DGolf Android Application Documentation

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1 Problem Statement & Introduction

Frisbee golf is casual game that is a mix of golf and frisbee. One common aspect of this sport is that the courses are either not properly marked out or that there is a lack of information provided by the park's website. The goal of our app is to alleviate this issue and provided additional features to aid users.

The user interface is split into three distinct sections, the splash screen, the setup screen and the "in game" herein after referred to as the course screen.

The Splash screen is presented to the user at the opening of the applications and will present the user with three buttons, "Select Course", "Leader Board", and "About Us." The select course will bring the user to the setup screen. The Leader Board will present the user with high scores for all games that have been recorded on the current device, centralized leader boards are planned for later revisions. About Us simply credits Team Special K., Jeffrey Kuang and Ryan Kuhl, lists the current version designation, and describes the application's functionality.

The Setup screen allows the user to pick a course from the currently available courses. The currently available courses are Tom Brown Park and Jack McLean Park. More parks are planned for the next release as well as the ability for the user to add parks to a centralized database. The user is also prompted to select the number of players and supply the name of the player. Once this information is available, the user is able to start a game in the course screen.

The course screen is split into two distinct card style sections, the user cards and the geographic card. The user card has the name of all users with the ability to add to or subtract from any individual user "putts" amount. This card also contains a user rating functionality, allowing the user to rate the hole on a scale of 1 to 5 stars. The cards in both sections are unique to the hole in question, providing relevant information for the hole the user is currently on. Once all holes are completed, the user will be presented with a leader board for the game showing the ranking of all current users for the current game.

2 Incorporated Technology & Methods

User information for in-game information was originally planned to be placed in a linked list data structure, however due to time constraints this data structure was changed to an array of PlayerStruct objects. These objects are made up of the player name, the array position number (correlated to the number of players), the course number (correlated to the current course), the number of holes for he current course, and an array the length of the hole number containing the amount of putts for the user per hole. This array is referenced for current score and overall score at the end of game leader board.

The Google cards user interface is an organized method of presenting a grouping of information to users. To obtain this design, a layout with a drawable XML object has to be initially created. Then from the parent XML container, the drawable XML object was assigned as the background attribute of the container. With an accented container it gives appearance of the content presented on a card. To match the navigation structure like Google Now, the containers were placed within either a horizontal or vertical scroll view.