**CSC 371/471 Mobile Application Development (iOS)**

**Final Project Proposal**

**Project Title:** Kanji Learning Game

**Name:** Fernando Araujo

**Project Type:** Individual Project

**Project Description**

This application’s objective is to aid the user in the learning and memorization of Kanji, their spelling in Hiragana, and their English meaning. While this application will be created with the Japanese language in mind, it can be easily adapted for the learning of other languages.

The application will have two main features. The first one is the memorization game. This will consist on a simple flash card memorization game which will show either an individual character, word or meaning and give the user multiple choices from which he will try to choose the correct one from. The user will also have a set number of lives / health points that will be lost upon choosing a wrong answer.

The second feature will be the Training Area where the user can freely review the available Kanji/words, select which groups he wants to be tested on, and even add new Kanji/words.

There will also be a Player Statistics screen where the user can review his game score, times played, learned Kanji, etc.

**Preliminary Screen Design:**

Main Menu

Question

TILTE SCREEN

家

New Game

Training Area

Player Stats

Answer 1

Answer 2

Answer 3

Answer 4

Play

Game Screen

Kanji Group 1

Player Statistics

Available Kanji

Times Played: 10

Games Won: 5

Max Combo: 3

Kanji Learned: 10/40

Kanji Group 1

K6

K5

K4

K3

K2

K1

Kanji Group 2

Kanji Group 3

Kanji:

Hiragana:

Meaning:

Kanji Group 4

X

Custom Group 1

Add New Kanji

Add Group

Training Area:

Here the user can access all the Kanji groups defined in the application, both default and custom. The user can also Add or Delete Custom Groups

Kanji Group Menu:

After selecting a Kanji Group, the user is taken to this screen. Here the user can access all the Kanji within the group, view their meaning and also Add New Kanji (only for custom groups)

Player Statistics:

The user can access this screen by pressing the “Player Stats” button in the Main Menu.

This screen contains various user statistics about the game, including games won, kanji learned, etc.

**API Features Used:**

The game section of the application will utilize Quartz 2D for 2D animations and images. There will be simple animations, which are triggered when the user gets a question correct/wrong, geometric shapes and background images.

For the content selection and input screen, the application will make usage of Dynamic Table Views in order to showcase both the default Kanji groups that come with the application and also the custom entries and groups defined by the user.