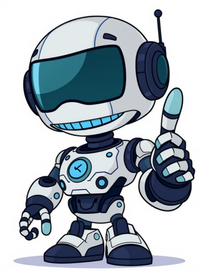
I'm not a bot



Hello everyone! In this post, I’m sharing a simple yet effective motor control code for Arduino, ideal for controlling small robots or any project involving motorized movement. This code allows you to control your motors for basic movements: forward, backward, turn left, turn right, and stop, all while utilizing PWM (Pulse Width Modulation) for speed control. The PWM allows for fine-tuned motor speed control, which is crucial for a variety of applications such as robot movement or driving DC motors efficiently. This code is simple enough for beginners to understand and use, yet flexible enough to adapt to various motor configurations and projects. In this project: Motor 1 (right motor) and Motor 2 (left motor) are controlled independently, allowing for directional movement as well as rotation. You can adjust the speed using PWM values (from 0 to 255), and the delay() function controls the timing of the movements. I hope this will be helpful for those starting their journey with motorized robots or anyone interested in learning motor control via Arduino. Here’s the code: /* Arduino Motor Control Code: Forward, Backward, Turn, and Stop with PWM This code allows you to control a robot's motors to move forward, backward, turn left, turn right, and stop. The speed of the motors is controlled using PWM (Pulse Width Modulation). Each motor has two pins for direction control and one pin for speed control. */ const int motorPinR1 = 7; // Motor Right IN1 const int motorPinR2 = 8; // Motor Right IN2 const int motorPinREna = 6; // Motor Right ENA (Speed Control) const int motorPinL1 = 9; // Motor Left IN1 const int motorPinL2 = 10; // Motor Left IN2 const int motorPinLEna = 11; // Motor Left ENB (Speed Control) /* Function to control the movement of a motor (Left or Right). direction: 1 for forward, -1 for backward, 0 to stop. speed: The speed value (0-255) for PWM control. */ void moveMotor(int motorPin1, int motorPin2, int motorPinEna, int direction, int speed) { if (direction == 1) { // Move forward digitalWrite(motorPin1, HIGH); // Set IN1 HIGH digitalWrite(motorPin2, LOW); // Set IN2 LOW } else if (direction == -1) { // Move backward digitalWrite(motorPin1, LOW); // Set IN1 LOW digitalWrite(motorPin2, HIGH); // Set IN2 HIGH } else { // Stop (direction == 0) digitalWrite(motorPin1, LOW); // Set both IN1 and IN2 to LOW digitalWrite(motorPin2, LOW); } // Control motor speed using PWM (analogWrite) analogWrite(motorPinEna, speed); } /* Move the robot forward. Accepts speed (0-255) to set motor speed. */ void moveForward(int speed) { moveMotor(motorPinR1, motorPinR2, motorPinREna, 1, speed); // Move right motor forward moveMotor(motorPinL1, motorPinL2, motorPinLEna, 1, speed); // Move left motor forward } /* Move the robot backward. Accepts speed (0-255) to set motor speed. */ void moveBackward(int speed) { moveMotor(motorPinR1, motorPinR2, motorPinREna, -1, speed); // Move right motor backward moveMotor(motorPinL1, motorPinL2, motorPinLEna, -1, speed); // Move left motor backward } /* Rotate the robot to the right. Right motor moves forward, left motor moves backward. */ void turnRight(int speed) { moveMotor(motorPinR1, motorPinR2, motorPinREna, 1, speed); // Right motor forward moveMotor(motorPinL1, motorPinL2, motorPinLEna, -1, speed); // Left motor backward } /* Rotate the robot to the left. Right motor moves backward, left motor moves forward. */ void turnLeft(int speed) { moveMotor(motorPinR1, motorPinR2, motorPinREna, -1, speed); // Right motor backward moveMotor(motorPinL1, motorPinL2, motorPinLEna, 1, speed); // Left motor forward } /* Stop both motors. */ void stopMotors() { moveMotor(motorPinR1, motorPinR2, motorPinREna, 0, 0); // Stop right motor (set direction to stop and speed to 0) moveMotor(motorPinL1, motorPinL2, motorPinLEna, 0, 0); // Stop left motor (set direction to stop and speed to 0) } /* Setup function runs once at the beginning to initialize motor pins. */ void setup() { // Initialize motor pins as OUTPUT pinMode(motorPinR1, OUTPUT); pinMode(motorPinR2, OUTPUT); pinMode(motorPinREna, OUTPUT); pinMode(motorPinL1, OUTPUT); pinMode(motorPinL2, OUTPUT); pinMode(motorPinLEna, OUTPUT); } /* Main loop function runs repeatedly to perform the robot movements. */ void loop() { // Move forward with speed 100 moveForward(100); delay(2000); // Keep moving forward for 2 seconds // Move backward with speed 100 moveBackward(100); delay(2000); // Keep moving backward for 2 seconds // Turn right with speed 100 turnRight(100); delay(2000); // Keep turning right for 2 seconds // Turn left with speed 100 turnLeft(100); delay(2000); // Keep turning left for 2 seconds // Stop both motors after completing all movements stopMotors(); delay(1000); // Wait for 1 second before starting the next iteration } `List item` Explanation: moveMotor() Function: This function controls the movement of one motor (left or right). It takes the direction and speed as inputs and uses digitalWrite() to set the motor direction and analogWrite() for speed control (PWM). Movement Functions: moveForward(): Moves both motors forward. moveBackward(): Moves both motors backward. turnRight(): Rotates the robot to the right (right motor forward, left motor backward). turnLeft(): Rotates the robot to the left (right motor backward, left motor forward). stopMotors(): Stops both motors by setting the direction to stop and speed to 0. Customizations: Motor Speed: Adjust the motor speed using PWM values (0-255) in the functions. Motor Pins: Modify the pin numbers if needed to fit your hardware. Movement Timing: You can change the delay() values to control how long the robot moves or turns. Conclusion: This code is perfect for controlling basic motor movements with speed adjustment using PWM. It’s great for beginners who want to get started with Arduino-based robot movement projects! 1 Like This appears to be AI generated spam. I'm just using AI to explain. Which Arduinos, motor drivers and motors have you tested that code with? arduino uno, ZGA12 motor, L298 driver Sorry for saying this, but your code is nothing more than the most trivial example of using motors, which is in any Arduino tutorial. Why did you post it? The question is the same as in your another topic about the millis timer - how is your example different from hundreds of such on the Internet? taha_zarif90: arduino uno, ZGA12 motor, L298 driver Then you should say so. Also for code that controls hardware including a schematic is essential. To a newbie motorpinL2 would be meaningless. These were my own questions and I thought maybe someone would use them. Just because you don't use it doesn't mean no one should use it. These things I put up are mostly for robotics competitions, the sumo robot section. 2 Likes I guess at least you should post in the Projects - Showcase or Projects - Tutorials category Hello taha_zarif90 Here too, STRUCTs are your friends If motorPinL2 is not present, the left motor can only rotate in one direction. I know that and you know that but a new person using your code has no idea what it is connected to. My driver has nothing called motorpinL2 ot Left IN2. I don't have much experience with structures, but I know they can help organize code better. That's why I didn't use it. Thanks for your suggestion, I'll use the schematic. May I know what driver you're using? taha_zarif90: I know they [structures] can help organize code better. That's why I didn't use it. ?? I don't see a much logic in this Without a parts list and a schematic, I would not recommend your code to anyone new to Arduino. This topic was automatically closed 180 days after the last reply. New replies are no longer allowed. Normally, Arduino IDE offers to auto-update when a newer version is available. However, due to a bug, Arduino IDE 2.3.5 does not have an auto-update capability. Please download Arduino IDE 2.3.6 from the "Software" page of the Arduino website and install the downloaded file: This release provides fixes for regressions present in Arduino IDE 2.3.5. Thanks so much to the forum community for all the valuable testing and feedback that has helped us greatly in identifying and investigating these bugs! Highlights Fix application auto-update capability arduino/arduino-ide#2697, arduino/arduino-ide#2696 Arduino IDE has an auto-update feature, which notifies the user when a newer version is available, and allows them to easily update the application. The auto-update feature was broken in Arduino IDE 2.3.5. Arduino IDE 2.3.5 will not notify the user of an updated version, even if the user manually triggers an update check. This bug has been fixed in Arduino IDE 2.3.6, so the auto-update feature will work as before for users of Arduino IDE 2.3.6 once a future release comes out. However, the bug in Arduino IDE 2.3.5 means that it will not be possible to use the auto-update feature to update from 2.3.5 to 2.3.6. Please download Arduino IDE 2.3.6 from the links on the "Software" page of the Arduino website: Then install the new version from the downloaded file. Fix opening additional sketches via file association arduino/arduino-ide#2686, arduino/arduino-ide#2678 In addition to opening them via the Arduino IDE GUI, sketch files can be opened directly when the .ino file type is associated with Arduino IDE. Previously, if a sketch was opened in this manner while Arduino IDE was already running, a bug caused the currently opened sketch was opened again in a new window instead of the selected sketch. Fix extra blank window on macOS when IDE started via sketch file association arduino/arduino-ide#2693, arduino/arduino-ide#2688 In addition to