Group Number 5

Group Name: Code5

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# Group Members

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# Executive Summary

Habitmon is a tool to let a user gamify their self-improvement journey while meeting others and becoming worldly. The user upon signing up can pick preset goals, tasks and habits or make their own and choose a few of the dev-team run groups where they can share or view other’s progress. Once they complete a certain number of goals, tasks, and habits they will earn a spin which will give the user a random critter. This critter can grow, and fight based on the user completing their goals, tasks, and habits. Users can compete against each other via Group made challenges or by challenging each other. This is done by seeing who makes the most progress, improved the most and seeing who can meet goal posts first.

# Competitive Analysis

# Data Definition

**User:** individual who uses product

**Team:** The developers who work front end and back end of product

**Team Member:** A single person of the team

**Game:** The product from users’ view

**Goal**: Long term desire with steps and an endpoint **ex.** Saving up for a game, completing a craft, doing a marathon

**Goal posts:** Step to reach end of goal

**Task**: Daily event that is to better the individual, should be basic and simple, **ex.** Brush teeth, Do Homework, Cleaning

**Habit**: A non-daily event that user is trying to incorporate into their routine ex. Spend 30 minutes on hobby,

*Critter*: The characters the user can earn, level up and battle with

**Gacha**: Random draw that gifts user with critter or other game items

*Group:* A team run club that gives out tasks to users who are members

**Sub-Group:** A user made club that falls under one of the main groups, is user run

**Battle:** Two or more users challenge each other via ????

**Challenge:** Team made event to have users play against each other within their group

# Overview, Scenarios and Use Cases

# Initial list of high-level functional requirements

The following is a list of functional requirements that we plan the implement for our project. This is the initial list and additional functional requirements will be provided later.

**User Story:** As a new user would like to create an account

**Functional requirements:**

1. The system/application must allow the user to create an account with a username and password
2. The system/application must allow the user to create an account with Google or Facebook accounts
3. The system/application must display message if username is already in use

**User Story:** As an existing user, I would like to be able to log into my account

**Functional requirements:**

1. The system/application must allow user to log into account by entering their email and password
2. The system/application must allow user to log into account with Google or Facebook accounts
3. The system/application must allow user to change/ reset password

**User Story:** As a user, I would like to create an avatar

**Functional Requirement:**

1. The system/application must allow user to select a gender
2. The system/application must allow user to select a body
3. The system/application must allow user to select hair
4. The system/application must allow user to select clothing

**User Story:** As a user, I would like to read messages for general updates, world events, game events and donations

**Function Requirement:**

1. The system/application must allow the user to read messages (updates, world events, game events and donation)

**User Story:** As a user, I would like to receive a reward for completing goal(s)

**Function Requirement:**

1. The system/application must provide the user with a reward

**User Story:** As a user, I would like to choose my main group

**Function Requirement:**

1. The system/application must provide a mechanism to choose the main group

**User Story:** As a user I would like to make purchases, payments and/or donations

**Function Requirement:**

1. The system/application must provide a mechanism to make purchases, payments or donations
2. The system/application must provide secure means to make purchase

**User Story:**

**Function Requirement:**

# List of non-function requirements

The following is a list of non-functional requirements that we plan the implement for our project. This is the initial list and additional non-functional requirements will be provided later.

**Non-function requirement:**

The system/application shall provide a user login page

**Non-function requirement:**

The system/application shall provide the user the ability to enter a username and password

**Non-function requirement:**

The system/application shall provide the user the ability to login with a Google or Facebook account

**Non-function requirement:**

The system/application shall provide the user the ability to create a new account with a username and password

**Non-function requirement:**

The system/application shall provide the user the ability to create a new account with an existing Google or Facebook account

**Non-function requirement:**

The system/application shall identify user at login

**Non-function requirement:**

The system/application shall create a unique ID for new users

**Non-function requirement:**

The system/application shall user the ability to create an avatar

**Non-function requirement:**

The system/application shall allow the user to pick gender, body, hair, clothing for avatar

**Non-function requirement:**

The system/application shall provide the user a reward method

**Non-function requirement:**

The system/application shall provide the user a secure method of making payments

**Non-function requirement:**

The system/application shall be responsive

# High-level system architecture

The following is the list of the high-level system architecture

Programming Language:

* C++
* Java Script
* Java

Database:

* MySQL

APIs:

* **Vulkan** – which is a graphics and compute API the provides high-efficiency cross-platform access to modern GPUs used in variety of devices
* **OpenGL|ES** – royalty-free cross-platform API for rendering 2D and 3D graphics which include consoles and phones
* OpenCL – royalty-free standard for cross-platform, parallel programming

# Team

# Checklist