**Project Deliverable E: Project Schedule and Cost**

GNG 1103 – Engineering Design

Team A14

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| --- | --- | --- |
| Student Number |  | Name |
| 300112652 |  | Josie (Jingshu) Fu |
| 300112337 |  | Nicolas Strebel |
| 300072471 |  | Disala De Silva |
| 300149657  300199652 |  | Brunel Sontia  Sacha Saleh |
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Faculty of Engineering - University of Ottawa

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# **Introduction**

Upon conducting a second meeting with the client, JAMZ, on Wednesday October, 15th, the team gathered and finalized relevant information regarding their future build for prototype 1 based on the client’s feedback. Within this document contains the potential risks and contingencies, bill of materials, 3 project plan charts containing the necessary tasks needed to be completed for the upcoming 3 prototypes, as well as an accompanying document which contains the project plan gantt chart.

# **Table 1: Bill Of Materials**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Item** | **Description**  (What/Why) | **Quantity**  (How many) | **Source**  (Link) | **Unit Price**  ($\*how many) | **Total Price**  ($) |
| 1 | Flutter | Flutter is a UI software development tool.  Our group will be using flutter to develop UI’s for both IOS and Android at the same time. | 1 | [Flutter Home](https://flutter.dev/) | $0.00 | $0.00 |
| 2 | Adobe XD | Adobe XD is a user experience design tool for web/mobile apps.  We will be using this for designing our prototype/ models to present to our class as well as our clients. | 1 | [Adobe XD Home](https://www.adobe.com/ca/products/xd.html) | (“Personal Account”)  $0.00 | $0.00 |
| 3 | Android Studios | Android Studios is an app building tool for android devices.  We will use this tool to build our initial Android UI. | 1 | [Android Studios Home](https://developer.android.com/studio) | $0.00 | $0.00 |
| 4 | Visual Studio Code | Visual Studio Code is a code editor.  We will use this to check/evaluate our software we create. | 1 | [Visual Studio Code Home](https://code.visualstudio.com/) | $0.00 | $0.00 |
| **Total** | | | | | **$0.00** | |

# **Table 2 - Prototype 1: Conceptual Mockup with Powerpoint Tasks & Estimation (Days)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Members | Current (Green) | Est (Days) | Will do (Orange) | Est  (Days) |
| Josie | Analyze Initial Designs Individually | 1 | Revise and Edit Main Home Page | 2 |
| Discuss and Compare Mockups, Send Initial Designs to Disala | 1 | Revise and Edit Search Page | 2 |
|  |  | Revise and Edit Restaurant Options Page | 2 |
|  |  | Configure Powerpoint Mockup | 1 |
| Nicolas | Analyze Initial Designs Individually | 1 | Revise and Edit Restaurant Page | 2 |
| Discuss and Compare Mockups, Send Initial Designs to Disala | 1 | Revise and Edit Order Confirmation Page | 2 |
|  |  | Revise and Edit Order Delivered Page | 2 |
|  |  | Configure Powerpoint Mockup | 1 |
| Disala | Analyze Initial Designs Individually | 1 | Revise and Edit Splash Page | 2 |
| Create Basic Mockups | 1 | Revise and Edit GPS tracking page | 2 |
|  |  | Revise and Edit Log-in Page | 2 |
|  |  | Revise and Edit  Sign-up Page | 2 |
|  |  | Configure Powerpoint Mockup | 1 |
| Brunel | Analyze Initial Designs Individually | 1 | Revise and Edit Account and Settings Page | 2 |
| Discuss and Compare Mockups, Send Initial Designs to Disala | 1 | Revise and Edit Change Password Page | 2 |
|  |  | Configure Powerpoint Mockup | 1 |
| Sacha | Analyze Initial Designs Individually | 1 | Revise and Edit Shopping Cart Page | 2 |
| Discuss and Compare Mockups, Send Initial Designs to Disala | 1 | Revise and Edit Order History Page | 2 |
|  |  | Revise and Edit Customer Support Page | 2 |
|  |  | Configure Powerpoint Mockup | 1 |

