**1 Introduction**

Learning is one of  the most valuable things you can do in the world. Without it we wouldn’t be able to become engineers, doctors or even be able to speak different languages with each other. In modern civilisation things develop quickly and everything changes but one thing that is consistent is learning. We will always have to learn to live. Life is about learning. That is why our project is main focused in learning. We will develop an application for android that will help you study and therefore learn. It will be a flashcard application because that is one of the easiest way to learn small facts.

**1.1 Purpose of application**

The purpose of the application is to help people study through the use of digital flashcards.

**1.2 General characteristics of application**

The application will consist of several decks, each of them holding a certain amount of flashcards with a question on the front and its respective answer on the back. If the user decides to open a deck the program will randomly choose a card from within the deck and show the user the card’s question. If the user swipes or presses a button the card will flip and show the answer. The user will then have the choice of assigning a difficulty to the card which will influence how often the card is presented to the user. If the user swipes or presses the button again the card will once again flip but at this point it will move on to another card. This process repeats until a certain amount of cards have been presented. Once finished the user is returned to the main menu.

**1.3 Scope of application**

The goal is to have the application running on all the most common platforms. The gist of the idea is that you use a desktop version of the application to easily create decks and a multitude of cards with different properties and then you have the mobile version so that you can handily rehearse your cards wherever you are. You could also practice on the desktop version or add cards on the mobile version of course.

**1.4 Objectives and success criteria of the project**Our goals is to make an as good application as possible in our timerange. We will see if we have suceed if we are pleased with the finished product.

(Our objective is to make the application as good as we possibly can within the timeframe we have been given. As such, the only success criteria we have is being satisfied with our work.

Of course there are a few criterias which, if not achieved, would mean we have failed.

1. The user should be able to create a deck and add cards to it
2. The user should be able to open a deck and practice on their cards
3. The user should be able to share decks with other users )

**1.5 Definitions, acronyms and abbreviations**

**GUI**, short for Graphical User Interface

A **deck** is a collection of flashcards.

A **flashcard** is a card with a question on the front, and its respective answer on the back.

**2 Requirements**

In this section we specify all requirements

2.1 Functional requirements

1. The user should be able to install the application on their chosen environment and be able to quickly get started on building a deck or downloading another user's deck.
2. The application should be able to change the language used in the GUI based on the current system’s locale.
3. The user should be able to create or download another person’s deck.
4. The user should be able to open a deck and go through its cards.
5. The user should be able to share their deck with other users.

2.2 Non-functional requirements

Possible NA (not applicable).

2.2.1 Usability

Since this is an application that will preferably be used by people every single day there will be a considerable amount of time and effort spent to ensure that it is a pleasant experience to use it, both mechanically and aesthetically.

Upon starting the program for the first time there will be a short and non-intrusive tutorial to ensure that the user quickly learns how to use the application.

2.2.2 Reliability

2.2.3 Performance

As this application is not very computationally complex or dependent on stable network connections, for the most part, performance should not be an issue. Of course this does not mean we should just ignore all optimization as, especially for mobile systems, the less energy spent is better.

2.2.4 Supportability

As previously stated, the plan is to in the future have support for all the major environments, most notably Windows and OS X for desktop and Android and iOS for mobile. There would also be a website where users can upload their decks and share them. Users would also be able to rate the decks that the other users have uploaded.

2.2.5 Implementation

The focus lies mainly on the Android version since the idea was that the mobile versions would be used the most and due to the fact that Android uses Java unlike iOS.

The only requirement for the application to run is using Android whose firmware is over X.X. An internet connection is also required so that the application can be downloaded from the Play Store.

2.2.6 Packaging and installation

The installation will be simple and quick to install through Google’s Play Store.

2.2.7 Legal

The user has to follow the Terms of Service provided by Google and us.

Since you can share decks with other users, no obscene material will be allowed to be included in the shared decks. As decks are shared through our servers illegal material will promptly be reported to the police and deleted.

2.3 Application models

2.3.1 Use case model

UML and a list of UC names (text for all in appendix)

2.3.2 Use cases priority

A list

2.3.3 Domain model

UML, possible some text.

2.3.4 User interface

Text to motivate a picture.

2.4 References

 APPENDIX

 GUI

 Domain model

 Use case texts