Golf Sports Analytics Capstone

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Project Goal

- To develop an application for Data Collection for Carnegie Mellon’s Varsity Golf Team

- Create a platform for the Golfers’ and Coach to reflect on performance and identify and make competitive decisions based on Data

- Focused on how to create a easy-to-use data collection process for the golfers and coach

- Increasing usage of analytics enables golfers to produce key insights for strategies and improvement to their game
Description App and Features

- 5 tabs to collect information based on Player, Tournament Round and Holes
- Using Google maps API Satellite imagery, we were able to locate golf locations through user input
- Markers are used to indicate Pin Location as well as each location where the golf ball landed during the round
- Markers can be cleared/removed and dragged in case the initial drop location is bad
- Analysis for reporting and reflecting through past performances and players
Tab 1: Player + Tournament Entry

• To start, the golfer initially enters his/her name, the Tournament Location and the Latitude/Longitude of each hole

• This can be preset by the Coach prior to golfer’s input

• The data does not need to be re-entered for every golfer
Tab 2: Pin Location

• The player or coach can set the pin location for each hole

• The player/coach navigates to the pin location tab which then the player can determine where each pin is for each hole
Tab 3: Golf Map

- Players are able to track their shots
- Each shot is indicated by a black marker
- The different types of shots (Fairway, Water, Sand, Rough)
Tab 4: Data Compilation

- Allows user to aggregate shot data by filtering through a specific date, tournament name, round, etc
- Players can reflect on their performance through a report to track each golfer’s shots
Screenshots/Live Demo

Data Entry App for CMU Golf Team

Date: 2021-03-27

Player Name: p4
Round Number: 3
Choose the Hole: 4

Submit Metadata

Data Entry Table:

<table>
<thead>
<tr>
<th>Shot</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Shot Type</th>
<th>Distance</th>
<th>Strokes Gained/Fairway</th>
<th>Strokes Gained/Rough</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>46.4770235641474</td>
<td>-79.405076631706755</td>
<td>Fairway</td>
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<td>-1</td>
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<td>-1</td>
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</tbody>
</table>

Search: 20 entries

Showing 1 to 9 of 9 entries
Results

- Have a fully automated process to collect, store and analyze golf shot data

- Easy to use app that captures different types of shots and holes for any type of tournament the players are using

- Have statistics to help inform golfers on their performance for tournaments/practice