CSC3122 Mobile Computer Development

Business Case

For this project I am going to be building a clock/timer app, with stopwatch, countdown timer and alarm functionality. It can be used for activities such as timing, counting down and alerting a user at a specific time. I have decided to build this app for many reasons, primarily, since I have little experience of app design before undertaking this module, it is simple enough to build well under the given time constraints of the module, whilst also being complex enough to produce sufficient design based documents. I am interested in the concept of app design, and I thought that this project would allow myself to become familiar with several different features of android studio and android app development in general.

I appreciate that this app contains only basic features that are available both through hundreds of third party apps and the system itself (see analysis of similar systems below) and so would be unsuccessful were I to release and/or charge for it, however it has not been designed to fill any niche and it has a primary purpose of familiarising myself with the processes, technology and design decisions involved in making an android app.

My app will be built for the android family of phones using android studio, due to their ubiquity and relative ease to develop for. I personally lack access to a mac computer, and therefore am unable to develop for iOS. Furthermore, android apps can be written in java, a programming language I am already familiar with. The lack of any complex android features mean that the app can be run on any android phone running any version of the android software, thus ensuring it has a large potential user base.

The app is not targeted towards one user demographic, so therefore anyone who wants to use the app can do so without any prior knowledge or equipment needed. The app has no restrictive characteristics and can be used by all, it is a general-purpose app.

iOS system clock (inbuilt to iOS systems)

The main inspiration for the features and layout of my app is the inbuilt clock/timer functions on iOS. This app provides lots of useful features within the stopwatch and timer, such as the ability to view the stopwatch pictorially and being able to change the ringtone when a timer or stopwatch finishes. This inbuilt clock system is entirely sufficient for most users and so they don't need to install any other apps for their clock based needs.

**Timer+ (iOS, Android, Windows)**

This is a free timer app (with a £2.99 pro version available) that allows a user to set multiple timers at once, or set multiple shorter timers from within a longer one (see turkey example in screenshot above). It also includes voice control options for the visually impaired.

Alarmy (iOS)
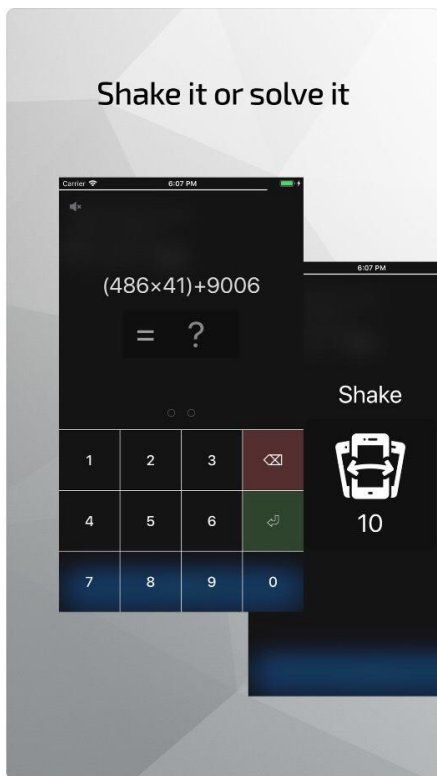
This is an advanced alarm app, supported by ads that can be removed with an in-app purchase of £0.99. As can be seen above, advanced alarm features include stopping alarms by shaking the phone, solving maths problems or taking a photo of a specific location. The alarm also has a built-in weather and news feed so a user can stay up to date when they wake.

Stopwatch (iOS)
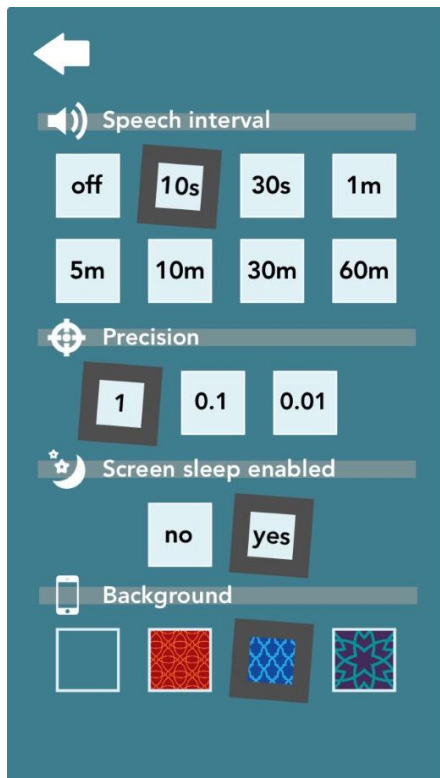
This is a stopwatch app, supported by ads that can be removed for an in-app purchase of £1.99. Whilst the design of the app is rather ugly, I was impressed by the options (shown above) such as the different background colours, changeable precision and the speech intervals for hard of hearing and for situations where a user is unable to touch their phone.