**Software Implementation and Testing Document**

**For**

**Group 1**

Version 1.0

**Authors**:

Phillip Sheng

Jose Ibarra

Christian Riley

Michael Clark

# Programming Languages (5 points)

*Python, HTML, CSS, JavaScript*

# Platforms, APIs, Databases, and other technologies used (5 points)

*SQLite, Flask, TheOdds Api for pulling sports betting odds and match results*

# Execution-based Functional Testing (10 points)

*Describe how/if you performed functional testing for your project (i.e., tested for the* ***functional requirements*** *listed in your RD).*

*Running the Flask-based application locally to then manually test out the website. Making sure that if you press a button or a hyperlink you are then sent to the appropriate render of an HTML or outcome populate.*

*Creating test programs for making API calls using the programs from the TheOdds API website as basis. Confirmed that we can access an API key for free and pull odds using Python.*

# Execution-based Non-Functional Testing (10 points)

*Describe how/if you performed non-functional testing for your project (i.e., tested for the* ***non-functional requirements*** *listed in your RD).*

*Running the Flask-based application locally to then manually test out the website, even though some components such as username and email duplication check, encryption password, ability to reset password, etc. Has not been functional components these features can be checked on both the front end and back end. For example, the back end can be used to check if the passwords were properly saved and retrieved in an encrypted format. For the duplication check, if the emails or the usernames are duplicated then they can get feedback specifying that the username or email has been taken.*

# Non-Execution-based Testing (10 points)

*Describe how/if you performed non-execution-based testing (such as code reviews/inspections/walkthroughs).*

*By reading through the codebase, we were able to check for errors and walk through to see how we can make it simpler for all of our team’s understanding. For example, in the beginning we had implemented a MySQL database, but after initial non-execution-based testing (aka the team was trying to install the MySQL server on their local devices) was deemed too complex and unnecessary and therefore we decided to move our database to SQLite.*