# **Table 3 - Prototype 2: Rough Copy of Prototype in Flutter/VSCode**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Members | Current (Green) | Est  (Days) | Will do (Orange) | Est  (Days) |
| Josie | Discuss Client Feedback from Prototype 1 | 1 | Revise and Finalize Code for Main Home Page | 2 |
| Plan out base code for main home page | 1 | Revise and Finalize Code for Search Page | 2 |
| Plan out code base for search page | 1 | Revise and Finalize Code for Restaurant Options Page | 2 |
| Plan out code base for restaurant options Page | 1 |  |  |
| Discuss initial code plans with group | 2 |  |  |
|  | Discuss Page Integration with group | 1 |  |  |
| Nicolas | Discuss Client Feedback from Prototype 1 | 1 | Revise and Finalize Code for Restaurant Items Page | 2 |
| Plan out code base for restaurant items page | 1 | Revise and Finalize Code for Order Confirmation Page | 2 |
| Plan out code base for order confirmation page | 1 | Revise and Finalize Code for Order Delivered Page | 2 |
| Plan out code base for order delivered page | 1 |  |  |
| Discuss initial code plans with group | 2 |  |  |
| Discuss Page Integration with group | 1 |  |  |
| Disala | Discuss Client Feedback from Prototype 1 | 1 | Revise and Finalize Code for Splash Page | 2 |
| Plan out code base for splash page | 1 | Revise and Finalize Code for GPS Tracking page | 2 |
| Plan out code base for GPS tracking page | 1 | Revise and Finalize Code for Login Page | 2 |
| Plan out code base for Login page | 1 | Revise and Finalize Code for  Sign-up Page | 2 |
| Plan out code base for sign-up page | 1 |  |  |
| Discuss initial code plans with group | 2 |  |  |
| Discuss Page Integration with group | 1 |  |  |
| Brunel | Discuss Client Feedback from Prototype 1 | 1 | Revise and Finalize Code for Account and Settings Page | 2 |
| Plan out code base for account and settings page | 1 | Revise and Finalize Code for  Change Password Page | 2 |
| Plan out code base for change password page | 1 |  |  |
| Discuss initial code plans with group | 2 |  |  |
| Discuss Page Integration with group | 1 |  |  |
| Sacha | Discuss Client Feedback from Prototype 1 | 1 | Revise and Finalize Code for  Shopping Cart Page | 2 |
| Plan out code base for shopping cart page | 1 | Revise and Finalize Code for  Order History Page | 2 |
| Plan out code base for order history page | 1 | Revise and Finalize Code for  Customer Support Page | 2 |
| Plan out code base for customer support page | 1 |  |  |
| Discuss initial code plans with group | 2 |  |  |
| Discuss Page Integration with group | 1 |  |  |

**Table 4 - Prototype 3: Final Working Prototype**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Members | Current (Green) | Est | Will do (Orange) | Est |
| Josie | Discuss Client Feedback from Prototype 2 | 1 | Review Overall Application | 1 |
| Write and test final code for search page | 1 | Finalize Code for Search Page | 1 |
| Write and test final code for options page | 1 | Finalize Code for Restaurant Options Page | 1 |
| Write and test final code for main home page | 1 | Finalize Code for Main Home Page | 1 |
| Nicolas | Discuss Client Feedback from Prototype 2 | 1 | Review Overall Application | 1 |
| Write and test final code for order confirmation page | 1 | Finalize Code for Order Confirmation Page | 1 |
| Write and test final code for order delivered page | 1 | Finalize Code for Order Delivered Page | 1 |
| Write and test final code for restaurant items page | 1 | Finalize Code for Restaurant Items Page | 1 |
| Disala | Discuss Client Feedback from Prototype 2 | 1 | Review Overall Application | 1 |
| Write and test final code for splash page | 1 | Finalize Code for Splash Page | 1 |
| Write and test final code for tracking page | 1 | Finalize Code for GPS Tracking page | 1 |
| Write and test final code for login page | 1 | Finalize Code for Login Page | 1 |
| Write and test final code for sign-up page | 1 | Finalize Code for  Sign-up Page | 1 |
| Brunel | Discuss Client Feedback from Prototype 2 | 1 | Review Overall Application | 1 |
| Write and test final code for account and settings page | 1 | Finalize Code for Account and Settings Page | 1 |
| Write and test final code for change password page | 1 | Finalize Code for  Change Password Page | 1 |
| Sacha | Discuss Client Feedback from Prototype 2 | 1 | Review Overall Application | 1 |
| Write and test final code for shopping cart page | 1 | Revise and Finalize Code for  Shopping Cart Page | 1 |
| Write and test final code for order history page | 1 | Revise and Finalize Code for  Order History Page | 1 |
| Write and test final code for customer support page | 1 | Revise and Finalize Code for  Customer Support Page | 1 |

# **Project Risks and Contingency Plan**

Many risks and issues will undoubtedly come up as we develop the application. SInce it is not a tangible product and it requires no “resources”, most, if not all, the project risks come down to human skill, time and the choices made by the team and its members.

