

## Web Development Technologies Assignment 2 specification

### Deadlines: Multiple deadlines

### To be attempted via: Portedu Marks allocated to

### You must attempt this assignment individually or in group of 2-3

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If you decide to work in a group, please create a group on PORTEDU- this is very important. **Failing to create a group on Portedu will lead to an award of ZERO Marks to your group members.**

*Note: If you are working individually, please skip to page 2*

**Group Owner** is the student who creates the group. Only group owner CAN submit the assignment on the behalf of the group for marking.

**Group Member** is a student who joins an existing group.

**Group Formation Closing Time** - Students may create/join/leave/delete group before the group formation closing time. System will not allow these operations after group formation closing time. Students must contact the course instructor if they need to change their group memberships after group formation time.

**Create New Group** - Student can create a new group if not a member of any group. Some students may want to attempt group assessments as individual. These students don't have to create a group in the system.

1. Select Course
2. Click Assessment (Assignment 2 - Milestone 1) and click on My Group menu item.
3. System will present the list of all group assessments for the selected course.
4. Click on Create link next to the assessment for which you wish to create a group.
5. Confirm your request to create a new group and submit.
6. System will present operation result message.
7. Click on View link to view your group id and group secret code. You will have to securely pass on your group id and group secret code to students who you wish to take members in your group.

**Join Group** - To join an existing group you need the group id and group secret code of that group. The group owner or an existing group member should securely pass on this information to you.

1. Select Course.
2. Click Assessment and click on My Group menu item.
3. Click Join Group link next the assessment for which you wish to join an existing group.
4. Enter Group Id and Group Secret Code given to you by the group owner or existing group member. Click on submit button.
5. Confirm the group details and submit your request.
6. System will present operation result message.

Now repeat all of the above steps for Assignment 2 - Milestone 2.

## 2.1: Introduction

*"The aim of this assignment is to develop a website with .NET Framework 4.5.1 using Visual Studio 2013 and SQL Server 2012/14 as the backend.*

*You can use either the Web form model or ASP.NET MVC model!*

Aim of this assignment is to develop a website/system that can be used to keep track of the patients registering in a hospital. Also, this system should support features such as- accessing the previous visit histories of any patient, search for patients by name and other properties etc.

Explanation of some frequently used terms for this system-

1. Patient - a patient is the person who visits the hospital for treatment/consultation
2. Doctor - a doctor will be assigned to each patient.
3. Bed - if patient type is "In Patient", a bed will be assigned to the user.
4. Visit - a patient can visit the hospital any number of times.

Some of the most general requirements of the system are:

- Registration of patients
- Users of this website/system can search for patients by name, admission date, discharge date etc.
- Users can view the previous visit histories of any patient
- System can maintain the list of doctors in the hospital
- System can maintain the list of beds/rooms available in the hospital
- Patients can be categorised into "In Patients" and "Out Patients"

## 2.2: General overview of the database involved

You will need to create a database with tables to work on this assignment.

*You may use ADO.NET or Entity Framework to fetch the data!*

1. *You can add and remove any of these tables as per your specific needs*
2. Symptoms, Disease and Treatment are sensitive information. In most of the cases, this information will not be saved into the System. You can remove those fields if you don't want them to be part of the system.
3. For the advanced part functionalities, you might have to add some additional tables.

Table Name: **Patient** -- When a new patient arrives in a hospital and register, a record is added to this table. A patient will have only one record in this table.

Field Name	Type
Id	Auto Number
Name	varchar (50)
Address	varchar (255)
DateOfBirth	DateTime
Phone	varchar (20)
EmergencyContact	varchar (255)
DateOfRegistration	DateTime

Table Name: **Doctor** -- This is a master table containing a list of the available doctors in the hospital.

Field Name	Type
Id	Auto Number
Name	varchar (50)
Address	varchar (255)
Phone	varchar (20)

Table Name: **Bed** -- This is a master table that contains a list of all the beds (rooms) in the hospital. Before we start assigning a bed to a patient, we must have created all of the available beds in this table.

Field Name	Type
Id	Auto Number
BedName	varchar (50)
RatePerDay	Number
BedType	varchar (50)

Table Name: **Visit** -- This is a table, which records the patient visit(s).

Field Name	Type	Remarks
Id	Auto Number	
PatientType	Number	0 - In patient, 1 - Out Patient
DoctorId	Number	For each visit, a doctor will be assigned to the patient.
BedId	Number	If the patient type is "In Patient", a bed will be assigned to the user.
DateofVisit	DateTime	The date on which the patient visited the hospital
DateofDischarge	DateTime	Date on which patient is discharged from the hospital. If the patient type is "Out Patient", DateofDischarge will be same as DateofVisit
Symptoms	varchar (1000)	The symptoms of the patient
Disease	varchar (1000)	Disease identified by the doctor.
Treatment	varchar (1000)	Treatment suggested by the doctor.

