PRC304 Project Initiation Document

1. Introduction

As our lives get busier it is important to keep track of things. One popular way of doing this that has been around for years are to-do lists. Traditionally these have been jotted down on paper, but with the huge rise of smartphone ownership over the last several years to-do list applications have become very popular partly due to the fact that people carry there smartphones almost everywhere.

There are a number of to-do list applications already available. The idea for my project is to create a to-do list app for iOS with a difference. One of my main hobbies is video games. Video games use a variety of mechanics to keep players engaged and motivate them to keep playing. In recent years some of these techniques have been taken outside of just videogames and applied to more real world scenarios. This is known as gamification. For my application I would like to utilise some gamification techniques in a to-do list application.

A large number of to-do list applications have a large amount of feature bloat. For me I find they reduce my want to use them, as they would rather focus on getting users to try all their features. With my application I would like to focus on the core features users are likely to find most useful.

I also want to take advantage of new ways of interacting with iOS apps that have come around in the last year. These are iOS widgets and the Apple Watch. I would like to create both an iOS widget and Apple Watch app for my App to increase the ease of use of interacting with the application.

2. Background/ Motivation

One of the main reasons I would like to undertake this project is so I can learn more about developing for iOS. Currently my experience with iOS is rather limited and it is something I would like to improve as I have an interest in this area.

By undertaking this project, I hope to learn not just about developing for iOS but also learn more about other areas associated with developing for mobile platforms such as UI design.

3. Project objectives

1. To analyse existing to-do apps and gamification techniques and assess what improvements could be made and what could work well in a to-do application.
2. To create an application that allows users to keep track of tasks and uses gamification techniques to aid in motivation.
3. To create an application that is simple and straightforward to use.
4. To ensure the application follows Apple's design guidelines
5. To submit the application to the App Store

4. Initial scope

The starting point for my project will be to look at some to-do apps that are already available on the App Store. I will investigate what functionality each application provides and what I think the strengths and weaknesses are of each app are. I will then analyse different gamification techniques and decide what I think would work well in combination with a to-do app.

I will then look into what requirements users expect from a to-do app. This will include the features that should be present and how the app can be interacted with. The requirements will be written in a user story format to fill the product backlog as I am using an Agile scrum approach. Using the information from this and the analysis of other apps I will decide what functionality my app should provide and also make decisions about UI design.

After deciding what features my app will provide I will then go on to building it. The core product to be created will be an iPhone application that allows users to manage tasks and uses gamification techniques to motivate them to complete them.

The additional features that hopefully will be implemented are an iOS widget that can be accessed from notification centre. This will allow users easy access from any place on their phone to see their task list and mark tasks as

completed. The second is the addition of an Apple Watch app. This will allow users with an Apple Watch the ability to see their tasks on their wrist.

Once the App is completed I would submit it to the App Store. This may require some changes to the app to ensure it meets Apple's guidelines.

5. Method of approach

Software development will mainly follow an Agile Scrum approach. User requirements in the form of users stories will be defined near the start of the project although this does not mean more cannot be added later. These user stories will make up the product backlog. Sprints of a week each will be used. Trello an online project management tool will be used to keep track of the product and sprint backlog.

Possible technology will include Swift, Xcode and the iOS SDK. A full evaluation will take place during the project.

6. Initial project plan

Stage	Deadline	Products/Deliverables/Outcome
1. Initiation	5/2/16	Project Initiation Document
2. Investigation and Requirements	19/2/16	Analysis of similar apps, gamification techniques and conclusions drawn presented in a report. Requirements presented in user stories
3. Core development	17/03/16	Core iPhone application
4. Additional features	29/04/16	Additional features. iOS widget and Apple Watch app.
11. Submission of application to App Store	2/5/16	The Application submitted to Apple for review. If the review is successful the Application will be on the App store
12. Assemble Final report	6/05/16	PRCO303 Final Report

6.1 Control plan

In order to help with the management of the project several PRINCE2 control techniques will be used.

- Highlight reports, which include stage reviews on completion of a stage, will be produced weekly until Easter and at the end of each stage afterwards.
- Weekly review meetings will also be held until Easter and when required thereafter.
- Risk management will also be used (see section 7)
- A communication plan
- Exception reports included in highlight reports when necessary

6.2 Communication plan

Weekly review meetings will be held with the supervisor up until Easter and then afterward when required. Further communications will take place as needed.

7. Initial risk list

Risk	Management Strategy
Schedule Overrun	Contingency has been included in the plan in the form of the Easter holidays and two weeks before the final deadline. Additionally, highlight reports and supervisor meetings will be used to monitor progress.
Difficulty learning the technologies required.	Over the past few months a number of hours have been spent learning Swift and the use of Xcode to prepare for the project.
Loss of Data	To reduce the risk of loss of data backups will be made using the offsite

5	cloud service storage Dropbox. For source code the Git repository hosting service GitHub will be used.