**LAB 2 – REQUIREMENT ANALYSIS**

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**Topic:** Fitness Tracking App with Personalized Workouts, Diets, and Daily Reminders **Output**:

• Functional and Non-functional Requirements

• Risk Register

• Resource Requirement

1. **Functional and Non-functional Requirement**

In this part, solution requirements are defined. Solution requirements describe the

characteristics that a product must have to meet the needs of business. There are two types of solution requirements:

▪ Functional requirements describe how the product must behave, what are its features and functions.

▪ Non-functional requirements describe the general characteristics of a system. They are also known as quality attributes.

| **Req.ID** | **Requirement Name** | **Detailed Description** | **Type** |
| --- | --- | --- | --- |
| 001 | **User Personalization** | Customers provide information about height, weight, gender, age,... Based on that information, customized nutrition and workout plans are suitably created. | Functional  requirement |
| 002 | **Activity summaries by specific time period** | Give the customers an overview of their fitness activities by days, and months. This helps evaluate the progress in a given period of time and set long-term goals accordingly | Functional  Requirement |
| 003 | **Goal setting** | The trainers set the desired results for customers, which makes the customers have a motivated aim to follow the plan. | Functional  Requirement |
| 004 | **Tracking metrics** | Repetitions, sets, calories, hours, kilometers, kilograms, miles, pounds, etc. are counted and recorded. | Functional Requirement |
| 005 | **Push notification** | Push notifications can remind users of the daily time to workout, the next mealtime, and other important events. | Functional requirement |
| 006 | **Tutorial** | Give instructions and tutorials on each appropriate exercise for users to easily keep up, especially ones that perceive information virtually. | Functional requirement |
| 007 | **Usability Requirements** | The interface is simple and easy to interact, the colors, buttons, messages and layout are attractive and promotive for users to have motivation to train | Non-functional requirement |
| 008 | **Flexible exercises** | There are exercises that are quick and simple, they don’t need special equipment or wide space to workout. | Non-functional requirement |

1. **Risk Register**

In this part, a list of identified risks and other information are defined.

▪ Risk Category: Some common categories are scope, schedule, cost, quality, HR.

▪ Risk title: a one-sentence description of a risk.

▪ Affect: A narrative description of the potential impact on the project.

▪ Probability: the likelihood of risk to happen. You can use Low, Medium, High

▪ Impact if the risk occurs: You can use Low, Medium, High

▪ Risk response plan: Actions to respond to the risk.

| **Risk**  **ID** | **Risk**  **Category** | **Risk Title** | **Affect** | **Probability** | **Impact** | **Risk response plan** |
| --- | --- | --- | --- | --- | --- | --- |
| 001 | Knowledge | Members lack knowledge of coding language and experience. | Obtaining the required knowledge will take time, and inexperienced work may produce unreliable results. | Medium | Medium | Divide the team into coding and business teams, and have each team research specific knowledge. |
| 002 | Requirements | Additional  requirements are added | It affects on the  project progress | High | Medium | Hold a daily meeting to update schedule and plan. |
| 003 | Scope | The scope might be terminated due to short working duration. | Some works can be canceled while in progress | Low | High | The scope must be declared realistically and suitably for the members |
| 004 | Schedule | Team members are often late for meeting or unavailable to join | They may be slower than the others and need more time to acquire the content of the meeting | High | Low | Set penalties for late members and set conformable time for everyone |

1. **Resources Requirement**

Resource Requirements for the project are divided into 3 parts: hardware resource, software resource and human resource.

**3.1 Hardware Resource**

| **Items** | **Quantity** | **Description** | **Purpose** | **Price** | **Total Cost** | **Date needed** |
| --- | --- | --- | --- | --- | --- | --- |
| Acer Nitro 5 | 1 | App Management | Backend Manager | 30.000.000 vnd | 33.100.000 vnd | 12/10/2023 |
| MX Master 3 | 1 | 3.100.000 vnd |
| Macbook Pro M1 | 1 | App Management | Frontend Manager | 30.000.000 vnd | 31.200.000 vnd | 12/10/2023 |
| Magic Mouse | 1 | 1.200.000 vnd |
| Total Cost: | | | | 64.300.000 vnd | | |

**3.2 Software Resource**

| **Application** | **Quantity** | **Description** | **Purpose** | **Price** | **Total Cost** | **Date needed** |
| --- | --- | --- | --- | --- | --- | --- |
| MS Windows 10  Pro 64bit | 1 | Operating System | PC’s OS | 500.000 vnd | 500.000 vnd | 12/10/2023 |
| Chat GPT 4 | 2 | Artificial Intelligent | Productivity | 50.000 vnd | 100.000 vnd | 12/10/2023 |
| Total Cost: | | | | 600.000 vnd | | |

**3.3 Human Resource**

| **Name** | **Name of**  **Organization** | **Project**  **Role** | **Required Skills** | **Phone** | **Email** | **Salary/month** |
| --- | --- | --- | --- | --- | --- | --- |
| Nguyen Toan Phuc | Peterian International Corporation | Project  Manager | Leading, English, Communicating,  Problem Solving | 09\*\*\*\*\*\*68 | to\*\*\*\*\*\*\*\*@gmail.com | 22.000.000 vnd |
| Nguyen Minh Duc | Duckie's Factory | Business  Analyst | Analytics, English, Problem Solving | 09\*\*\*\*\*\*45 | du\*\*\*\*\*\*\*\*\*@gmal.com | 20.000.000 vnd |
| Total Cost: | | | | 42.000.000 vnd | | |