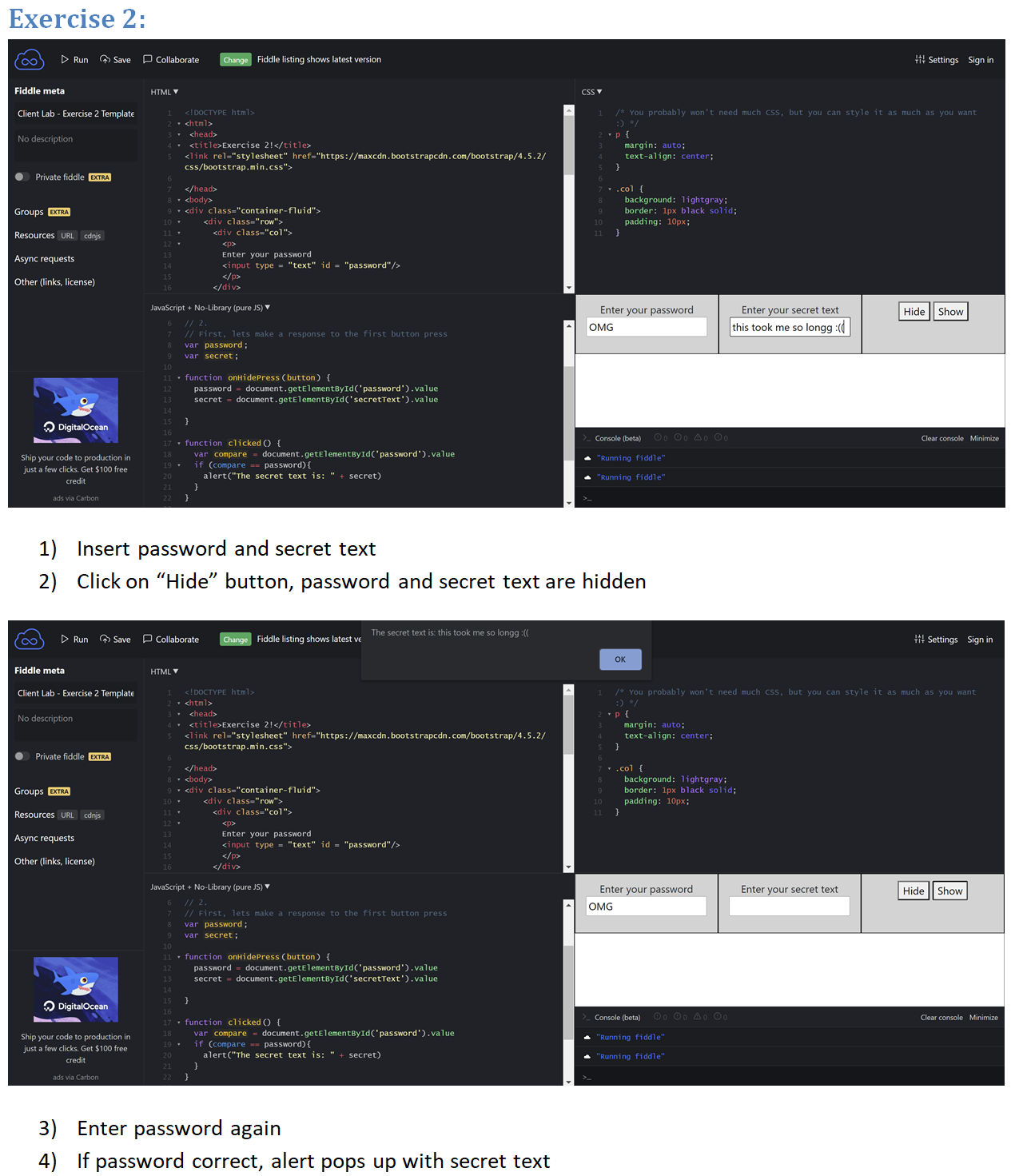
The software development kit *Flutter* has been chosen as our platform for the development of the application. While this may seem like the most ideal option at the moment, we may begin creating our prototype and later discover that it does not have the functionalities needed or that the development kit is too difficult to work with. If this arises, were the app in an early stage of development, it would be possible to find another kit that better suits our needs and our skills as the amount of time lost would be minimal compared to the time spent working with a difficult program. Were the app to be far along in development, it would be necessary to carry on with the initial choice as too much time would be lost learning how to use a new system and how to carry over all that has been produced into the new development kit.

Another issue that could arise is the inaccurate estimation or mismanagement of time. Were this to happen, it would lead to certain features of the application having much more time dedicated to their development while others would lack the care and attention that the other features received. This creates an imbalance in the UI and UX throughout the application. While the goal is to have all aspects be presentable and functional, sometimes time and knowledge do not allow it. Were this to arise, it would be necessary to ensure that a list of necessary functionalities for each feature be made. From this, it should be determined which feature requires more attention and which are more advanced.

The implementation of complex features that are not required is certainly an alluring idea but is not always feasible with such a restricted time frame and limited skill. It would be very beneficial for the final prototype to include features such as text-to-speech, different font sizes and multiple languages but these have not been stipulated in the clients needs. Were we to arrive at a point where we had the possibility of implementing these, we would need to see what the cost vs. benefits are. Would it be more beneficial to include text-to-speech or to refine the pages we have already developed? Do we need varying font sizes or is there another feature that would be more useful? With these questions, we can create a pros and cons list and possibly a selection matrix and decide thusly.

# **Conclusion**

Overall, based off of our results from deliverable D we as a group were able to create our plan, schedule, and cost for the second half of this project. Outlining these three concepts was imperative for our group to continue working on this project as it: gives us a procedure for the development of each prototype, reduces the stress if ever we run into any problems and organizes how we will spend our allocated money. As a result, now that we have created an outline of our projects plan, a timeline of our projects schedule and an estimate of its cost; we can now move forward to developing our first prototype to be presented to our client.



<https://jsfiddle.net/kf5j0tLb/>

^realized my screenshot doesn’t cover the entire code..