CS 3450 Introduction to Software Engineering Requirements Definition

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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
 - \cdot 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
 - $\mathbf{c}\,$. Customize the drink menu
 - d . Provide refunds
 - e . Tournament Setup
 - \cdot Decide the start and end time of a tournament
 - \cdot 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
 - $\ast\,$ 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

- **Actor** An actor is someone who will use the application in some way. Synonym: User
- Work Offline- Capability of a Web Application to remain functional regardless of internet connection
- Favorites Bar A quick and easy side bar that allows for instant ordering
- Play History A log of past games and game scores for a Player
- Self Ads Advertisements provided by the host bar and grill.
- Role A role is a defined user and is associated with what permissions they have on the web app.

- Prize Pool A sum of money to be won at a tournament
- Checkout A confirmation screen to buy items
- Cart A page that shows what items a User intends to buy
- \bullet $\, {\bf Banner} \,\, {\bf Ads} \,$ Advertisements that are displayed on the Web Page