

# CS 3450 Introduction to Software Engineering

## Requirements Definition

Caleb Harris, Nick Sorenson, Thadeus Ferney Trax Bagley

September 2021

### 1 Context

Our goal is to create a fully functional Web Application to manage and track Golf tournaments for a put put golf tournament bar and grill. The application will serve five actors: managers, owners, players, drink meisters, and sponsors. These actors will be served via the application or app, which houses features to manage and order drinks, setup the Golf tournament, keep track of players scores in the tournament, and advertise sponsors.

### 2 Actors and Actor Goals

#### 1 . Owner

##### 1.1 Must:

- a . Assigns user Roles
- b . Manage Personal and Store account

#### 2 . Player

##### 2.1 Must:

- a . Create Account
- b . Order drinks
  - View Drink Menu
  - Add items to Cart
  - Checkout
  - Order from favorites bar
- c Add money
- d Participate in Golf Tournament
  - Add strokes to score
  - Track High Scores
  - Win Tournament

- Optional Resignation
- 2.2 Should:
  - a . Be able to view Play History from past games
  - b . Be able to leave reviews
- 3 . Manager
  - 3.1 Must:
    - a . Assign sponsors to a given tournament
    - b . Manage user permissions
    - c . Customize the drink menu
    - d . Provide refunds
    - e . Tournament Setup
      - Decide the start and end time of a tournament
      - end tournaments prematurely
  - 3.2 Should:
    - a . Be able to refund orders and see order history.
- 4 . Sponsor
  - 4.1 Must:
    - a . Tournament Setup
      - Sponsor prize Money for a Prize Pool
      - Pick a date to Sponsor
  - 4.2 Should:
    - a . Post advertisements.
- 5 . Drink Meister
  - 5.1 Must:
    - a . Serve Players
      - Make Orders
      - Deliver Orders to Player
      - View Current Orders
      - Complete Player Orders and Confirm delivery

### 3 Functional Requirements

- 1 . Must:
  - a . User Friendly
  - b . Fast

- c . Functional
- d . Unit Tested
- e . Tournament
  - \* Tournament Setup page
  - \* Current hole display
  - \* Winner Page - Displays winner, distributes money
  - \* End Tournament Option
- f . Menu
  - \* Order Drinks
  - \* Item Display
  - \* Pay for items
  - \* Cart and Checkout
- g . Account Creation
  - \* enter a username, email, etc
- h . Order Screen
  - \* See current orders
  - \* Completed Orders
  - \* In Progress tab
  - \* On Hold tab
- h . Calendar
  - \* See Upcoming Tournaments
  - \* Sign-up and Sponsor functionality
  - \* Add/Edit/Delete Upcoming Tournaments
- i . Leader board
  - \* View all time leader board
  - \* View current tournament leader board
- j . Contact Info Page
  - \* Display contact information
- j . Money management system
  - \* Money must be securely handled
  - \* A detailed log of transactions will be kept
  - \* Users must have accounts which they can deposit/withdraw from.
- k . Notification System
  - \* Players must be notified when it is their time to play
- 2 . Should
  - a . Tournament has banner ads for sponsors

- b . Favorites Bar for quick ordering
- 3 . Could
  - b . Play history for players
  - c . Work Offline
  - d . Self ads that advertise our drinks and food
  - e . Teams - team tournaments

## 4 Non-Functional Requirements

- 1 . Must:
  - a . Persist Data in a database
  - b . Five strokes per hole
- 2 . Should:
  - a . Prioritize Design on Home Page and Menu
- 3 . Could:
  - a . Make orders add up such that Users always have money still in their account
  - b . Users have a minimum amount of money they can put in.
- 4 . Won't
  - a . Fail

## 5 Glossary