Project Deliverable E

-Project Schedule and Cost-

Group B4

Emma Ballantyne [300115563]
Bayza Woldemariam [300131459]
Callum French [300128814]
Reda Hamza [300103331]
Mariane Scalise [300114681]

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Introduction

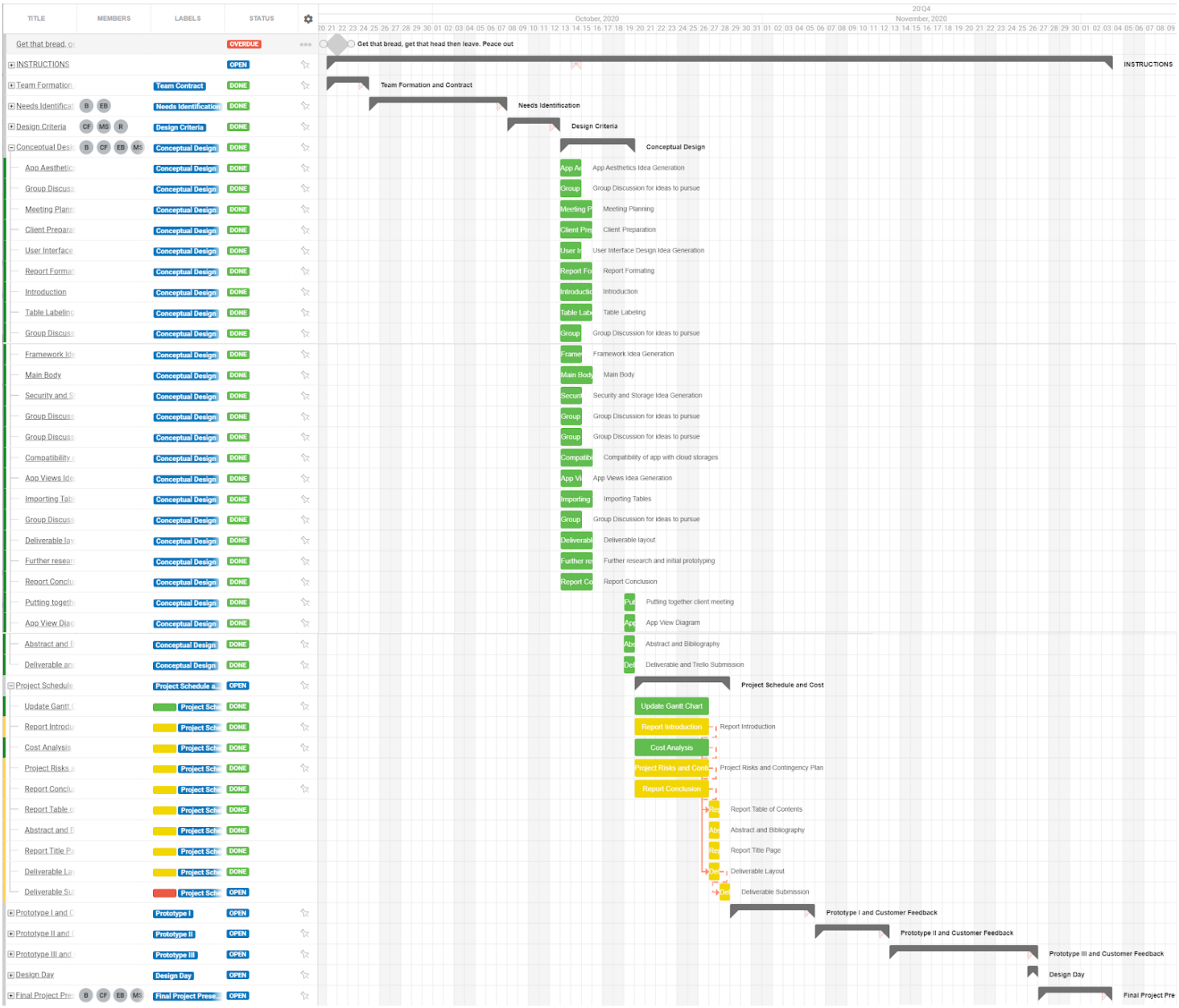
Proper planning is essential to the successful completion of any engineering project, and our project is no exception. If doing a project is like caving, then project planning is the flashlight. Sure, you could repel blindly into the dark, but you would just get lost and never go anywhere. With a light though, you can see a path of exactly what needs to get done and what steps must be taken to go from point A to point B. Even with software, it is important to set these needs and steps for every single prototype you create. Eventually with enough prototypes, the path from point A to point B seems simple and manageable, no matter how daunting the trek might have initially seemed.

This deliverable details the proposed schedule for group B04 to stay on track and successfully deliver three prototypes by the end of the course. This schedule can be seen in the form of a Gantt chart with rough tasks and estimated completion times for every deliverable from this one until the final project. This schedule is rough and tentative to change, but gives the backbone of structure to support the completion of the project. Also included in this deliverable is a discussion of project risks, contingency plans, and an estimate of total final cost for the completion of the project.

Gantt Chart

The following diagram is the Gantt Chart created using Trello and the BigPicture add-on detailing every single deliverable over the course of this project. Two of the deliverables have been expanded as examples to show job breakdowns so that each member of the team is contributing equally and so that all parts of each deliverable are completed. Because the image is large, it has also been attached as a separate PDF so that it can be read more easily.

To ensure completion, each subtask is tagged with a team member, a colour, and a deadline. Green means “completed”, yellow means “currently working on”, and red means “waiting for dependencies”. The group is ready to submit a deliverable when all subtasks except “Submit” are green.



Project Risks and Contingency Plan

The biggest risk which we face in this project is more of an uncertainty surrounding our abilities with application development and augmented reality. No members of our team have substantial experience in software development and we are therefore uncertain regarding the difficulties we may encounter when converting our concept into a functional prototype. However, we have assessed this likely possibility and put a plan in place to mitigate this risk factor. Each member of our team has completed the project specific lab using Unity, which is our chosen platform for our project. We have also gone further by spending additional time individually using Unity to

get accustomed to the environment prior to commencing work on the first prototype. This introduction to Unity will help our assessment in what is reasonable to expect from our concept. Moving forward we will also keep regularly communicating with our TA and PM regarding any clarifications that may be needed to ensure that our project succeeds.

Costs

Given a $100 limit, the cost of this project is very minimal. As a group we have chosen to utilise Unity for the development of our application. The use of this program is free and all aspects of our design can be developed on this software. Unity offers millions of different assets and scripts ranging from $0 to $150+. Fortunately, there are many high quality assets which are free but, if we happen to find an asset or script that we deem necessary for the proper functionality of our product we will use the money we have towards that purchase. In addition, when testing the application no additional material will have to be bought because all teammates have a mobile device which we will be able to use during our testing phase. All in all, this is a fairly low cost product allowing for a lot of freedom in terms of testing out different coding techniques without the risk of losing money and if any money were to be spent it will be on purchasing an asset.

Conclusion

In conclusion, since our team has taken some time to get more familiar with Unity, the tasks' distribution will be easier for Prototype I and Customer Feedback. Concerning the costs, even if we are not expecting to spend anything we agreed that we could end up purchasing an asset that is not free and is absolutely necessary to the development of the app. We are now continuing our work on Prototype I where all tasks have been distributed following each other's skills that can be found on the Gantt chart we uploaded above. Our main goal is to be able to create an app that can be opened on a phone with an object on the background. After presenting the initial work to the client, his feedback will be used to make ajustements, and to complete our prototype in order to move forward in the project.