starting the Arduino IDE application directly, it can be started by opening a specific sketch file using the Arduino IDE application. Previously, when Arduino IDE was started by opening a sketch file on a macOS machine, a pointless blank window was opened in addition to the Arduino IDE window for the selected sketch. Arduino IDE will now only open the window for the selected sketch. (Thanks @embeddedkiddie) Fix IDE stealing focus from other windows. arduino/arduino-ide#2681, arduino/arduino-ide#2679 During long operations such as installing large boards platforms or libraries, or compiling/uploading large sketch programs, the user may wish to multitask by using another application will the operation proceeds in Arduino IDE. Previously, if the user selected a different window while an operation was in progress in Arduino IDE, a bug caused the Arduino IDE window to steal focus from the active window each time any new content was printed to Arduino IDE's "Output" panel. Expand and improve translations arduino/arduino-ide#2692 The community work to make Arduino IDE accessible to everyone in the world through localization of the text of the IDE's UI continues, reaching high coverage levels for 18 languages/locales. If you would like to contribute to the Arduino IDE translations, please see the information here: Full changelog here: If you have any questions or feedback please post here in the dedicated forum category for Arduino IDE 2.x: If you want to see the list of known issues, work in progress, submit a formal report, or contribute to development, the Arduino IDE 2.x source code is hosted in this public repository: 10 Likes Downloaded 2.3.5 1,5 hrs ago 2 Likes ptillisch: Please download Arduino IDE 2.3.6 from the "Software" page of the Arduino website and install the downloaded file: Should IDE 2.3.5 be uninstalled first? If installing 2.3.6 over the old 2.3.5 installation, does it remember the previous installation preferences (e.g., whether to install for just the current user or all users, location of installation folder, etc.)? 1 Like Afaik binaries and data including preferences are separated. 1 Like grb: Should IDE 2.3.5 be uninstalled first? It is not required. The Windows installers (exe and "MSI") will perform an update if there is an existing installation of Arduino IDE. If you are using the Windows ZIP package, then you manage the installation manually and are free to have multiple copies of Arduino IDE if you like, and likewise can delete the copies as you like. There is no installer for Linux, so you manage the installations manually and can have multiple copies and remove them as you like, the same as the Windows ZIP package. macOS has a minimal installation helper, were you simply mount the DMG file and then drag the application from the mounted drive to the Applications folder (or anywhere you like). You are free to have multiple copies of the Arduino IDE application if you like. You only need to rename the Arduino IDE application folder if you want to store multiple copies in the same folder (since each folder must have a unique name). grb: does it remember the previous installation preferences (e.g., whether to install for just the current user or all users, location of installation folder, etc.)? Yes, the Windows installer does. 1 Like FYI, my MacAir does NOT have the Fix extra blank window on macOS when IDE started via sketch file association bug. I also do not have the following bug Fix opening additional sketches via file association sonofcy: my MacAir does NOT have the Fix extra blank window on macOS when IDE started via sketch file association bug. Are you using Arduino IDE 2.3.5 or 2.3.6? If you are using 2.3.6, then that is expected because the bug has been fixed in 2.3.6. If you are using 2.3.5, then the bug is indeed present. You can follow these instructions: If Arduino IDE is running, select Arduino IDE > Quit Arduino IDE from the Arduino IDE menus. All Arduino IDE windows will close. Control-click on any .ino file from a sketch. A context menu will open. Select "Open With" from the menu. A submenu will open that allows you to select which application to use to open the file. Select the Arduino IDE application from the menu. Arduino IDE starts, with the selected sketch open as expected. However, an additional blank Arduino window also opens. sonofcy: I also do not have the following bug Fix opening additional sketches via file association If you are using 2.3.5, then the bug is indeed present, but on macOS it only occurs if you pass the path of the sketch to the Arduino IDE invocation as a command line argument. For example: % "/Applications/Arduino IDE/Contents/MacOS/Arduino IDE" ~/Documents/Arduino/SomeSketch Maybe that explains it, I open sketches using normal methods like dbl clicking the ino file. I have no idea if that passes the path to the ino file to the command although it sounds probable. I have NEVER used Control-Click for anything in all the years I have been using a Mac. I just tried it on 2.3.5, and indeed, it works as the bug report states. Now, I have to find out what the advantage is of using a procedure to open a sketch that requires all those extra steps. Thanks for the clarification, and now, back to our regularly scheduled program. sonofcy: Maybe that explains it, I open sketches using normal methods like dbl clicking the ino file. A double click is generally equivalent to the Control-click procedure I described. Those instructions came from the bug report. I chose the Control-click procedure because it allows you to select the specific application to use to open the sketch, while the double click will open it using the default application. The developers and beta testers likely have multiple installations of Arduino IDE and they must make sure to open the sketch using the specific installation that is under test. sonofcy: I have no idea if that passes the path to the ino file to the command macOS seems to use a different mechanism. The reason I say this is because arduino/arduino-ide#2678 occurs when you open the sketch via command line argument, but not when you open it via double click or Control-click. Likewise, arduino/arduino-ide#2688 occurs when you open the sketch via double click or Control-click, but not when you open it via command line argument. sonofcy: Now, I have to find out what the advantage is of using a procedure to open a sketch that requires all those extra steps. The only advantage is the ability to select which application will be used to open it. If the application you want to use is used by default, then there is no advantage. 1 Like I have been using rename to allow for multiple versions/releases, but I have always used the Mac ecosystem method of Spotlight to select from a few versions of an app, fewer keystrokes I had a very old IDE in this Win 10 WS, so uninstalled it and grabbed 2.3.5. It was fascinating to see that during the first startup, the focus bug appeared. Tried to get a browser window into the fg, but the IDE kept took it back, until it was done with initial install, setup. Under 2.3.6 it's gone. Looks like IDE2.3.6 still having issues. Been working with zephyr on the giga R1 and had to do a remove of 0.3.1 and a reinstall. The reinstall completed successfully but after I closed and restarted the IDE on windows 11 22h2 received a not responding when I opened the IDE again. Had to restart machine. After restart it looked like it worked but when I put the board into booloader mode by double clicking the IDE went blank and had to do task manager to kill the process didn't see this issue previous versions. After restarting the ide seems to have recovered. Merlin513: Looks like IDE2.3.6 still having issues. Been working with zephyr on the giga R1 and had to do a remove of 0.3.1 and a reinstall Needless to say I have been in the same boat at times with zephyr on the GIGA. I have also installed 2.3.6 as 2.3.5 had many other issues. Sometimes with Zephyr, it feels like there is something with each individual GIGA on will it boot correctly or not. Not sure what. I have Two GIGAs, each now has a Giga display shield on it. With one of them, each time zephyr boots, I have to go to the Debug window (Serial1 through USB to UART connection) and type: sketch to get the sketch to run. Note: I have gone through probably 50+ loader installs since this started, plus I have tried building with or without debug on... The other one works as expected... Not sure what the difference is... Note: They both work fine when using MBED I have also tried to reset, the giga using the instructions at: Factory reset giga r1/remove micropython - Mega / GIGA R1 WiFi - Arduino Forum But maybe other things, like maybe the settings that it was set in earlier when using MBED, like flash split?... Sorry I know this is more giga specific and not the IDE, but maybe something like that is hitting your board as well, although maybe manifesting itself differently. There were other changes; not sure if it is in 2.3.4 → 2.3.5 or 2.3.5 → 2.3.6. One change that I observed is that when starting with a multi-line comment /* it now auto completes with the closing */. No complaints about it. Is this related to feat: use `theia@1.57.0` (#2654) · arduino/arduino-ide@859d29d · GitHub (2.3.4 → 2.3.5)? sterretje: Is this related to feat: use theia@1.57.0 (#2654) · arduino/arduino-ide@859d29d · GitHub (2.3.4 → 2.3.5)? I confirm that was where the feature was introduced. For those of us who prefer to close block comments manually, it can be disabled via Arduino IDE's advanced settings: Press the Ctrl+Shift+P keyboard shortcut (Command+Shift+P for macOS users) to open the "Command