**CSE 310 – Applied Programming**

**Module Plan**

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| **Name:** | Parker Johnson |
| **Date:** | 11/17/2023 |
| **Teacher:** | Brother Pineda |
| **Module # (1-6):** | Module 6 |

1. **Identify which module you have selected to work on. Place an “X” under the “Selected Module” column.**

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| **Modules** | **Selected Module** |
| Cloud Databases |  |
| Data Analysis |  |
| Game Framework |  |
| GIS Mapping |  |
| Mobile App | X |
| Networking |  |
| SQL Relational Databases |  |
| Web Apps |  |
| Language – C++ |  |
| Language – Java |  |
| Language – Kotlin |  |
| Language – R |  |
| Language – Erlang |  |
| Language – JavaScript |  |
| Language – C# |  |
| Language - TypeScript |  |
| Language – Rust |  |
| Choose Your Own Adventure |  |

1. **At a high level, describe the software you plan to create that will fulfill the requirements of this module. This may change as you learn more about the technology or language you are learning.**

I plan to create a mobile health tracking application using React Native with JavaScript, ensuring compatibility with both Android and iOS platforms. React Native facilitates cross-platform development, allowing for a unified codebase. The app will feature a main health dashboard as its primary screen, providing users with personalized metrics like daily steps, heart rate, and sleep duration. It will be interactive, allowing users to log daily activities, set goals, and receive real-time feedback on their fitness progress. As a stretch challenge, I aim to integrate a phone component, such as the camera, microphone, sensor, or location services, to enhance the app's functionality.

1. **Create a detailed schedule using the table below to complete your selected module during this Sprint. Include details such as what (task), when (time), where (location), and duration.** **You are expected to spend 24 hours every Sprint working on this individual module and other activities in the course. Time spent on this individual module should be at least 12 hours.**

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|  | **First Week of Sprint** | **Second Week of Sprint** |
| **Monday** | Research React Native and JavaScript, Office, 2 hours | Test the app on Android, Office, 3 hours |
| **Tuesday** | Set up React Native environment, Office, 3hrs | Test the app on iOS, Office, 3 hours |
| **Wednesday** | Create the basic app structure, Office, 4 Hours | Implement additional screens (stretch), office, 4 hours |
| **Thursday** | Implement the main health dashboard, Office 4 hrs | Implement data storage, office, 4 hours |
| **Friday** | Make the app interactive, office, 4 hrs | Document and Prepare README.md, office, 2 hours |
| **Saturday** | Integrate phone component (stretch), office, 4hrs |  |

1. **Identify at least two risks that you feel will make it difficult to succeed in this module. Identify an action plan to overcome each of these risks.**

Risk 1: Limited Familiarity with React Native and JavaScript

Action Plan: Dedicate the initial days of the sprint to comprehensive research on React Native and JavaScript, leveraging official documentation, tutorials, and community forums. Seek guidance from experienced React Native developers if necessary.

Risk 2: Technical Challenges in Integrating Phone Components

Action Plan: Break down the integration task into smaller components, focusing on one at a time. Regularly consult React Native documentation and online resources. Consider seeking advice and support from the React Native community. Allocate additional time in the schedule to troubleshoot potential issues.

By addressing these risks proactively, I aim to mitigate challenges and ensure the successful development of the mobile health tracking application using React Native and JavaScript.