## Computer Engineering and Computer Science



## 491A Senior Project Product Proposal

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| **Academic Term:** Fall 2023  **Team Name:** The Decision Tree  **Team Members:** Aiden Hock, Jacob Phillips, Nathan Wolski, Noah Daniels, Kihambo Muhumuza, Diego Garcia  **Team Leader:** Aiden Hock  **Date:** 9/11/2023  **Product Name:** Balance |  |
| **Glossary** |  |

**Product Outline:**

**Product’s Value/Purpose:**

Balance is a comprehensive well-being application designed to motivate individuals in cultivating positive habits, tracking their mental health, and harmonizing their chakras. The product's core value lies in gamifying everyday life, motivating users to adopt and sustain healthy routines while customizing their own balanced lifestyle. Balance combines the fun and addictiveness of gaming with **habit tracking and lifestyle management**.

**Vision:**

The vision guiding Balance is to create an engaging environment where users can track and manage their daily routines. It promotes building and managing healthy habits while providing a creative way to track and enhance lifestyles. The main objective is to help users tailor a unique habit equilibrium for maintaining a balanced and healthy lifestyle.

**Features:**

**Member Name:** Aiden Hock

**Medium to High Complexity Feature (Phase 1):**

* + **Habit Gamification Engine:** Develop a robust habit gamification system where users can set, track, and earn rewards for completing daily and weekly tasks. This feature involves complex gamification algorithms and **user interface design (UID)**.

**Low to Medium Complexity Feature (Phase 1):**

* + **Chakra Balancing Guidance:** Providing users with an introductory understanding of chakra/mental health balancing through informative content and user-friendly exercises. This feature emphasizes content creation and the development of user-friendly instructional materials.

**Feature for Next Release (Phase 2):**

* + **Mental Health Insights:** Incorporation of a **machine learn model (MLM)** to analyze users' daily habits, offering valuable insights into their mental well-being. The implementation of this feature requires the application of a weighted MLM algorithm.

**User Types:**

* **Root Admin (Super Admin):**
  + **Responsibilities**: Configuration of system settings, user account management, and access to advanced analytics and well-being tracking tools.
* **Admin Delegates (Admin):**
  + **Responsibilities**: Assisting the root admin in user management tasks and overseeing community engagement and challenges.
* **Normal Users:**
  + **Responsibilities**: Leveraging the capabilities of Balance for the tracking and balancing of habits, journaling of thoughts and emotions, engagement in chakra exercises, and participation in a supportive community for motivation.

**Target Audience:**

Balance caters to individuals actively seeking an enhancement of their overall well-being, encompassing those keen on habit formation, mental health monitoring, and chakra harmonization. The product appeals to a diverse audience with a shared interest in self-improvement and mindfulness.

**Scope:**

The scope of our project encompasses the comprehensive development of the Balance mobile application, encompassing features facilitating habit gamification, chakra guidance, mental health tracking, and an active balanced lifestyle.

**Minimum Viable Product:**

* User registration and profile creation
* Habit gamification featuring XP and reward mechanisms
* Introductory chakra balancing exercises
* Integrated journaling
* User role management to accommodate both administrators and standard users.

**Business terms:**

* **Habit-Tracking Lifestyle Manager (HTLM):** A software or application designed to help individuals monitor and manage their daily habits and routines, often with features for goal setting, progress tracking, and habit reinforcement.

**Technical terms:**

* **Machine Learning Model (MLM):** A computational algorithm or mathematical representation that learns patterns from data and uses this knowledge to make predictions or decisions on new, unseen data.
* **User Interface Design (UID):**

**Resources:**