Palette". A menu will appear on the editor toolbar: Select the "Preferences: Open Settings (UI)" command from the menu. You can scroll down through the list of commands to find it, or type the command name in the field. A "Settings" tab will open in the Arduino IDE main panel. Type editor.autoClosingComments in the "Search Settings" field of the "Settings" tab. Select "never" from the "Editor: Auto Closing Comments" setting menu. Close the Preferences tab by clicking its X icon. 1 Like Two issues with 2.3.6: when initially offered to start the IDE immediately after the install, I got a black window. Library update hangs: DaveEvans: I got a black window. When that happened, did the IDE application become completely unresponsive as reported by @Merlin513?: Merlin513: the IDE went blank and had to do task manager to kill the process DaveEvans: Library update hangs I can provide you with instructions for a workaround: Start Arduino IDE. When you see the "Updates are available for some of your libraries" notification, click the "INSTALL MANUALLY" button instead of the "UPDATE ALL" button. Library Manager will open, with a list of the updatable libraries. Click the "UPDATE" button on the first of the entries in Library Manager for a library you wish to update. Wait for the update to finish, as indicated by the appearance of a "Successfully installed library ..." notification. Repeat steps (2)-(3) until you have updated all the libraries you wish to update. Please let me know whether the problem of the update hanging still occurs when you use that procedure. I also experience this problem sometimes. Unfortunately it seems to only occur intermittently and under specific conditions, which makes it difficult to investigate. For example, I experience it when I use the IDE with my ridiculous 32 GB collection of 90 different boards platforms installed, but when I switch to a more realistic environment with only a dozen platforms then I can no longer reproduce the fault. And when I enable the debug logging that would give me some idea of what is happening, I can no longer reproduce the fault. And when I run the same commands with Arduino CLI directly (which is the tool that actually performs the library updates for Arduino IDE under the hood), I can no longer reproduce the fault. A very difficult to pin down bug! I have made multiple attempts at investigating it, but previously I didn't take it very seriously because we had never received any reports from users who were affected. However, now we have your report, as well as a couple of others over the last six months (1, 2), so maybe something has changed that makes it more likely to occur? I find that when I update each of the libraries separately using the procedure I described in my previous reply, instead of all in one go as occurs when you click the "UPDATE ALL" button in the notification, I never encounter the update process hang. So I think that we at least have a reliable workaround for the bug. ptillisch: When that happened, did the IDE application become completely unresponsive as reported by @Merlin513?: Yes. Thank you for the library work-around. I'll give that a try the next time there are libraries to update. 1 Like ptillisch: Please download Arduino IDE 2.3.6 from the links on the "Software" page of the Arduino website: Software Then install the new version from the downloaded file. Hi, I did update like this from 2.3.5 and my all-previous sketches somehow disappeared from the sketch directory. I checked the sketch library location, but they are not there. The bug that previous versions had (Restart: "A setting has changed that requires a restart to take effect. Press the restart button to restart Arduino IDE and enable the setting" when a new sketch is opened, and next time when a sketch is opened menu bar is missing) is still there. I am on Windows 10 64bit. Page 2 3 posts were split to a new topic: Port select grey out bug A post was split to a new topic: IDE 2.x laborary/student setup ptillisch: And when I enable the debug logging that would give me some idea of what is happening, I can no longer reproduce the fault. That may mean (99% of cases) that multithreaded application (IDE) is accessing shared resources without any locking mechanism. At least from my software development experience. And this symphom is the same for i386 Win32 GUI application or PowerPC RTEMS Console-only app. Debug output changes timings so this bug becomes not reproducible. These bugs are extremely hard to find :(. DaveEvans: I'll give that a try the next time there are libraries to update. You can change library version manually, by editing library.properties file (located in your library folder): change version to the previous one and then Arduino IDE will offer you to update again ptillisch: I also experience this problem sometimes. Unfortunately it seems to only occur intermittently and under specific conditions, I experience freezes since 2.3.4 : either complete freeze (usually when IDE updates something in bulk , like toolchain or libraries) or partial freeze. By partial I mean that IDE works somehow (you can edit files and switch between them) but file content is not saved, with "Saving Icon" (a circle) appearing that never goes away. This happens when I right click on a macro to go to definition: after clicking nothing happens (or Loading... appears) and since that moment no source files can be saved. Happens quite often, somehow connected to file operations, but I can't always reproduce it :-/ vvb333007: complete freeze (usually when IDE updates something in bulk , like toolchain or libraries) Thanks for your report @vvb333007. When that occurs, does the window go blank as was described by @Merlin513 and @DaveEvans: Merlin513: the IDE went blank and had to do task manager to kill the process I believe the window being black is due to them having the IDE configured to use a dark theme, and it would instead be blank white if you instead have it configured for a light theme. vvb333007: Happens quite often, somehow connected to file operations, but I can't always reproduce it :-/ The lack of reliable reproducibility makes it challenging to investigate, prepare a fix, and validate the fix, but the "quite often" makes things a bit easier. Which operating system are you using? Windows 10, Light Theme, yes it was white blank. Do you have "debug" builds of Arduino IDE with all verbose output turned on? I'd like to install one so whenever it freezes I can copy IDE's debug output and send it to you. I had strong feeling that it is connected to multiple file operations performed in parralel. So even before you posted a workaround I somehow realized that doing things one by one will probably help. And yes it helped. Arduino IDE always automatically generates log files while it is running, so no special debug build is required. The next time you encounter this problem, please provide the latest log file from your computer. It might contain information that will help us to identify the problem. This procedure is not intended to solve the problem. The purpose is to gather more information. Please do this: Open a forum reply here by clicking the "Reply" button. Click the "Upload" icon () on the post composer toolbar: The "Open" dialog will open. In the "Open" dialog, select the latest .log file from this folder (the files are named according to the date):C:\Users\\AppData\Roaming\Arduino IDE\ (where is your Windows username) Note that the C:\Users\\AppData folder is hidden by default. On Windows "File Explorer", you can make it visible by opening the "View" menu, then checking the box next to "☐ Hidden items". Click the "Open" button. The dialog will close. Click the "Reply" button to publish the post. Alternatively, instead of using the "Upload" icon on the post composer toolbar as described in steps (5) - (7) above, you can simply drag and drop the .log file onto the post composer field to attach it. Please let me know if you have any questions or problems while following those instructions. 1 Like 2 posts were split to a new topic: IDE hangs on startup A post was merged into an existing topic: IDE hangs on startup A post was split to a new topic: I can't download Arduino IDE Hi all, When trying to upload a sketch to my Arduino UNO I get the above error message, how can the port be busy, if I am trying to up load through it? I have tried different ports and get the same message, my device manager states all com ports have up to date drivers, I have tried googleing and this forum but my problem seems slightly different to those already posted on this forum, or am I looking in the wrong place? can anyone help me? Arduino: 1.8.13 (Windows 10), Board: "Arduino Uno" Sketch uses 11926 bytes (36%) of program storage space. Maximum is 32256 bytes. Global variables use 602 bytes (29%) of dynamic memory, leaving 1446 bytes for local variables. Maximum is 2048 bytes. Error opening serial port 'COM6'. (Port busy) avrdude: stk500_recv(): programmer is not responding avrdude: stk500_getsync() attempt 1 of 10: not in sync: resp=0x72 avrdude: stk500_recv(): programmer is not responding avrdude: stk500_getsync() attempt 2 of 10: not in sync: resp=0x72 avrdude: stk500_recv(): programmer is not responding avrdude: stk500_getsync() attempt 3 of 10: not in sync: resp=0x72 avrdude: stk500_recv(): programmer is not responding avrdude: stk500_getsync() attempt 4 of 10: not in sync: resp=0x72 avrdude: stk500_recv(): programmer is not responding avrdude: stk500_getsync() attempt 5 of 10: not in sync: resp=0x72 avrdude: stk500_recv(): programmer is not responding avrdude: stk500_getsync() attempt 6 of 10: not in