# Arduino development

Reference websites:

* <http://tavendo.com/blog/post/arduino-yun-with-autobahn/>
  + Introduction to the Yun
* <http://www.linksprite.com/wiki/index.php5?title=NFC_PN532_Shield>
  + Details of the NFC Readers
  + Former library used – now replaced by the Seeedstudios version
  + <http://www.seeedstudio.com/wiki/NFC_Shield_V1.0>
    - Ditto above
* <http://arduino.cc/en/Guide/ArduinoYun#toc9>
  + Details of Arduino Yun setup
  + <http://arduino.cc/en/Guide/ArduinoYun#toc13>
* <http://www.instructables.com/id/PART-1-Send-Arduino-data-to-the-Web-PHP-MySQL-D3js/>
  + Connecting to a server
* <https://www.youtube.com/watch?v=UuZ6g4Dn6zE>
  + Setting up wifi connection on the Arduino
* <http://rapidnfc.com/item/221/nfc_cards_tickets_nfc_business_card_ntag203>
  + Cards used in setup
* <http://arduino-info.wikispaces.com/Arduino-Libraries>
  + Fixing problem of connection between Arduino and NFC library
* <http://arduino.cc/en/Guide/Libraries>
  + Fixing problem of connection between Arduino and NFC library
* <https://github.com/adafruit/DHT-sensor-library/issues/1>
  + Fixing problem of connection between Arduino and NFC library
* <http://stackoverflow.com/questions/13839129/how-to-read-write-a-mifare-tag-wtih-arduino-at-nfc>
  + Figuring out why the card was only writing to 4 bits instead of 16
* <http://www.asciitable.com/>
  + ASCII table to convert from the student code to the code on the card
* <https://learn.adafruit.com/adafruit-pn532-rfid-nfc/mifare>
  + Figuring out why card was only writing to 4bits instead of 16
* <http://www.instructables.com/id/Save-data-of-temperature-and-humidity-on-MySQL-wit/#step4>
  + Updating a SQL database
* <http://www.w3schools.com/php/php_mysql_connect.asp>
  + Linking between the PHP and the SQL
* Trying to fix problem with pins
  + <http://forum.arduino.cc/index.php?topic=213389.0>
    - Advice about trying to select different pins (didn’t help)
  + <http://arduino.cc/en/Reference/SPI>
    - Shows which pins are used (didn’t help)
  + <https://github.com/jmgjmg/PN532>
    - Alternate library (didn’t help)
  + <http://forum.arduino.cc/index.php?topic=161241.0>
    - Layout of pins on the Arduino (didn’t help)
  + <https://forums.adafruit.com/viewtopic.php?f=31&p=308506>
    - Compatibility advice (didn’t help)
  + <http://forum.arduino.cc/index.php?topic=183587.0>
    - Compatibility advice (didn’t help)
  + <http://tronixstuff.com/2011/05/13/tutorial-arduino-and-the-spi-bus/>
    - Arduino and SPI use (didn’t help)
  + <http://forum.arduino.cc/index.php?topic=296382.0>
    - Arduino yun connection to nfc (confirms out of date)
  + <https://learn.adafruit.com/adafruit-pn532-rfid-nfc/arduino-library>
    - Adafruit library for comparison
  + <http://forums.adafruit.com/viewtopic.php?f=31&t=48339>
    - Adafruit communication problems
  + <http://forum.arduino.cc/index.php?topic=74087.0>
    - Communication problems outlined
  + <http://forum.arduino.cc/index.php?topic=67044.0>
    - Attempt to attach nfc shield via the breadboard
* Fixed problem with Arduino-NFC communication – new library
  + <http://www.seeedstudio.com/wiki/NFC_Shield_V2.0>
  + <https://github.com/Seeed-Studio/PN532>
  + <https://github.com/don/NDEF>
* Trying to connect to PHP using post (unsuccessfully) with yunclient
  + <http://forum.arduino.cc/index.php?topic=239575.msg1720142#msg1720142>
  + <http://forum.arduino.cc/index.php?topic=193567.0>
  + <http://stackoverflow.com/questions/4007969/application-x-www-form-urlencoded-or-multipart-form-data>
  + <http://www.element14.com/community/thread/41630/l/arduino-yun-sending-data-to-ws-via-post?displayFullThread=true>
  + <http://forum.arduino.cc/index.php?topic=239575.msg1720142#msg1720142>
  + <http://forum.arduino.cc/index.php?topic=226602.0>
  + <http://forum.arduino.cc/index.php?topic=45957.0>
  + <http://forum.arduino.cc/index.php?topic=37718.0>
  + <http://forum.arduino.cc/index.php?topic=239575.0>
* Connecting direct to mysql (unsuccessful)
  + <http://drcharlesbell.blogspot.co.uk/2013/04/introducing-mysql-connectorarduino_6.html>
  + <http://drcharlesbell.blogspot.co.uk/2013/04/introducing-mysql-connectorarduino_6.html>
* Connected successfully to php script
  + Used get request
  + <http://php.net/manual/en/function.urlencode.php>
  + <http://interactive-matter.eu/how-to/arduino-http-client-library/>
  + <http://php.net/manual/en/function.mysqli-connect.php>
  + <http://php.net/manual/en/reserved.variables.server.php>
  + <http://www.w3schools.com/php/php_mysql_connect.asp>
* Get only sending one word
  + <http://stackoverflow.com/questions/4462219/get-request-with-space-in-querystring-crashes-code>
    - to solve the ‘ ‘ vs ‘+’ problem with Get requests
  + <http://stackoverflow.com/questions/11834440/how-do-i-handle-strange-characters-in-arduino-code>
    - Trying to sort above
* Looping through database results for timetable
  + <http://stackoverflow.com/questions/9243383/looping-through-sql-results-in-php-not-gettiing-entire-array>
* Converting timetable results
  + <http://stackoverflow.com/questions/2303724/formating-an-sql-timestamp-with-php>
  + <http://php.net/manual/en/function.date.php>
  + <http://php.net/manual/en/function.getdate.php>
* Confirming student is in course
  + <http://us3.php.net/manual/en/function.strpos.php>
  + <http://stackoverflow.com/questions/4366730/check-if-string-contains-specific-words>
* Fixing connection issue between date and datetime
  + <http://www.richardlord.net/blog/dates-in-php-and-mysql>
  + <http://stackoverflow.com/questions/10789758/convert-date-to-datetime-in-php-and-mysql>
  + <http://stackoverflow.com/questions/13189252/sending-date-and-time-form-fields-to-mysql-with-php>
  + <http://stackoverflow.com/questions/2215354/php-date-format-when-inserting-into-datetime-in-mysql> (answer)
* Arduino Library Pages used
  + <http://arduino.cc/en/Reference/YunBridgeLibrary>
  + <http://arduino.cc/en/Reference/YunHttpClientGet>
    - Used to do the final solution
  + <http://arduino.cc/en/Reference/YunProcessBegin>
  + <http://arduino.cc/en/Reference/YunClientWrite>
  + <http://arduino.cc/en/Reference/YunServerConstructor>
  + <http://arduino.cc/en/Tutorial/Bridge>
  + <http://arduino.cc/en/Serial/Flush>