ISYS1124/1126 ASSIGNMENT # 1

Marks allocated:	**15%** (*to be marked out of 30*)
Deadline:	**Sunday 20.08.2017 (11:59 PM)**
Submit via:	Blackboard group page
Work mode:	*Individually* or In a group of **2**
Submission format:	.**zip** (no other formats will be accepted)
Demo:	**Face2Face during week 6 (21.08.2017 - 25.08.2017)**

Overview

In this assignment, you will develop web database applications using **Laravel**. You may use **Sqlite3** or **MySQL** as the back-end database. The work of assignment 2 will be an extension of assignment 1.

Scenario

Look at the ITS ticket submission system (you may have used it at some stage of your study career): https://rmit.service-now.com/serviceandsupport/

ITS is asking you to build a working prototype of a new ticketing web system. A ticketing system will be used to submit new requests, track the submitted requests and add comments to the tickets. At this stage, no login or registration features are required to access the system as it is in pilot stage. You will implement the login in assignment 2.

The system will support the following basic features-

- When users visit the ticket submission page, they will be able to submit a ticket via a form to ITS. Each request will be allocated a unique ID upon submission.
- A user should be able to add comments to their ticket(s) and close them if need be.
- A support person from ITS can view all the tickets
- A support person from ITS should be able to reply to the ticket and close it upon resolution

The following information should be stored in the back-end database into separate tables-

- User information | Ticket information | Comments associated with a ticket

The layout and UI of the web pages is entirely up to your discretion. Since this is an advanced elective, we do not want to prescribe the layout and stifle innovation. Be creative and choose your own professional layout!

*Tasks (*to be marked out of 30 for major demo during week 6; whatever you score out of 30, we will divide it by 2 as assignment 1 carries 15% weight)

NOTE: Do not emulate every feature of the ITS helpdesk website at this stage, focus on the tasks mentioned below. All the relevant data must be stored in the backend database using <mark>Eloquent ORM</mark>. Your database should be normalised and reflective of your model and migration classes. **Use of embedded SQL is strictly prohibited**.

1.1 (5 marks) Write two-three pages of a report (*save it as **1.1.pdf***) outlining the following-

   a)   What is your general impression of ITS helpdesk portal (website)?
   b)   Which aspects of its design and usability do you find easy (hard)?
   c)   Explain your answer for part b
   d)   How can your design and implementation of ticket submission system simplify the website?
   e)   Anything else that you may want to add.

1.2 (5 marks) A well-defined layout page for all the blade view pages. Layout should define the basic sections of view pages- header, footer, navigation bar and content areas. Use meaningful content on all the pages- <mark>lorem ipsum is not allowed</mark>.

   a)   Home page- to contain some information about ITS, ticketing system and anything else that you may deem necessary.
   b)   FAQ- a list of frequently asked questions along with the answers for a user.

1.3 (10 marks = 3+ 4 + 3) Implement the tickets submission feature-

   a)   Users should be able to submit their basic information and the issue via a tickets submission form. The form should ask for – user email, first and last names, email, operating system being used, software issue and a comment textearea to describe the issue. You may add more fields at your discretion.
   b)   Add appropriate **Laravel server-side validation**
   c)   Upon successful validation the above form data must be saved into the database. Each ticket should be marked as *Pending* and be allocated a unique ID upon submission.

1.4 (10 marks = 2 + 6 + 2) Implement a page for the ITS staff where they can

   a)   View all the tickets displayed in a neat tabular manner.
   b)   Add comments to a ticket. The comments should be stored in the database. *Replies/comments made by the ITS staff and the submission status of the ticket should be visible to the user.*
   c)   Close the ticket upon successful resolution and change its submission status. A submission status can be – *Pending, In Progress, Unresolved, Resolved.*

Group Registration, what and how to submit?

a) You must register your group via Google excel sheet link present on the **Assignments** Blackboard page. The deadline for registration is end of week 3 ie Sunday 06.08.2017

b) You must register even if you are working individually.

c) Zip all of the files and one of the group members to submit a single zipped archive (**assignment1.zip**) via your group link in Blackboard

d) Make sure you attend the **mandatory face2face** demo during week 6. A schedule will be announced closer to the demo date.

Late submission and Penalty

a) A penalty of 10% per day of the total marks will apply for each day late, including both weekend and weekdays.

b) After five days, you will receive a zero for the whole assignment.

c) Extension requests should only be emailed to the lecturer (**shekhar.kalra@rmit.edu.au**)

d) **No demo = No marks**

Plagiarism

Blackboard contains an in-built tool known as **turnitin**. It compares all of the submitted assignments for the whole batch and then compares the text against the resources in the internet. It flags a similarity report when it finds huge chunks of copied text.

All assignments will be checked with plagiarism-detection software; any student found to have plagiarised would be subject to disciplinary action. Plagiarism includes

- submitting code that is not your own or submitting text that is not your own
- allowing others to copy your work via email, printouts, social media etc.
- posting assignment questions (in full or partial) on external technical forums
- copying work from/of previous semester students

A disciplinary action can lead to

- a meeting with the Associate Dean
- a score of zero for the assignment
- a permanent record of copying in your personal university records and/or
- expulsion from the university, in some severe cases

All plagiarism will be penalised. There are no exceptions and no excuses. You have been warned.