sync: resp=0x72 avrdude: stk500_recv(): programmer is not responding avrdude: stk500_getsync() attempt 7 of 10: not in sync: resp=0x72 avrdude: stk500_recv(): programmer is not responding avrdude: stk500_getsync() attempt 8 of 10: not in sync: resp=0x72 avrdude: stk500_recv(): programmer is not responding avrdude: stk500_getsync() attempt 9 of 10: not in sync: resp=0x72 avrdude: stk500_recv(): programmer is not responding avrdude: stk500_getsync() attempt 10 of 10: not in sync: resp=0x72 Problem uploading to board. See for suggestions. This report would have more information with "Show verbose output during compilation" option enabled in File -> Preferences. Sketch uses 928 bytes (2%) of program storage space. Maximum is 32,256 bytes. Global variables use 9 bytes (0%) of dynamic memory, leaving 2,039 bytes for local variables. Maximum is 2,048 bytes. C:\Program Files (x86)\Arduino\hardware\tools\avr/bin/avrdude -CC:\Program Files (x86)\Arduino\hardware\tools\avr/etc/avrdude.conf -v -patmega328p -carduino -PCOM8 -b115200 -D -Uflash:w:C:\Users\abin\AppData\Local\Temp\build6019b9665d7767adebbe2ffad6f83d6c.tmp/led_blink.ino.hex:i An error occurred while uploading the sketch Board: Arduino/Genuino Uno Port: COM8 (Arduino/Genuino Uno) Programmer: AVRISPmkII Arduino: 1.6.10 (Windows 8.1) error.txt (15.8 KB) Do you have File > Preferences > Show verbose output during: upload checked? I have a strange question. How did you open the sketch that you're trying to upload? Did you start the IDE by opening the sketch(double clicking on the sketch file or whatever) or did you start the IDE and then open the sketch file(File > Open or File > Sketchbook or File > Examples)? The reason I ask is that someone reported that they can only upload if they start the IDE the second way: Windows 10 64Bit, Arduino 1.6.10 upload issue. · Issue #5173 · arduino/Arduino · GitHub Thank you very much. Sketch uploaded successfully. Uploaded by starting the IDE the second way (File -> Open) : Windows 10 64Bit, Arduino 1.6.10 upload issue. · Issue #5173 · arduino/Arduino · GitHub Thank you. Board Model: Arduino UNO R3 Sketch: void setup() { pinMode(13, OUTPUT); } void loop() { digitalWrite(13, HIGH); delay(1000); digitalWrite(13, LOW); delay(1000); } 1 Like Glad to hear it helped! So when it wouldn't open you had opened the sketch the first way? 1 Like Yes, the error occurred when the IDE is launched by clicking on the .ino sketch file. Thank you. success.txt (3.98 KB) Glad to know the cause of the issue, there have been multiple reports of this on the forum but it was hard to know the cause since the IDE wasn't displaying any useful information on the error. Now that I know I can help everyone out. 1 Like pert: I have a strange question. How did you open the sketch that you're trying to upload? Did you start the IDE by opening the sketch(double clicking on the sketch file or whatever) or did you start the IDE and then open the sketch file(File > Open or File > Sketchbook or File > Examples)? The reason I ask is that someone reported that they can only upload if they start the IDE the second way: Windows 10 64Bit, Arduino 1.6.10 upload issue. · Issue #5173 · arduino/Arduino · GitHub thanks man! I have the same error, when I was testing it I found that it was the bluetooth module, for some reason if it is to the current to program my Arduino gave me that error, my solution was to program the Arduino UNO without a connected module and it worked. Hi, I had the same problem and i just went to Tools+Port, and then selected the one that showed Arduino Genuino/UNO, in my case (i switched from port 13 to port 20). It worked. Regrads, Page 2 Hi Guys I know this thread is pretty old, but I thought I should add what I found since all the above suggestions did not work for me. What ended up working for me was changing the programmer (Tools > Programmer) from AVRISP mkII to ArduinoISP, then the sketch was able to upload without any errors. Then I changed it back to AVRISP mkII and it still worked. Not sure why or how this happened. Might be worth trying if none of the other solutions worked for you. Thanks for your time and I hope this helps you out. I really do. I know how frustrating this problem is, first hand. 1 Like Arduino: 1.8.10 (Windows 7), Board: "Arduino/Genuino Uno" Sketch uses 936 bytes (2%) of program storage space. Maximum is 32256 bytes. Global variables use 9 bytes (0%) of dynamic memory, leaving 2039 bytes for local variables. Maximum is 2048 bytes. C:\Program Files\Arduino\hardware\tools\avr/bin/avrdude -CC:\Program Files\Arduino\hardware\tools\avr/etc/avrdude.conf -v -patmega328p -carduino -PCOM16 -b115200 -D An error occurred while uploading the sketch-Uflash:w:C:\Users\dharani\AppData\Local\Temp\arduino_build_889315/sketch_oct08a.ino.hex:i avrdude: Version 6.3-20190619 Copyright (c) 2000-2005 Brian Dean, Copyright (c) 2007-2014 Joerg Wunsch System wide configuration file is "C:\Program Files\Arduino\hardware\tools\avr/etc/avrdude.conf" Using Port : COM16 Using Programmer : arduino Overriding Baud Rate : 115200 This report would have more information with "Show verbose output during compilation" option enabled in File -> Preferences. SIVAJEEVA: Arduino: 1.8.10 (Windows 7), Board: "Arduino/Genuino Uno" Sketch uses 936 bytes (2%) of program storage space. Maximum is 32256 bytes. Global variables use 9 bytes (0%) of dynamic memory, leaving 2039 bytes for local variables. Maximum is 2048 bytes. C:\Program Files\Arduino\hardware\tools\avr/bin/avrdude -CC:\Program Files\Arduino\hardware\tools\avr/etc/avrdude.conf -v -patmega328p -carduino -PCOM16 -b115200 -D An error occurred while uploading the sketch-Uflash:w:C:\Users\dharani\AppData\Local\Temp\arduino_build_889315/sketch_oct08a.ino.hex:i avrdude: Version 6.3-20190619 Copyright (c) 2000-2005 Brian Dean, Copyright (c) 2007-2014 Joerg Wunsch System wide configuration file is "C:\Program Files\Arduino\hardware\tools\avr/etc/avrdude.conf" Using Port : COM16 Using Programmer : arduino Overriding Baud Rate : 115200 This report would have more information with "Show verbose output during compilation" option enabled in File -> Preferences. This one is really tricky because the output is not providing us with any useful information about the error. Please try restarting your computer. Maybe by some miracle that will fix the problem, or at least cause the output to show some more info. To upload any code , it shows: An error occurred while uploading the sketch ,meanwhile the orange(L) and Green (On) Lights blinks on always. Arduino: 1.8.10 (Windows 10), Board: "Arduino/Genuino Uno" Sketch uses 2040 bytes (6%) of program storage space. Maximum is 32256 bytes. Global variables use 224 bytes (10%) of dynamic memory, leaving 1824 bytes for local variables. Maximum is 2048 bytes. C:\Program Files (x86)\Arduino\hardware\tools\avr/bin/avrdude -CC:\Program Files (x86)\Arduino\hardware\tools\avr/etc/avrdude.conf -v -patmega328p -carduino -PCOM5 -b115200 -D -Uflash:w:C:\Users\Raeed\AppData\Local\Temp\arduino_build_375716/Blink.ino.hex:i avrdude: Version 6.3-20190619 Copyright (c) 2000-2005 Brian Dean, Copyright (c) 2007-2014 Joerg Wunsch System wide configuration file is "C:\Program Files (x86)\Arduino\hardware\tools\avr/etc/avrdude.conf" Using Port : COM5 Using Programmer : arduino Overriding Baud Rate : 115200 An error occurred while uploading the sketch This report would have more information with "Show verbose output during compilation" option enabled in File -> Preferences. Hello, guys! I got the same problem and the only thing that worked to me as to open the IDE as root. Hello, I'm new to programming Arduino, is there anyone that can help me get started because I've been having this error. Arduino: 1.8.12 (Windows 10), Board: "Arduino Nano Every, ATMEGA328" C:\Program Files (x86)\Arduino\arduino-builder -dump-prefs -logger=machine -hardware C:\Program Files (x86)\Arduino\hardware -hardware Sketch uses 1120 bytes (2%) of program storage space. Maximum is 49152 bytes. Global variables use 22 bytes (0%) of dynamic memory, leaving 6122 bytes for local variables. Maximum is 6144 bytes. An error occurred while uploading the sketch Thanks in advance!! brandon1177: An error occurred while uploading the sketch I'll ask you to provide the verbose output in hopes that will provide us with more information we can use to identify the cause of the error. Please do this: (In the Arduino IDE) File > Preferences Uncheck the checkbox next to "Show verbose output during: compilation" Check the checkbox next to "Show verbose output during: upload Click "OK" Sketch > Upload After the upload fails, you'll see a button on the right side of the orange bar "Copy error messages" (or the icon that looks like two pieces of paper at the top right corner of the black console window in the Arduino Web Editor). Click that button. In a forum reply here, click on the reply field. Click the button on the forum toolbar. This will add the forum's code tags markup to your reply. Press "Ctrl + V". This will paste the upload output between the code tags. Move the cursor outside of the code tags before you add any additional text to your reply. Arduino: 1.9.0-beta (Windows 10), Board: "Arduino Uno" Sketch uses 2256 bytes (6%) of program storage space. Maximum is 32256 bytes. Global variables use 216 bytes (10%) of dynamic memory, leaving 1832 bytes for local variables. Maximum is 2048 bytes. C:\Users\unhol\Downloads\arduino-1.9.0-beta-windows\arduino-PR-beta1.9-BUILD-119\hardware\tools\avr/bin/avrdude -CC:\Users\unhol\Downloads\arduino-1.9.0-beta-windows\arduino-PR-beta1.9-BUILD-119\hardware\tools\avr/etc/avrdude.conf -v -patmega328p -carduino -PCOM4 -b115200 -D -Uflash:w:C:\Users\unhol\AppData\Local\Temp\arduino_build_473414/Timer_Project_two.ino.hex:i avrdude: Version 6.3-20190619 Copyright (c) 2000-2005 Brian Dean, Copyright (c) 2007-2014 Joerg Wunsch System wide configuration file is "C:\Users\unhol\Downloads\arduino-1.9.0-beta-windows\arduino-PR-beta1.9-BUILD-119\hardware\tools\avr/etc/avrdude.conf" Using Port : COM4 Using Programmer : arduino Overriding Baud Rate : 115200 An error occurred while uploading the sketch This report would have more information with "Show verbose output during compilation" option enabled in File -> Preferences. thats what this says, I have no idea what to do unholymealman: Overriding Baud Rate : 115200 An error occurred while uploading the sketch Does it show that same output every time you try to upload, or is there sometimes more output? The reason I ask is because usually there is a descriptive error message that gives us a better idea of what went wrong. I've been trying to run a temperature sensor code using Arduino and I was able to upload it on a different PC, but when I am trying to upload it on my laptop it results in the following error message: Arduino: 1.8.13 (Windows 10), Board: "Arduino Uno" Sketch uses 3588 bytes (11%) of program storage space. Maximum is 32256 bytes. Global variables use 244 bytes (11%) of dynamic memory, leaving 1804 bytes for local variables. Maximum is 2048 bytes. An error occurred while uploading the sketch D:\Arudino\Arduino\hardware\tools\avr/bin/avrdude -CD:\Arudino\Arduino\hardware\tools\avr/etc/avrdude.conf -v -patmega328p -carduino -PCOM4 -b115200 -D -Uflash:w:C:\Users\owenz\AppData\Local\Temp\arduino_build_614977/E2_BMD.ino.hex:i avrdude: Version 6.3-20190619 Copyright (c) 2000-2005 Brian Dean, Copyright (c) 2007-2014 Joerg Wunsch System wide configuration file is "D:\Arudino\Arduino\hardware\tools\avr/etc/avrdude.conf" Using Port : COM4 Using Programmer : arduino Overriding Baud Rate : 115200 This report would have more information with "Show verbose output during compilation" option enabled in File -> Preferences. Arduino: 1.8.13 (Windows Store 1.8.42.0) (Windows 10), Board: "Arduino Uno" Sketch uses 1916 bytes (5%) of program storage space. Maximum is 32256 bytes. Global variables use 200 bytes (9%) of dynamic memory, leaving 1848 bytes for local variables. Maximum is 2048 bytes. C:\Program Files\WindowsApps\ArduinoLLC.ArduinoIDE_1.8.42.0_x86__mdqgnx93n4wtt\hardware\tools\avr/bin/avrdude -CC:\Program Files\WindowsApps\ArduinoLLC.ArduinoIDE_1.8.42.0_x86__mdqgnx93n4wtt\hardware\tools\avr/etc/avrdude.conf -v -patmega328p -carduino -PCOM3 -b115200 -D -Uflash:w:C:\Users\Heba\AppData\Local\Temp\arduino_build_846712/sketch_apr14a.ino.hex:i An error occurred while uploading the sketch avrdude: Version 6.3-20190619 Copyright (c) 2000-2005 Brian Dean, Copyright (c) 2007-2014 Joerg Wunsch System wide configuration file is "C:\Program Files\WindowsApps\ArduinoLLC.ArduinoIDE_1.8.42.0_x86__mdqgnx93n4wtt\hardware\tools\avr/etc/avrdude.conf" Using Port : COM3 Using Programmer : arduino Overriding Baud Rate : 115200 This report would have more information with "Show verbose output during compilation" option enabled in File -> Preferences. Please turn on VERBOSE in the PREFERENCES as it tells you to do then post your output again as there appears to be some information missing. Some people have reported issues with the windows store version and we would recommend installing the full version of the IDE to see if that improves your experience. Page 3 Arduino:1.8.13 (Windows 10), Ploča: "Arduino Uno" Skica koristi 724 bytes (2%) od prostora za program. Maximum je 32256 bajtova. Globalne promjenljive koriste 9 bajtova (0%) RAM-a, ostalo je 2039 bajtova za lokalne promjenljive. Maximim je 2048 bajtova. C:\Program Files (x86)\Arduino\hardware\tools\avr/bin/avrdude -CC:\Program Files (x86)\Arduino\hardware\tools\avr/etc/avrdude.conf -v -patmega328p -carduino -PCOM3 -b115200 -D -Uflash:w:C:\Users\Marija\AppData\Local\Temp\arduino_build_52047/try_ma.ino.hex:i avrdude: Version 6.3-20190619 Copyright (c) 2000-2005 Brian Dean, Copyright (c) 2007-2014 Joerg Wunsch System wide

follow. 1st. Be an administrator. 2nd. Create another user with administration privilegies. 3rd. Enter in that user sesison and change your user file name as you wish. 4th. Finally you have to change the register of the users on the computer, so open redegit and find this path: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\ProfileList\ there are the profiles path to each username, find yours and change the original one to the new path, for example: C:\Users\OldOne to C:\Users\NewOne in the profileImagePath that's is all. Then you have to reset the computer, and be able to enter your session. My recommendation is to create another user and just use the new user, doing the previus can damage your installation of some programs that path your username profile archives (I got the reinstall Arduino and repair some path issues because I did that, it's annoying but it's possible). That's it, be careful doing that seriously (I google it when I did it and it works but causes some issues as I said). Thanks for sharing the solution you found @juanjgomezb! I'll mention an alternative workaround for those who are encountering problems caused by characters in their Windows user folder name. This workaround might be preferrable to those who don't feel comfortable making the changes to the registry as is required to change the folder name. The alternative is to configure Arduino IDE to use different paths on your computer, which are not under the user folder (and that only contain basic ASCII characters): These instructions will only work for Arduino IDE versions 2.3.4 or newer. Select File > Quit from the Arduino IDE menus if it is running. All IDE windows will close. Open the file at the following path in any text editor:C:\Users\\.arduinoIDE\arduino-cli.yaml (where is your Windows username) Add the following content to the arduino-cli.yaml file (or replace the existing content if equivalent content is already present in the file):build_cache: path: directories: builtin: libraries: data: user: Replace the placeholder with the path to the folder under which you want Arduino to store the cached data for compiling sketches. For this, and for the paths in the subsequent instructions, make sure to chose a location that is not under any folders with names that contain anything other than basic ASCII characters (e.g., A-z, 0-9, _, -, .,). Arduino IDE periodically deletes contents of this folder (the files stored under it are only cached there for the sake of efficiency, and it can always regenerate the files on demand), so you should not use this folder to store any valuable files. Replace the placeholder with the path to the folder under which you want Arduino to store some fundamental "built-in" Arduino libraries. Replace the placeholder with the path to the folder under which you want Arduino to store the boards platforms you install via Boards Manager, as well as some other data files. Replace the placeholder with the path you want to use as the Arduino sketchbook (the folder under Arduino IDE stores libraries you install via Library Manager and "Add .ZIP Library...", as well as a convenient location to save your sketches). Unlike the other paths, you can also configure this one via Arduino IDE's preferences GUI. I thought I should include it in these instructions just to be comprehensive. Save the file. Move the files from this folder on your hard drive:C:\Users\\AppData\Local\Arduino15\libraries (where is your Windows username) to the folder you configured in step (5) above (""). Move the files from this folder on your hard drive:C:\Users\\AppData\Local\Arduino15 to the folder you configured in step (6) above (""). If you configured a different sketchbook folder location in step (7) above, move the files from the previous sketchbook folder location to the new one. Start Arduino IDE. I also found an alternative workaround, which is perhaps a bit risky so I don't necessarily recommend it, but maybe of interest to advanced users so I'll add a link to it: 2 Likes This topic was automatically closed 180 days after the last reply. New replies are no longer allowed. If you are using a recent version of the IDE, you will get an auto-update offer simply by starting the IDE. Otherwise, the release is available for download here: This release provides some nice advancements and fixes. Thanks so much to the forum community for all the valuable testing and feedback that has helped us greatly in identifying and investigating these bugs and enhancements! Highlights Sanitize notification messages Gracefully handle invalid package index URLs Sanitize notification messages arduino/arduino-ide#2664 Arduino IDE uses notifications to communicate information about various events (e.g., completion of an upload) to the user. In some cases, the text of the notification message might contain content that comes from external sources. It is possible that an attacker could introduce malicious content into the notification message text, using it for a cross-site scripting attack: GitHub ### Introduction A Self Cross-Site Scripting (XSS) vulnerability has been identified within the Arduino-IDE prior to version v2.3.5 This type of attack occurs when user input is not properly sa... Sanitization code has been added to render any potentially malicious content in the notification message harmless. Gracefully handle invalid package index URLs arduino/arduino-ide#2645, arduino/arduino-cli#2817, arduino/arduino-cli#2786 Support for specific board models in Arduino IDE is provided