**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.

1. **Protytype 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>

1. **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 |