COMP3059 Capstone Project I

Sprint 4

Wireframe/Prototype, Technical Requirements Assignment (20%)

Due: Monday, Nov. 25, 2019 (11:59 pm)

A) Prototype
Use a mock-up tool or any other tool that best suits your project to:
- create wireframes to build a **Mockup/Prototype** OR a **Beta version**;

Ensure that the design of your application has effective UX and UI.
It must be interactive to show the functional and navigational capabilities.
It must also be **detailed and adhere to** Sprint 1, 2 and 3 documentation.

Note: If you are using the Balsamiq tool, you can export your mockup as a **.pdf**.

B) Technology Requirements (1 or 2 pages as a Word document)
- Create a detailed tabular representation of the technology (for e.g. Database, Programming languages, Framework, Hardware, etc.) that is being planned by your team to build the application/s.
- State 1 or 2 reasons to justify why each technology is best fit for your application.
- If any skills need to be developed within the team, the **Learning Plan** (start date, end date, resource, and team member/s) must be stated.

Evaluation guidelines:
Design of Mockup	–> 20%
Functionality of Mockup	–> 20%
Technology Requirements	→ 20%
Team Work (based on Peer Evaluation)	–> 40%

For any documents submitted on Blackboard, use the following naming convention "F19_T<your team number>_<appropriate name>".
        For example, F19_T33_MockUp.pdf, F19_T33_TechReq.doc

Only 1 submission per team is required.

A) Prototype Link

Web Version:
https://www.figma.com/proto/4ziukeKzoys3Tio2YA9W5i/T30_Mockup_WebVersion?node-id=17%3A51&scaling=contain

Mobile Version:
https://www.figma.com/proto/Hq5VkkVJbeT4W7sXJJO21t/T30_MockUp_MobileVersion?node-id=1%3A2&scaling=scale-down

B) Technology Requirements

#	Type	Technology Planned To Employ
1	Database	MongoDB
2	Cloud Hosting Platform	Google Cloud Platform
3	Framework	Angular 8.0
4	Code Editor	Visual Studio Code
5	Programming Language	JavaScript ES2015
6	UI/UX Designing Tool	Figma
7	Programming Language	Python
8	Programming Language	Node.js
9	Framework	Express
10	D3	Visualization Library
11	DevOps Tool	Docker
12	DevOps Tool	Kubernetes

Reasons to choose technologies above:

1. **Angular 8.0**: Angular is one of the most popular front-end frameworks for developing web application. Angular documentation is well-written and easy to read. Also, Angular is the web framework that we are studying in this course, and thus working on a real-world project using Angular will be a valuable experience for our team

2. **MongoDB:** MongoDB is among top choices when it comes to picking database for web project. Unlike SQL, MongoDB is a cross-platform document-oriented database program. Classified as a NoSQL database, MongoDB uses JSON-like documents with schema. Therefore, using MongoDB as a database program can help our team to strengthen our knowledge in terms of using JSON as well as working with NoSQL database

3. **Figma:** The main reason for us to choose Figma as our UI/UX design tool is because Figma is total free. Also, Figma is much more powerful, and user-friendly than industry competitors such as Adobe XD (also free), Balsamiq, and Sketch.

Learning Plan

#	Tool	Date Start	Date Finish	Resources	Members on duty
1	D3 Visualization	January 2, 2019	January 9, 2020	freeCodeCamp (freeCodeCamp.org), D3 official website (d3js.org)	Quang Pham, Thanh Quan
2	Google Cloud Platform	January 3, 2019	January 8, 2020	Coursera (Course Name: Google Cloud Platform Fundamentals)	Thong Nguyen, Tu Nguyen