

# Business Requirements Document

for Team C's

## **Better Betting Pool App**

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## 1. Executive Summary

Team C, comprised of members Will Blankenship, Ryan Manus, and David Rosenberg, has been assigned to a new project: a betting pool app for ReTrans engineers, who have traditionally used a manual means of betting in their pools. The purpose of this app is to simplify the process of pool participation and administration. The app will streamline and centralize the processes involved, as well as eliminate the clutter created by customary printed spreadsheets. The app is being created to handle the 2017-2018 NCAA college football season, but may be extended into succeeding seasons and differing football leagues. Team C will report to the ReTrans contact, Dr. Michael Bartz.

## 2. Business Objectives

Purposes for this project are to benefit not only the engineers at ReTrans, but also the team members of Team C. This project will provide experience of agile software development techniques and processes to the student team members. These processes include:

- Project planning
- System design and architecture
- Relationship-building (among the team members and with the customer)
- Requirements gathering
- Documentation
- Coding (Python and Django)
- Testing

## 3. Non-functional Requirements

The software will be:

- Scalable to any football league betting pool
- Environmentally sound, in that it won't be using paper
- Available through a local server/webpage for the users
- Administered and used by ReTrans engineers

## 4. Functional Requirements

The software will:

- Utilize a database to obtain game details: teams playing, favored team, point spread, network broadcasting the game, date and time of game.
- Display the game details (including game of the week) to the user
- Allow the administrator to choose the games and determine the game of the week.
- Keep track of the system's users, their current points, and their accumulated points

- Allow the user to enter line and winner predictions for each game and to pick a high-risk game if he or she so chooses
- Alert the user of first or second place status each week
- Display user standings as well as previous week's winners

## **5. Personnel Requirements**

Each member of Team C is expected to build on his understanding and abilities of:

- Techniques, skills, and modern tools involved in software engineering
- Meeting the specifications of the customer in terms of software functionality
- Communication within a team and with the customer
- Team participation and effectiveness
- Respect for each other and the customer

## **6. Reporting and Quality Assurance**

Development progress will be documented such that our work will be traceable for future maintenance and testing purposes. Milestones in this process will also be submitted to Dr. Michael Bartz for approval and critique.

## **7. Delivery Schedule**

Final delivery of the software package is scheduled for December 1, 2017.

## **8. Risk Management**

Time management and quality assurance will be maintained by holding regular meetings among the software developers and regular status reporting to the contact, Dr. Michael Bartz. Accountability and punctuality will be expected among the team members regarding the meeting schedule and project development guidelines.

## **9. Constraints**

The primary development constraints involve time management and coding. Delivery of functional software is due by December 1, 2017, and the software will be coded in a Python/Django environment and designed to provide a graphical, web-based interface.

## 10. Glossary of Terms

This section provides clarity to terms used in this document that may be unfamiliar to an outside audience.

### **Software Production Terms:**

#### **Functional/non-functional requirements**

Simply put, non-functional requirements describe how the system works. Functional requirements describe what a system should do.

#### **Sprint**

In product development, a sprint is a set period of time during which specific work has to be completed and made ready for review.

### **Betting Pool Terms:**

#### **Betting pool**

A betting pool is a form of gambling, where gamblers pay a fixed price into a pool, and then make a selection on an outcome, usually related to sport. In an informal game, the vig is usually quite small or non-existent. The pool is evenly divided between those that have made the correct selection. There are no odds involved; each winner's payoff depends simply on the number of gamblers and the number of winners.

#### **Game of the Week**

The game of the week is chosen by the administrator, and 2 Winston Cup points will be awarded to participants who choose the winner of that game correctly.

#### **High-risk game**

One game per week, of the user's choice, can be selected as a high-risk game. 5 points are either added or subtracted from the user's cumulative Winston Cup points.

#### **Winston Cup**

The Winston Cup is awarded to the user with the most cumulative points at the end of the season. The Winston Cup is basically the culmination of all things that are awesome in the world and something that every engineer at ReTrans should strive to obtain.