by Arduino boards platforms. Platforms can be installed via Boards Manager. Boards Manager uses data published to the Internet in a package index file. In order to install a 3rd party boards platform, the user must first add the URL of that platform's package index to Arduino IDE's "Additional Boards Manager URLs" preference. Previously, if the user added an invalid URL to the "Additional Boards Manager URLs" preference, it would cause Arduino IDE to be non-functional and the only way to restore it from that state was to manually remove the invalid data from an obscure configuration file. Arduino IDE will now gracefully handle invalid "Additional Boards Manager URLs" preference data. Of course, the dependent boards platform will still not be available for installation via Boards Manager under these conditions, but the user will now be able to easily correct their mistake via the Arduino IDE preferences GUI if this happens. (Thanks @ijmurflo) Update Eclipse Theia Platform framework to 1.57.0 arduino/arduino-ide#2654 Arduino IDE is built on the free open source Eclipse Theia Platform framework. In order to benefit from the ongoing development work in the Eclipse Theia Platform project, Arduino IDE has been updated to using Eclipse Theia Platform version 1.57.0. (Thanks @dankeboy36) Reliably provide "state" information to extensions arduino/arduino-ide#2643, arduino/arduino-ide#2642 Arduino IDE has a powerful and flexible extension framework. Anyone can add additional capabilities to Arduino IDE without making any modifications to the IDE's codebase. In addition to its general support for VS Code extensions, Arduino IDE also provides supplemental "state" information specific to Arduino sketch development, which may be required by extensions written by the Arduino community. Previously, that "state" information was unnecessarily withheld under certain conditions. (Thanks @dankeboy36) Update Arduino CLI dependency to 1.2.0 arduino/arduino-ide#2645 Much of the non-GUI functionality of Arduino IDE comes from the Arduino CLI tool. In order to benefit from the ongoing development work in the Arduino CLI project, Arduino IDE has been updated to using Arduino CLI version 1.2.0. Fix coloration of preprocessor stderr output arduino/arduino-ide#2645, arduino/arduino-cli#2806 The output from the tools used to compile and upload Arduino sketches is displayed in Arduino IDE's "Output" panel. The text is colored to communicate its significance to the user. The output from the tool's "standard output" stream is colored white, and the the output from the "standard error" stream colored red. Errors or warnings may be produced by the C preprocessor, and it prints these to the standard error stream. Previously, this text was incorrectly given the standard output coloration. Add support for configuring Arduino CLI network timeout via settings file arduino/arduino-ide#2645, arduino/arduino-cli#2770, arduino/arduino-cli#2769 Much of the non-GUI functionality of Arduino IDE comes from the Arduino CLI tool. Arduino CLI uses various resources from the Internet, and thus makes network requests under certain conditions. In some unusual use cases, it might be useful to the user to be able to configure a specific timeout duration for requests that don't receive a response due to exceptional network conditions. This can now be done via the network.connection_timeout key of the Arduino CLI configuration file used by Arduino IDE. Add support for disabling enhanced port identification arduino/arduino-ide#2645, arduino/arduino-cli#2770, arduino/arduino-cli#2769 Support for specific board models in Arduino IDE is provided by Arduino boards platforms. With the exception of the foundational "Arduino AVR Boards" platform, which is automatically installed by Arduino IDE, the user must install the necessary platform before they can use their board. New users who aren't aware of that requirement and so don't install the platform dependency might think that their board or the IDE is broken. The ports of Arduino boards can be automatically identified by Arduino IDE via the port's identification properties. This is used for convenience features such as labeling the ports in the Tools > Port menu (e.g., "COM42 (Arduino Uno)") The primary source of the board model / port property association data is the boards platform. However, if the platform for the connected board is not installed then that information will not be available to Arduino IDE. For this reason, a secondary port identification system has been implemented, which obtains board model associations from an online API. The ability to identify ports of Arduino boards for which no platform is installed is very useful because it allows Arduino IDE to automatically offer to install the missing platform dependency for the user, supporting a natural user flow for the first use of a board and thus making the learning curve more gentle for new users: The port identification functionality is provided by the Arduino CLI tool. Advanced configuration of this tool can be made via a configuration file. In some unusual or advanced use cases, the user might want to disable the feature for identifying the board port via the online API. This can now be done via the network.cloud_api.skip_board_detection_calls key of the Arduino CLI configuration file used by Arduino IDE. Add support to library discovery system for compilers with unusual error message format arduino/arduino-ide#2645, arduino/arduino-cli#2782 The C++ compiler must be configured with the paths of all library dependencies of a sketch. The Arduino sketch build system handles this automatically. This "library discovery" system works by tentatively running the C preprocessor on the sketch program. If preprocessing fails, the system parses the text of the preprocessor's error messages. If the error was caused by the absence of a file referenced by one of the sketch program's #include directives, this indicates that the path to the library dependency providing the header file has not yet been added to the compiler's "search path". It turns out that some rarely used compilers use an unusual format for these error messages, and the parsing code was not able to correctly recognize the messages in that format. The library discovery code has now been updated to add support for those compilers. Add support for disabling platform installation integrity checks arduino/arduino-ide#2645, arduino/arduino-cli#2740, arduino/arduino-cli#1468 Support for specific board models in Arduino IDE is provided by Arduino boards platforms. Platforms can be installed via Boards Manager, which downloads the archive files for the platform from the Internet. By default, Boards Manager checks the downloaded archives against the checksum defined by the platform's package index in order to ensure the file was not corrupted. Although this is very useful behavior for any production usage, it can be inconvenient in advanced use cases where a package index provides beta tester versions of the platform, which are continuously updated as the platform's development work progresses. These users can now disable that integrity check via the board_manager.enable_unsafe_install key of the Arduino CLI configuration file used by Arduino IDE. (Thanks @obra) Only delay after serial output in "Knock" built-in example arduino/arduino-ide#2646, arduino/arduino-examples#81, arduino/docs-content#2159 A collection of example sketches demonstrating various concepts are bundled with the Arduino IDE installation. The "Knock" example uses a piezo disc to detect the vibrations associated with a knock. Previously a "debouncing" delay was incorrectly positioned in the example code, which caused it to miss detection of some knocks. (Thanks @thespiffer1) Document incomplete nature of "p08_DigitalHourglass" built-in example arduino/arduino-ide#2646, arduino/arduino-examples#84, arduino/arduino-examples#83 A collection of example sketches are bundled with the Arduino IDE installation. These include the sketches that accompany the Arduino Starter Kit. The "p08_DigitalHourglass" sketch is intentionally left incomplete. The Arduino Projects Book that comes with the starter kit instructs the user to add their own code to indicate the completion of the timer. In addition to owners of the Arduino Starter Kit, other users might use this sketch as a reference, and thus not have the context provided by the Arduino Projects Book. Comments were added to the sketch to instruct the user to add the missing code. (Thanks @DaveX) Expand and improve translations arduino/arduino-ide#2597, arduino/arduino-ide#2645, arduino/arduino-cli#2771 The community work to make Arduino IDE accessible to everyone in the world through localization of the text of the IDE's UI continues, reaching high coverage levels for 18 languages/locales. If you would like to contribute to the Arduino IDE translations, please see the information here: Full changelog here: If you have any questions or feedback please post here in the dedicated forum category for Arduino IDE 2.x: If you want to see the list of known issues, work in progress, submit a formal report, or contribute to development, the Arduino IDE 2.x source code is hosted in this public repository: If you are using a recent version of the IDE, you will get an auto-update offer simply by starting the IDE. Otherwise, the release is available for download here: This release provides some nice advancements and fixes. Thanks so much to the forum community for all the valuable testing and feedback that has helped us greatly in identifying and investigating these bugs and enhancements! Deprecation notice: Upcoming