CPET 491 Senior Design Report
Phase II

Android Golf Statistics Tracker

Brad Sorensen

Kory Martin

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Project Summary

Develop an Android application that provides golfers with an easy way to track their statistics.

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Problem/Solution

Problem

- Golfer's currently do not have an easy way to track statistical information from their rounds without writing everything down by hand
- Similar applications lack in depth analysis of statistics

Solution

- Simple graphical user interface
- Voice recognition for entering data
- GPS for tracking club distances
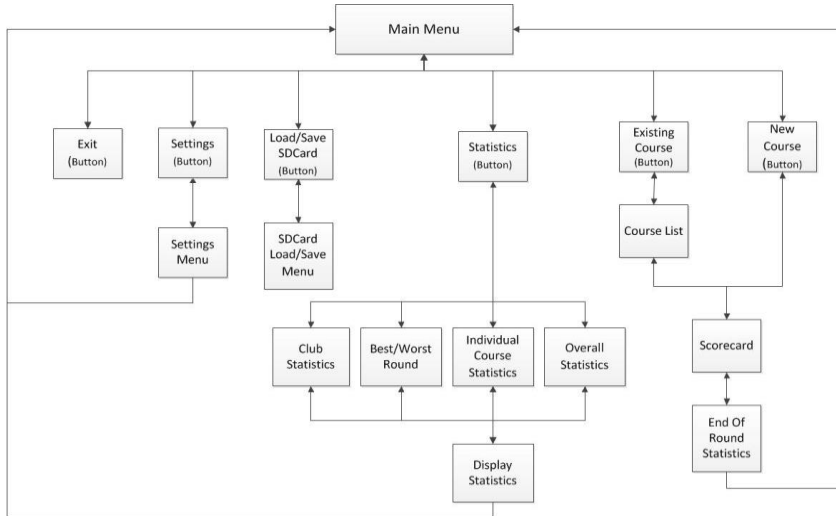- Comprehensive breakdown of statistics

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Project Requirements

- Read/write information to databases
- Save/load user data to SD card
- Display statistics in tables
- Keep application under 6 MB
- Support multiple screen sizes
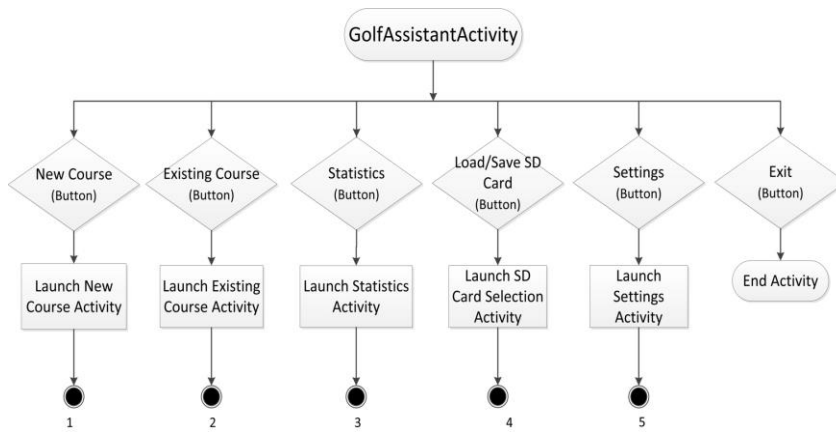- Support Android versions 2.1 and higher
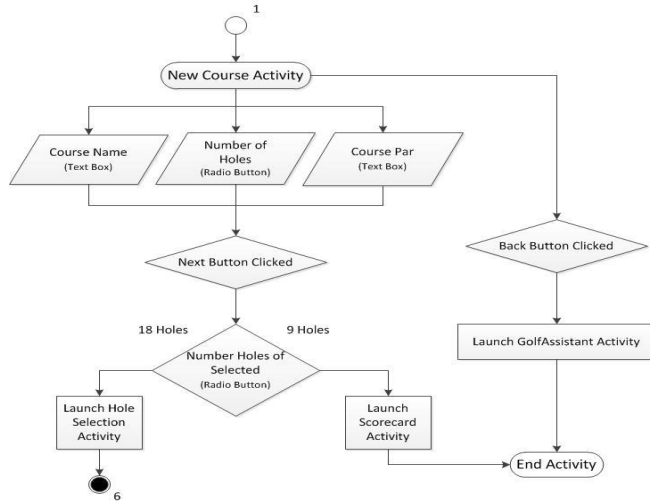
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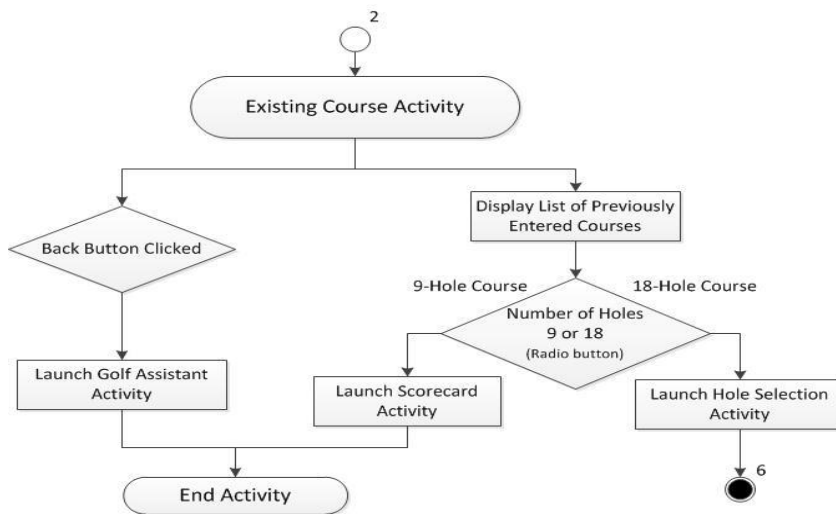
System Design Flow Charts
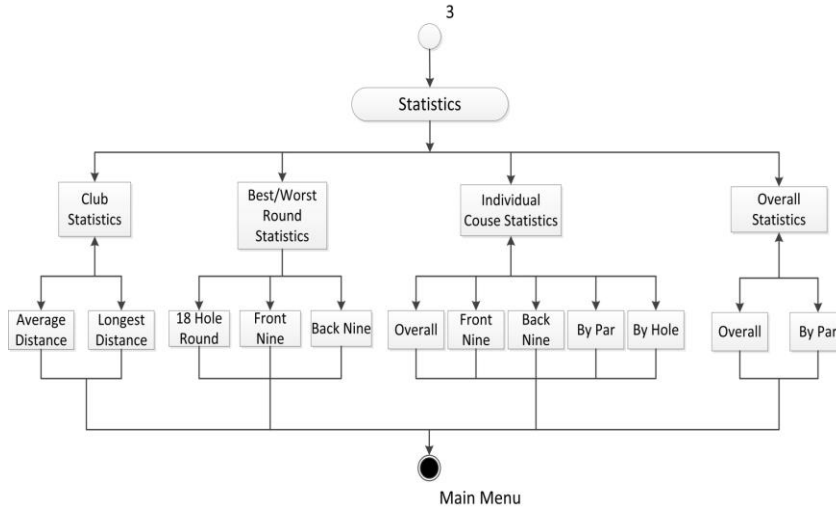

