

# CST 226-2 Web Application Development

## Assignment 1 (Practical)

**Duration:** 1 hour and 30 minutes

### Instructions:

Create a new project in NetBeans IDE with your registration number. (E.g.: **UWU\_CST\_21\_XXX**)

Upload the zipped project to the given link in the VLE.

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1. You are required to create a simple web application to insert the item details to the database using the form given in Figure 1.

(**Note:** Copy and paste the html code given in the **index.php** file to your **index.php** file to generate the **Insert Item form** and set the action to **process.php**.)

<b>Insert Item</b>	
Item Name:	<input type="text"/>
Unit Measured:	<input checked="" type="radio"/> Kilogram <input type="radio"/> Liter <input type="radio"/> Packet
Unit Size (optional):	<input type="text"/>
Unit Price (LKR):	<input type="text"/>
<input type="button" value="Add Item"/> <input type="button" value="Clear"/>	

Figure 1: Insert Item Form

2. Create a database called '**assignment1db**' on MySQL server and create the **item** table using the following SQL command.

```
CREATE TABLE item (  
    itemId int(11) PRIMARY KEY NOT NULL AUTO_INCREMENT,  
    itemName varchar(20) NOT NULL,  
    unitMeasured varchar(20) NOT NULL,  
    unitSize varchar(20),  
    unitPrice double NOT NULL  
);
```

3. Create the **DbConnector** class with the information given in Figure 2 using **PDO**.

DbConnector
<ul style="list-style-type: none"><li>- host : string</li><li>- dbname : string</li><li>- dbuser : string</li><li>- dbpw : string</li></ul>
<ul style="list-style-type: none"><li>+ getConnection() : pdo</li></ul>

Figure 2: DBConnector Class

4. Implement the **Item class** using the class structure given in Figure 3 using object-oriented PHP.
  - Name the class as **item.php**.
  - Within **addItem()** function, write the code to insert item details to the database using prepared statements.
  - If the item details are successfully saved to the database, display a message to the user (i.e.: **The item sugar inserted successfully**) and for any errors, inform the user with an **"Insertion failed"** message.

Item
- itemId : int - itemName : string - unitMeasured : string - unitSize : string - unitPrice : double
+ __construct(itemName, unitMeasured, unitSize, unitPrice) + addItem()

Figure 3: Item Class

5. Create another page called **process.php** to receive the item details obtained from **Insert Item form**.
  - Use validations and other security measures as much as possible.
  - Within the page, assign the received item details to an **item object** through the **constructor**.
  - Call the **addItem()** function in the item class through the **item object** to save the item details.