**Software Implementation and Testing Document**

**For**

**Group <20>**

Version 2.0

**Authors**:

Nicole Johnson

Michael Carroll

Tanner Rohloff

James Tanner

Tyler Carver

# Programming Languages (5 points)

# Java Script – Used in react components and page views. It will also be used in the backend for middleware with expressJS.

# HTML used to to develop visual interface and to work in conjunction with the Java Script code.

# CSS to build background functionality of html code

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

# Google Maps API - We are considering other free options or implementing our own API for proof of concept

# ReactJS – front end

# ExpressJS and MongoDB - backend

# Execution-based Functional Testing (10 points)

* The main functional testing we conducted was for the front end. We tested the navbar buttons and the routing to each page by clicking each button. We were also to debug any issues that occurred with the display on the page. We also tested the deal cards showing on the map by testing our front end with placeholder data that did not need to fetch any data. We used this placeholder to test the swiping functionality of the deal cards on our application.

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

- We tested non-functional components of our application by focusing on the user-design and ensuring a user-friendly application. These are non-functional to our application but contribute to the overall client side of the project. We ran the client side of our application to look at our pages and things like button effects on the navbar.

# Non-Execution-based Testing (10 points)

- We performed non-execution-based testing by strictly resolving merge conflicts and doing code reviews of each other's code before merging branches into main. This requires communication and walkthroughs which were done through online meetings to step through the code to ensure that expected behavior will occur without an execution testing. Examining code through screenshots was also performed to resolve any errors that would prevent the code from compiling.