

## Assignment 1

In today's world, we live very busy lives where we are always going from one task to another. With this, trying to juggle multiple tasks can be very challenging. From work to study to social life, and even time to relax, we can get caught up in it all and lose track of what we need to complete. To make our lives simpler, we need something that can combine all of these things into one and help us maintain all areas of our life. With this in mind, we are going to develop a reminder app that will include several functions not normal to a reminder app.

Our aim is to develop a reminder app that will allow the user to easily create, manage, and interpret tasks. This will give a visually pleasing and easy-to-use system that will allow users to create tasks that will have many different attributes. These attributes will include set dates, times and hint tones, as well as the option to have different lists of task, to help keep task handling for the user organised and simple. A key feature to this app is to create an interface that is quick to navigate and easy to interpret, which will allow it to be used on the go. Therefore, a customisable and easy organisational system is important to create this system, and will be a priority aim during development. The user will be able to create and maintain several lists where the tasks will be chronologically ordered by default. The user can sort the tasks by common attributes, such as priority, which will still be chronologically ordered but within these priority groups. Once completed, these tasks can be manually ticked off by the user or auto ticked off by the system at a default time after the task deadline.

The main features described above are core to making our reminder app function well and achieve its main purpose effectively. To separate it from other apps and improve its usability on the go and thus aid the user more effectively, we will be looking at other features. This can include a weather icon to show the predicted weather that is forecasted for the user's current day. This allows the user to prepare for the conditions of the tasks at hand. Another feature that we look to involve, is to incorporate Google Maps to a degree. This will allow the user to set a location for a task, and then be able to open it up in Google Maps so that they only have to input the location once from a single point. This will also save the location as an attribute to the task, rather than having to look up the location again at a later time in the Google Maps app. An additional feature that we believe could very much set this app apart from many other reminder apps, is the ability to import Facebook events into its own list. The Facebook event list is cluttered with information, therefore having the events chronologically ordered with a title, date, and location would be very helpful to frequent users of Facebook.

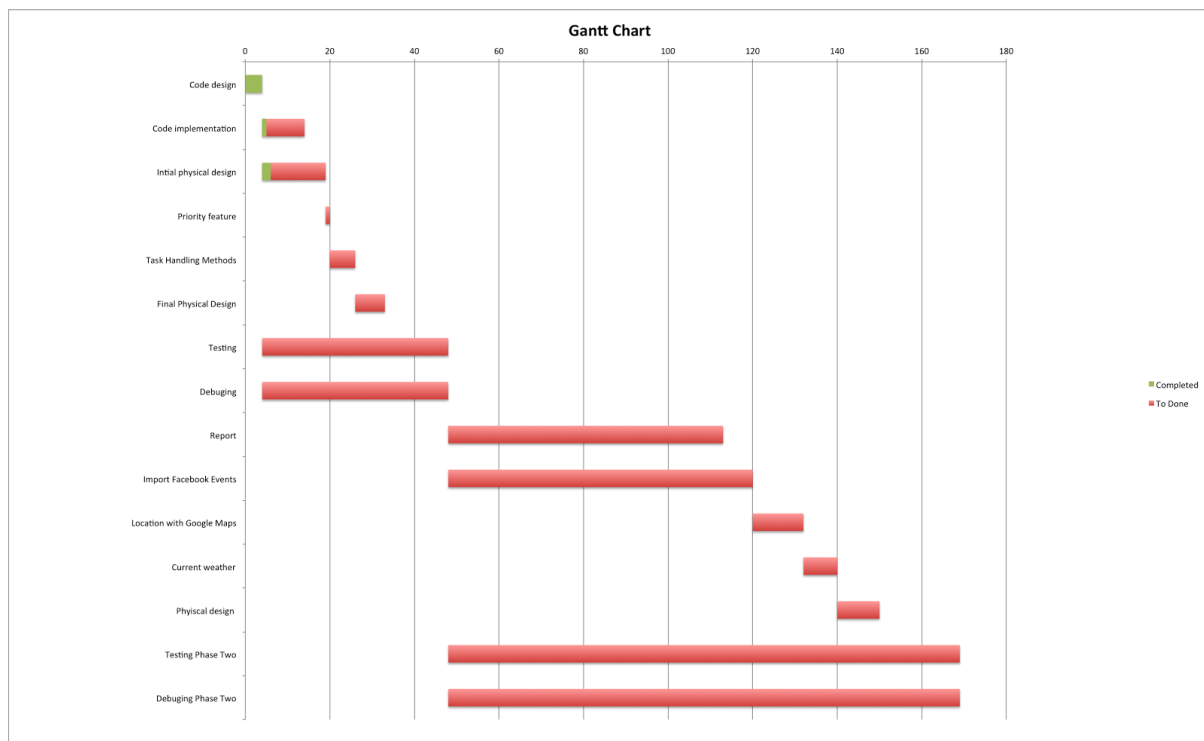
Overall, the development aims are to produce an app that is effective at handling and creating tasks, while also having a broad amount of features allowing for a single point of access for the user. This will be achieved by holding all of the required information for their tasks in the background, keeping what they see simple and clean.

We are all going to be involved in developing this app. As for the language and tools we are going to use, the plan is to use our current knowledge obtained in C language and apply it to C++ language. We will be using C++ instead of C due to C++ being a richer language. Also many people have used C++ to form wrappers for swift allowing for easier research of source code.

We will be using Travis CI linked to our GitHub repository (<https://github.com/travis-ci/travis-ci>) to automatically test our code whenever we upload new versions to GitHub. This allows us to continuously integrate and ensure the quality of the code. We will use Xcode simulation to find bugs and errors in our code and test the app itself on iOS devices as well.

### *How long will it take / Timeline*

Implementation of the basic app with all its necessary features will take between 6-8 weeks of work. This time frame includes testing and debugging, and producing the best product we can with the basic features implemented. For the complete app, we believe it will take up to 5 months to implement due to the complexity of the task at hand and our inexperience with working with this kind of software development.



We live in a very busy world and our lives are constantly getting busier every day with more and more tasks we need to complete. As university students, we not only need to stay on top of everyday tasks, but also keep track of various assignment deadlines, lecture and lab times for each of our papers, with all of this adding up to a very busy lifestyle. Having all of this information in one easy to access app will help us not only be more organised, but also perform

better. This app will help in balancing our lives and how we manage our tasks with different priorities, thus the app will be something that is in near constant use.