## Assignment 2 Milestone 1 Tasks

**Deadline: Sunday August 3, 2014 (11:59 pm Melbourne Time)**

**Marks allocated: 25**

*If you are working in the group, only the group owner needs to submit via PORTEDU.*

The website is only accessed by the booking staff. Booking staff must login in order to perform certain functions. You should store the log in details (username and password) in the database. There is no need to write functionality to create Booking staff login details; you can create some pre-existing staff members in a database table.

1. [4 marks = 2 + 3] Website must have the following pages:
  - a. Home page for the hospital – *lorem ipsum* not allowed, please add some sensible content and an image.
  - b. Site Map
2. [2 marks] Navigation bar consisting of links to the basic pages.
3. [15 marks= 2 + 4 + 2 + 2+ 2] Following basic pages/screens are required:

a.	Patient List (both “in” and “out”)	<ul style="list-style-type: none"><li>• A gridview/table should be used to display the list of registered patients.</li><li>• Staff should also be able to enter the full/partial name of a patient to filter the list of patients.</li></ul>
b.	Patient Registration	<ul style="list-style-type: none"><li>• This screen allows to add/edit patient registration.</li></ul>
c.	Patient Visits	<ul style="list-style-type: none"><li>• This screen uses a grid view/table to display the list of patient visits.</li><li>• Staff member should be able to filter the details of patient visits by patient name, date of visit and date of discharge.</li></ul>
d.	Doctors List	<ul style="list-style-type: none"><li>• This screen displays the list of all available doctors, using a gridview/table.</li></ul>
e.	Bed List	<ul style="list-style-type: none"><li>• This screen displays the list of all available doctors, using a gridview/table.</li></ul>

*Details of patient visits: should normally contain information as- patient name, address, type (in or out), problem (invent some, be creative!!) and diagnosis (medicine, surgery, etc.), date of visit and date of discharge (in case of an in patient).*

*Bed List: Bed table from the database should give you some hint. Invent some bed types, names and rates. There is no need to get into the details of different types of rooms.*

4. [4 marks] Each form must have basic form server-side validation, such as some important fields must not be left empty.

PLEASE decide which fields are important and should not be left empty, as per your implementation.

### **What to submit?**

Zip all of the following together and submit 1 zipped file via Portedu to the assessment labelled **Assignment 2 - Milestone 1 (25%)**-

- 1- Documentation Table (a template has been provided separately)
- 2- Readme file (*if applicable*)
- 3- The whole project directory
- 4- Sql file to create database

### **Extension queries**

Send the extension queries to Maree Graham at [ouacsit@rmit.edu.au](mailto:ouacsit@rmit.edu.au) .

Make sure you discuss queries at the Discussion Board and attend collaborate sessions for any help with the assignment.

Plagiarism is a serious offence. If you use any work borrowed from a book or net, you must reference it.

### **Assignment 2 Milestone 2 Tasks**

**Deadline: Sunday August 24, 2014 (11:59 pm Melbourne Time)**

**Marks allocated: 10**

*If you are working in the group, only the group owner needs to submit via PORTEDU.*

5. [4 marks = 2+ 2] Following advanced features should be added to the website:

a.	DoctorPatientInfo	<p>This page should have the following features-</p> <ul style="list-style-type: none"><li>• Assign a doctor to a patient</li><li>• Treatment history of each doctor (i.e. which patient he/she has treated in past and/or is treating)</li></ul>
b.	DischargeInPatient	<ul style="list-style-type: none"><li>• A page that calculates amount payable by the “in-patient” upon discharge.</li><li>• Presenting of an Invoice, payment process and change of status (patient → discharged) in the database.</li></ul>

6. [2 marks] Extend the ‘DischargeInPatient’ by adding a feature that will allow the validation of the credit card (during the payment process). Credit card validation should be done via **jQuery**.

7. [4 marks = 3 + 1] These marks will be awarded based upon the following features-

- a. Code elegance (Object-oriented code, separation of code, code commenting and exception handling)
- b. Project and directory structure

**What to submit?**

Zip all of the following together and submit 1 zipped file via Portedu to the assessment labelled **Assignment 2 - Milestone 2 (10%)**-

- 1- Documentation Table (a template has been provided separately)
- 2- Readme file (*if applicable*)
- 3- The whole project directory
- 4- Sql file to create database

### **Extension queries**

Send the extension queries to Maree Graham at [ouacsit@rmit.edu.au](mailto:ouacsit@rmit.edu.au) .

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