cessation of support for Linux distros using glibc 2.28 Recent changes in the framework used to produce automated release of Arduino IDE resulted in the loss of compatibility of the Linux builds with older Linux distro versions that use version 2.28 of the GNU C Library (glibc) shared library. This includes Ubuntu 18.04. Arduino IDE 2.3.4 will be the last version that can be used with these distro versions. Future releases (including nightly and tester builds) will fail to start on machines using these distro versions with an error like: Error: node-loader: Error: /lib/x86_64-linux-gnu/libc.so.6: version `GLIBC_2.28' not found (required by /home/foo/arduino-ide/resources/app/lib/backend/native/pty.node) at 85467 (/home/foo/arduino-ide/resources/app/lib/backend/main.js:2:2766) at __webpack_require__ (/home/foo/arduino-ide/resources/app/lib/backend/main.js:2:6663105) at 23571 (/home/foo/arduino-ide/resources/app/lib/backend/main.js:2:3374073) at __webpack_require__ (/home/foo/arduino-ide/resources/app/lib/backend/main.js:2:6663105) at 55444 (/home/foo/arduino-ide/resources/app/lib/backend/main.js:2:3369761) at __webpack_require__ (/home/foo/arduino-ide/resources/app/lib/backend/main.js:2:6663105) at 24290 (/home/foo/arduino-ide/resources/app/lib/backend/main.js:2:1780542) at __webpack_require__ (/home/foo/arduino-ide/resources/app/lib/backend/main.js:2:6663105) at 43416 (/home/foo/arduino-ide/resources/app/lib/backend/main.js:2:1770138) at __webpack_require__ (/home/foo/arduino-ide/resources/app/lib/backend/main.js:2:6663105) If you don't know which version of glibc your machine is using, run this from the terminal: /lib/x86_64-linux-gnu/libc.so.6 Further technical details are available here. The recommended path forward is to update to a modern version of Linux. If you can't or won't do that, you can update to the last compatible version of Arduino IDE, 2.3.4, and then avoid updating when future releases (e.g., 2.3.5) come out. There are two methods for dealing with these update offers. I'll provide instructions for both of them. You can pick whichever one of the two is most convenient for you. "SKIP VERSION" The "Update Available" dialog contains a "SKIP VERSION" button. If you click that button, Arduino IDE will no longer show the dialog for the specific newer version being offered at the time you click the button. The dialog will appear once again each time Arduino releases a new version of Arduino IDE, so you will need to click the button again after each release. That is slightly inconvenient, but the release cycle is fairly long so I don't think it will be very burdensome. Disable All Update Offers It is possible to completely disable the offers of updates in the Arduino IDE advanced settings. The downside is this setting also disables offers of updates for your installed boards platforms and libraries. Press the Ctrl+Shift+P keyboard shortcut (Command+Shift+P for macOS users) to open the "Command Palette". A menu will appear on the editor toolbar: Select the "Preferences: Open Settings (UI)" command from the menu. You can scroll down through the list of commands to find it or type the name in the field. A "Preferences" tab will open in the Arduino IDE main panel. Type arduino.checkForUpdates in the "Search Settings" field of the "Preferences" tab. Uncheck the box under the "Arduino: Check For Updates" setting. Close the Preferences tab by clicking its X icon. Keeping Your Arduino Dependencies Updated If you chose this "Disable All Update Offers" method, make sure to periodically check to see if newer versions of your installed boards platforms and libraries are available. You can do this by opening Boards Manager and then setting the "Type" menu to "Updatable", then repeating the process with Library Manager. There is no possibility of a problem using newer versions of Arduino libraries on a computer with an older version of Linux, so don't worry about an incompatibility when updating your libraries. It is theoretically possible that some future version of a boards platform could have an increased minimum Linux version requirement in its tool dependencies. Even if you did encounter that a boards platform stopped working after an update, you can always easily downgrade the platform back to the last working version via the Arduino IDE Boards Manager. Fix operations hanging while Serial Monitor/Plotter is open arduino/arduino-ide#2571, arduino/arduino-ide#2562, arduino/arduino-cli#2728, arduino/arduino-cli#2719 A bug was introduced in Arduino IDE 2.3.3 that caused operations such as downloading Boards Manager package index files to hang if performed while Serial Monitor or Serial Plotter is open. The bug has now been fixed. (Thanks @k5map and @starthemorning) Fix bug causing failed uploads to be indicated as successful arduino/arduino-ide#2518, arduino/arduino-ide#2516 At the termination of an upload operation, Arduino IDE displays a notification to communicate the result to the user. A bug was introduced in Arduino IDE 2.3.3 that caused the IDE to display the upload success notification even when the upload failed. This bug has now been fixed. Fix compilation caching when library installation or cache path contains non-ASCII characters arduino/arduino-ide#2571, arduino/arduino-cli#2733, arduino/arduino-cli#2671 In order to reduce the sketch compilation duration, Arduino IDE caches the compiled files and reuses those on subsequent compilations when appropriate. Previously, the caching did not work when libraries were installed under a path containing non-ASCII characters, or when the path where the cached files are stored contained such characters. This resulted in unnecessarily long compilation durations for the affected users. (Thanks @g91_y and @vvb333007) Fix hang on startup when Raspberry Pi Pico/RP2040 platform installed arduino/arduino-ide#2571, arduino/arduino-cli#2707, arduino/arduino-cli#2665, arduino/pluggable-discovery-protocol-handler#50 Previously, Arduino IDE would sometimes hang on startup if the user had previously installed @earlephilhower's excellent "Raspberry Pi Pico/RP2040" boards platform. Compatibility with that platform has now been restored. Kill tool process when upload is canceled arduino/arduino-ide#2571, arduino/arduino-ide#2517, arduino/arduino-cli#2726 A "CANCEL" button was added to the progress notification Arduino IDE shows during sketch compilation and upload. The user can click this button if for some reason they wish to cancel the operation (e.g., it is clear from the output that the upload is going to fail eventually). Previously, the button affected the Arduino IDE GUI, but didn't actually cancel the underlying process. This could result in spurious failures of subsequent operations if the collided with the still running process from the "canceled" operation. The upload tool process is now killed when the button is clicked. Display a more helpful message when cryptographic signature validation fails due to incorrect system time arduino/arduino-ide#2571, arduino/arduino-cli#2750 Index files used by Arduino IDE are cryptographically signed. Arduino IDE validates the signature of these files. Signatures are time stamped, so if the system time on a users's computer is set to a time in the past, the validation will fail due the signature being considered invalid at any time prior to the timestamp. This causes Arduino IDE to hang on startup, with an "Error verifying signature: openpgp: signature expired" error message in the logs. The error message displayed under these conditions has been updated to include the hint "is your system clock set correctly?". Don't fail platform installation on mismatch with size fields of package index arduino/arduino-ide#2571, arduino/arduino-cli#2739, arduino/arduino-cli#2332 The Arduino IDE Boards Manager is populated by data from index files. In addition to the primary index file maintained by Arduino, the user can specify additional 3rd party Arduino boards platforms to be included by adding URLs to the "Additional Boards Manager URLs" preference. The package index data includes the checksum and file size for each of the files that will be downloaded by Arduino IDE. The purpose of the checksum is to ensure the downloaded file has not been corrupted in any way. The purpose of the file size data is to allow Arduino IDE to display a progress indicator while downloading the file. Arduino IDE 1.x only validated the checksum after download, as this is fully sufficient. If the maintainer of a package index made an error in the file size value, the only impact on the user would be an inaccurate progress indicator, so package index maintainers who used Arduino IDE 1.x would not have any sign of their error. Previously, Arduino IDE 2.x validated the file size against the package index. This resulted in unnecessary boards platform installation failures. It is now changed to only validate against the checksum. Improve resiliency to errors in package indexes arduino/arduino-ide#2571, arduino/arduino-cli#2713 The Arduino IDE Boards Manager is populated by data from index files. In addition to the primary index file maintained by Arduino, the user can specify additional 3rd party Arduino boards platforms to be included by adding URLs to the "Additional Boards Manager URLs" preference. The maintainers of the package index files occasionally introduce errors in the data format, which might impact the functionality of Arduino IDE. Arduino IDE is now able to more gracefully handle such errors. Display donation links on Arduino IDE update arduino/arduino-ide#2581 Arduino IDE is a cornerstone of the Arduino initiative. The IDE, as well as all its helper tools