System Design Flow Charts
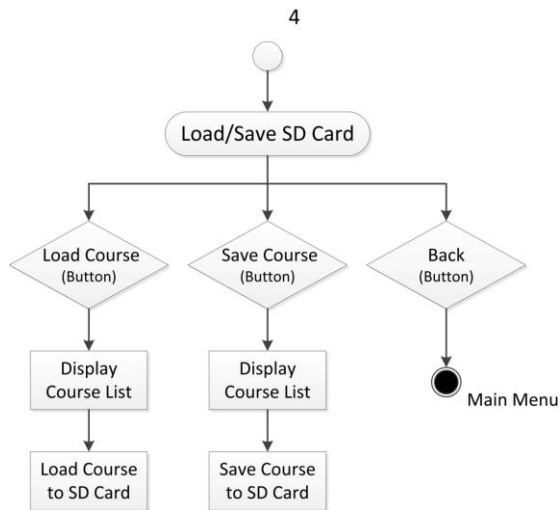
System Design Flow Charts

System Design Flow Charts

System Design Flow Charts

System Design Flow Charts

GPS Design

Data Collection

10 total location points collected approximately 1 per second. First 10 points that meet accuracy criteria are collected. If 10 points not collected after 45 GPS updates then the GPS Activity exits and returns to Scorecard Activity.

Accuracy

1 – 15
6 meters
16-25 (if needed)
8 meters
26 – 45 (if needed)
10 meters
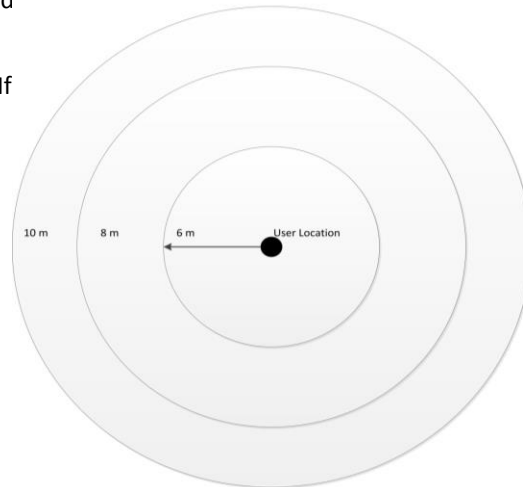
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Course Database

ID			
Course Name	Course 1	Course 2	Course 3
Course Par			
Number of Holes			
Best Round 18			
Worst Round 18			
Best Round 9-Hole Course			
Worst Round 9-Hole Course			
Best Front 9			
Worst Front 9			
Best Back 9			
Worst Back 9			
9 or 18 Hole Databases			

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Hole Database

ID									
Hole Number	1	2	3	4	5	6	7	8	9
Par									
Times Played									
Strokes									
Putts									
Fairways Hit									
GIR									
Num of Pars									
Num Of Birdies									
Num of Eagles									
Num of Double Eagles									
Num of Bogeys									
Num of Double Bogeys									
Num of Triple Bogeys or Worse									
Num of Hole in One									
Flag Location Lattitude									
Flag Location Longitude									
Flag Location Accuracy									

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Application Demonstration

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