

# WAD LABORATORY 10

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## 1 Objectives covered in this laboratory

- ❑ Practise to debug web applications
- ❑ Practise to use Regular Expressions
- ❑ Practise Object-Oriented Programming

## 2 Exercises

- a) Write a PHP page to verify IP address (IPv4 version) using Regular Expressions (see Figure 2). The page provides an input box to let users input an IP address, then press the button. On server side, you should use PHP Regular Expressions functions to check the validity of the IP address.

Hint: an IPv4 address is a 32-bit (four-byte) address, which is usually represented as Dotted decimal such as '192.168.0.1'. The range of an IPv4 address is 0.0.0.0 – 255.255.255.255.



Figure 1 validate IPv4 address

- b) Create a class called `InventoryCon` in PHP script `connectInventory.php`. This class will be used by users to retrieve information from the inventory table created in MySQL database. A user is also asked to select a “make” from a drop-down list that lists a set of make items plus an “ALL” item (Refer to Figure 1 in Lab 4).
1. Write a constructor `__construct()` to initialize data members used for `InventoryCon` (connecting to the Inventory table). The data members include normal parameters for connecting to MySQL database (i.e., host, username, userpassword), the database dbname, as well as the table name (which should be “Inventory” and you’ve already created this table in lab4). Then, you make a connection to the MySQL server in Object Oriented Syntax.
  2. Also define the following member functions:
    - i. `getMakes()` - to get make information from database (this is used to populate the drop-down list for all makes);
    - ii. `setMake ()` - to set make which is selected by a user;
    - iii. `getInventories()` - to get inventory data for a particular make or ALL makes from database and display it on the page;
    - iv. `closeConnection()` - to close the connection.

Then, create another PHP script `showInventory.php` to use the `InventoryCon` class to display the inventories (Refer to Figure 2 in Lab 4).