



Uva Wellassa University, Sri Lanka  
Faculty of Science & Technology  
2<sup>nd</sup> Semester Examination September/October 2012  
CST 323-3 Web Development Technology



Part (B)

Follow the instructions given bellow

Time Allowed: Two (02) hours

**Instructions:**

- Removable storage devices/ drivers are **not allowed**.
- You are allowed to refer your own notes but **sharing notes is strictly prohibited**.
- All your works should be saved in your **Z** drive.
- Index page (or the main page of the website) should be saved as '**index.php**' in **Z** drive.
- You can run your PHP files saved in your Z drive using the web address  
'http://10.93.2.253/your examination number/your php file with the extension'  
e.g. **http://10.93.2.253/ex090271/test.php**
- Database for each student has been created under the student's examination number.
- Parameters for MySQL database access;  
Server name: **localhost**  
Username: **ex09student**  
Password: no password (i.e. " ")  
Database name: examination number (e.g. **ex090271**)
- You have to create the necessary tables by yourself using PHP.

**Question:**

QuickCab is a vehicle renting company which provides vehicles to the customers with or without drivers. The company hires vehicles from different owners and registers them manually. Similarly QuickCab has its own driver pool in which all the drivers have been registered. Drivers are assigned to the vehicles upon customer request, i.e. if a customer wants to hire a vehicle without a driver then company will not assign a driver to the vehicle. Company maintains a schedule for each customer request and all the details of each booking are logged accordingly.

QuickCab requires a web-based system for managing the rented vehicles. The web-based application will be used only by the QuickCab staff. Therefore user authentication is not a mandatory requirement.

Following specifications are given;

- Vehicle
  - Types of vehicles available: Car, Van and Three-wheeler.
  - Each type has different amount of guarantee deposit (Rs.): Car (10 000), Van (15 000) and Three-wheeler (5 000)
  - Vehicles have the following properties in common: Registration number, Guarantee, Odometer reading.
- Driver
  - All necessary details should be considered (Name, Driving License Number)
- Customer
  - There are two types of customers: Regular (loyalty) customers and Irregular (casual) customers.
  - Regular customers have a special identification number and they are released from the guarantee deposit. Irregular customers should deposit the relevant amount to hire a vehicle.
  - All the other attributes are common to both categories (Name, NIC, Address, etc.).
- Schedule
  - Each schedule has to have the vehicle registration number, type of the vehicle, duration (hiring and return dates), starting odometer reading, driver details (if assigned) and customer details.

Main functionalities expected from the system;

- Registering a new vehicle, a new customer and a new driver
- Upgrading an existing (irregular) customer to a regular customer
- Booking a vehicle (scheduling)
- View details of each schedule (vehicle, driver, customer, duration, etc.)
- View list of vehicles as hired or not-hired
- View list of drivers in detail
- View the customers under each category
- Editing/ Deleting any table entry (a vehicle, a customer, a driver or a schedule)

Design the system considering **Object Oriented Concepts** and implement it using **PHP** and **MySQL**.

You have to create the required MySQL tables using PHP (you are not allowed to use phpmyadmin or MySQL console) and populate them appropriately.

- Styling and interface designing is not a mandatory requirement.
- If you use object oriented techniques for database connectivity and JavaScript for form validation, it will be an added advantage.

(70 marks)