and components, are free open source software. This software benefits the entire Arduino community, even those who do not use the boards sold by Arduino. The ongoing work to develop and maintain this software can be supported by donating to Arduino. The IDE now displays a link to the donation page during updates via the auto-updater, and on the first start after an update. Fix memory leak when scanning sketchbooks with large folders arduino/arduino-ide#2555, arduino/arduino-ide#2537 Previously, the IDE could become unresponsive if the sketchbook contained a folder with many/large files. Support compilation of very large sketch files arduino/arduino-ide#2571, arduino/arduino-cli#2729, arduino/arduino-cli#2718 Previously, compilation would fail spuriously if any sketch code file was larger than 4 MB. The maximum sketch file size has now been increased to 16 MB. (Thanks @jacek_kander) Store all temporary files in path indicated by build_cache.path arduino/arduino-ide#2571, arduino/arduino-cli#2673, arduino/arduino-cli#2668 When a sketch is compiled, Arduino IDE stores the generated files in a temporary folder. It is possible to configure the path under which the files are stored via Arduino CLI's build_cache.path configuration key. This capability might be required for some rare advanced use cases. Previously, the configuration only controlled where the generated Arduino core library files were cached, while sketch and library files were still stored in the default location. All generated files are now stored under the path specified by the build_cache.path configuration key when the user has added that key to the configuration file. Align viewsWelcome behavior to VS Code arduino/arduino-ide#2543 This change allows Arduino IDE extension developers to accomplish certain UI designs. (Thanks @dankeboy36 and @pjrc) Expand and improve translations arduino/arduino-ide#2523, arduino/arduino-ide#2571, arduino/arduino-cli#2692, arduino/arduino-cli#2757 The community work to make Arduino IDE accessible to everyone in the world through localization of the text of the IDE's UI continues, reaching high coverage levels for 18 languages/locales. If you would like to contribute to the Arduino IDE translations, please see the information here: Update Arduino CLI dependency to 1.1.1 arduino/arduino-ide#2571 Much of the non-GUI functionality of Arduino IDE comes from the Arduino CLI tool. In order to benefit from the ongoing development work in the Arduino CLI project, Arduino IDE has been updated to using Arduino CLI version 1.1.1. Full changelog here: If you have any questions or feedback please post here in the dedicated forum category for Arduino IDE 2.x: If you want to see the list of known issues, work in progress, submit a formal report, or contribute to development, the Arduino IDE 2.x source code is hosted in this public repository: Im using arduino IDE 2.3.2 with esp32 wrrom kit and Im trying to generate a simple pwm example and Im getting this error: Compilation error: 'ledcSetup' was not declared in this scope The esp32 library is the 3.0.4. I read in the forum abouyt this error but how do I solve it? Thanks Gaston 1 Like Please post your sketch, using code tags when you do. This prevents parts of it being interpreted as HTML coding and makes it easier to copy for examination In my experience the easiest way to tidy up the code and add the code tags is as follows Start by tidying up your code by using Tools/Auto Format in the IDE to make it easier to read. Then use Edit/Copy for Forum and paste what was copied in a new reply. Code tags will have been added to the code to make it easy to read in the forum thus making it easier to provide help. 1 Like GastonMelo: this error Show the full error. did you #include ? ledc API has changed, theres no ledcAttachPin anymore I forgot to mention that this is a new installation of arduino IDE 2.3, I already installed the esp32 espressif. So I need to install other libraries?¡ #include #include // Define LEDC channel, GPIO pin, and resolution #define LEDC_CHANNEL 0 #define LEDC_PIN 12 #define LEDC_RESOLUTION 10 // Set resolution to 10 bits void setup() { // Initialize LEDC channel ledcSetup(LEDC_CHANNEL, 50, LEDC_RESOLUTION); // Set frequency to 50Hz, resolution to 10 bits ledcAttachPin(LEDC_PIN, LEDC_CHANNEL); // Associate GPIO pin with LEDC channel } void loop() { int dutyCycle = (pow(2, LEDC_RESOLUTION) - 1) * 0.075; // Calculate duty cycle value using 10-bit resolution ledcWrite(LEDC_CHANNEL, dutyCycle); // Delay for 1 second delay(1000); dutyCycle = (pow(2, LEDC_RESOLUTION) - 1) * 0.0875; // Calculate duty cycle value using 10-bit resolution ledcWrite(LEDC_CHANNEL, dutyCycle); delay(1000); dutyCycle = (pow(2, LEDC_RESOLUTION) - 1) * 0.075; // Calculate duty cycle value using 10-bit resolution ledcWrite(LEDC_CHANNEL, dutyCycle); delay(1000); dutyCycle = (pow(2, LEDC_RESOLUTION) - 1) * 0.0625; // Calculate duty cycle value using 10-bit resolution ledcWrite(LEDC_CHANNEL, dutyCycle); delay(1000); } the error output /home/gaston/Arduino/sketch_sep16b/sketch_sep16b.ino:9:5: error: 'ledcSetup' was not declared in this scope 9 | ledcSetup(LEDC_CHANNEL, 50, LEDC_RESOLUTION); // Set frequency to 50Hz, resolution to 10 bits | ^~~~~~~~~~ /home/gaston/Arduino/sketch_sep16b/sketch_sep16b.ino:10:5: error: 'ledcAttachPin' was not declared in this scope; did you mean 'ledcAttach'? 10 | ledcAttachPin(LEDC_PIN, LEDC_CHANNEL); // Associate GPIO pin with LEDC channel | ^~~~~~~~~~~~~ | ledcAttach exit status 1 Compilation error: 'ledcSetup' was not declared in this scope @ZX80 tried to point you to the Espressif documents that explain what are the differences between version 2.x and 3.x of the ESP32 API. On 3.x version, ledcSetup() and ledcAttachPin() are no longer available. That means you have 2 options: Rollback the version of the ESP32 board to the version 2.x OR modify your code according to the new API. Since the code is nor big or complex, I suggest the second option. void setup() { ledcAttach(LEDC_PIN, 50, LEDC_RESOLUTION); } and all ledcWrite functions thereafter will need to be: ledcWrite(LEDC_PIN, dutyCycle); 5 Likes Maybe try this version: #define LEDC_PIN 12 #define LEDC_RESOLUTION 10 // Set resolution to 10 bits float multiplyfactor[4] = {0.075,0.087,0.075,0.0625}; void setup() { ledcAttach(LEDC_PIN, 50, LEDC_RESOLUTION); } void loop() { for (int i=0; i Registers emulation: “None(ATMEGA4809)” since the beginning. Recently I noticed that this has changed back to: Registers emulation: “ATMEGA328”. I suspect it was caused by this update. Hi @stitech. stitech: I suspect it was caused by this update. The regression occurred at the Arduino IDE 2.3.0 release, as a side effect of this bug fix: github.com/arduino/arduino-ide ### Motivation Store the board config data per sketch and not per IDE install… So I think that either you upgraded from Arduino IDE 2.2.1 (or earlier) directly to 2.3.2, or else you didn't notice the regression had occurred while you were using 2.3.0 and 2.3.1. I don't think it is feasible for us to mitigate the regression so everyone will just have to reset their custom board options. My most recent project was with another board, so that change may have gone unnoticed for some time. Anyway: thank you. Search & replace - great feature, to see preview what is about to be replaced. 1st time I see this in IDE 1 Like Page 2 Arduino IDE 2.3.2 works great. Tried it on Raspberry Pi Pico and Espressif ESP32S3. Arduino Nano ESP32 ESP32-S3 on order will test that. I ran two different processors at the same time! I didn’t even check if that was possible. Great work! 2 Likes A post was split to a new topic: Problems with IDE 2.x A post was split to a new topic: IDE 2.3.2 not opening Hi - I am using 2.3.2 Is there a way of cancelling a verify or upload after it has started yet? I have seen numerous posts about it coming but have not found out how to do it as yet. There are times when you press upload or verify and know it is going to fail but you just have to wait it all out before you can try again. Hopefully the function is in the IDE now and someone can point me to it. Thanks Do not know about 2.3.2 but with the nightly 2.3.3, which I currently use, the bottom right message box displays a Cancel button during compile and upload. It works as advertised. Ahhh... Wonderful - thanks - will look at the nightlies. Side note: I am running the nightly builds. In fact I updated today on general principle as I was running one that was about a month old. However, AFAIK the last change made to IDE that was brought into the nightly builds is now something like 5 or 6 months ago. I see still the same bug as described for 2.0.2 here: Often stuck on uploading (IDE 2.0.3) IDE 2.x Hi, I'm using the IDE v2.0.3 with a Raspberry Pi Pico W. The program compiles correctly, it starts to upload the compiled program but most of the time the popup with "upload in progress..." (or something similar, I have the IDE in italian) stays forever and so the "upload" button is disabled. So I have to close the IDE and start it again. Sometime the popup (and the disabled button) stays forever even if the program is uploaded and is running. Is there something that I could check? Thank y… This should be handled properly. Occasionally happening to Pro Micro: A post was split to a new topic: Still no upload without recompile A post was split to a new topic: Hay alguna guía en español? This topic was automatically closed 180 days after the last reply. New replies are no longer allowed.

- what is the main conflict in the book to kill a mockingbird
- yidabevi
- zasopicu
- vuxa
- jerixifa
- spanish worksheets for high school pdf