#### PROJECT SELECTION DOCUMENT

## **Descriptions of Proposed Projects:**

<u>Alternative 1:</u> Involves the creation of a health tracking app that measures an individual's key health metrics. Some of the key health metrics are steps taken, calories burned, calories consumed, and heart rate monitoring. A unique feature of this app is that it can allow users to upload photos of the food they consume throughout the day and the app performs a caloric estimation using machine learning. The results of this estimation are then shown to users.

<u>Alternative 2:</u> Involves the creation of a student accommodation app. The app would allow students to search for suitable housing within nearby distances. The app would allow the users to filter out results by distance, rent, number of bedrooms, and amenities. The students would also be able to pull-in other students as roommates, and would be able to review and provide feedback on the postings. The app would only be available for students in the US.

<u>Alternative 3:</u> Involves the creation of a travel planning app/website. The product would allow users to plan their travel to any destination within the US end-to-end. The users would be able to book flights, search for hotels, book cabs, rent cars, and select points of interest in their destination. The app/website would then generate an itinerary for the user with useful details.

# **Explanation of Criteria**

**Must-have Criteria:** All of the criteria provided in the following sections are important, but there are some considered must-have. This means if the criteria had to be downsized, then these must-have criteria would not be considered for removal. These include Cost, ROI, Customer Churn, and Increased Market Share.

## **Project Criteria**

Cost (15%): Cost was given a higher weighted percentage than the other two project criteria because our team wants to deliver an amazing solution. It is difficult to do so without having the necessary funds to pay contributors to the project and to pay for resources. The cost factors into other aspects of the project criteria as well.

Time to Develop (10%): This criteria was included for project evaluation because it is important to estimate how long it will take for the software development to finish. This estimate is needed when creating the project scope and will help keep the team accountable and provide motivation to complete tasks on time to meet deadlines.

**Risk** (10%): This criteria refers to risks that can occur during the lifespan of the project that would need to be mitigated or responded to accordingly. This includes missing deadlines due to poor communication, needing to replace equipment, operational changes such as a team member leaving the project, and cost overruns by exceeding the budget.

## Financial Criteria

**ROI** (20%): This criteria has one of the largest weighted percentages because the project needs to meet its ROI in order to properly provide post-launch support and maintenance for a long period of time, as well as to continue paying developers and team members for their contributions. The earlier the project can meet its ROI value, then the earlier it is the team can start taking those profits and adding more functionality on top of what was already delivered.

### **Strategic Criteria**

**Increased Market Share (15%):** This criteria is included in the analysis as the project needs to capture a significant portion of the market share to be a key product in the industry. Capturing a larger market share means increased revenue as well. The increased market share would give the project a competitive advantage over competing products, brand recognition and loyalty.

Customer Churn (20%): Customer churn is the rate at which customers stop using a product or a service. This criteria has one of the largest weighted percentages because the project needs to retain customers in order to remain relevant. Customer retention provides revenue stability, ensures profitability, increases brand recognition and reputation, and long-term sustainability. Low churn rates help the project meet its goals of providing ROI and enhanced branding.

## **Organizational Criteria**

**Innovation (10%):** Innovation is included in the analysis as it gives the product a competitive advantage, meets undiscovered market needs, and ensures relevance in the market. The team aims to provide a product that helps solve a problem for which no novel products exist or the existing solutions fail to meet the demand adequately.

# **Trade-Off Table**

| Criteria       | Sub-criteria              | Weight | Health<br>Tracker | Student<br>Accommodation | Travel<br>Planning |
|----------------|---------------------------|--------|-------------------|--------------------------|--------------------|
| Project        | Cost                      | 15%    | 6                 | 4                        | 4                  |
| Project        | Time to<br>Develop        | 10%    | 6                 | 5                        | 3                  |
| Project        | Risk                      | 10%    | 6                 | 4                        | 4                  |
| Strategic      | Increased<br>Market Share | 15%    | 7                 | 4                        | 6                  |
| Strategic      | Customer<br>Churn         | 20%    | 8                 | 3                        | 5                  |
| Financial      | ROI                       | 20%    | 7                 | 3                        | 5                  |
| Organizational | Innovation                | 10%    | 8                 | 6                        | 4                  |
| Total          |                           | 100%   | 6.95              | 3.9                      | 4.6                |

#### **Score Model Results**

**Alternative 1: Health Metrics -** This project scored the highest using the weighted scoring model. This is because it ranked the best in all criteria categories. The estimated market share, cost, ROI, and customer churn for this project were far higher than the other alternatives. Those criteria had the highest weighted percentages and were considered more important to the team, which is why it makes sense that this project scored the best.

**Alternative 2: Student Accommodation -** This project scored the lowest using the weighted scoring model. This is because it was ranked the lowest in many criteria categories. The customer churn for this project would be high as it is expected that the product would not be frequently used by students once they have found suitable accommodation. The ROI would also be low as it would be offered as a free service. The competing services and products are free of charge and run no advertisements, putting the student accommodation project at a disadvantage.

Alternative 3: Travel Planning - This project scored low using the weighted scoring model. The travel planning project is expected to take significantly longer to develop as it would require the team to create features to look for flights, hotels, cabs, create itineraries, and inform customers in case of flight delays or cancellations. The cost of development is directly proportional to the time to develop the product. There are many competing products which provide a similar service to customers planning their travel, leading to a lower score in the innovation criteria as well.

## **Project Recommendation**

From discussions and reviewing the results from the weighted scoring model, the recommended project to generate a business case for is Alternative 1. This project will generate a product that makes it easier for users to track their health metrics using a variety of features.