

Project Name: Bee Garden

1.0 Objective

Our mission is to craft an inviting and user-friendly website that serves as a hub for promoting daily sustainable habits while fostering a deeper connection with the vital bee ecosystem. By seamlessly blending education and engagement, we aim to raise awareness about the essential role of bees while empowering users to adopt eco-conscious practices. Through captivating content and interactive features, our website will inspire individuals to cultivate bee-friendly environments by learning about suitable plants and nurturing sustainable habits in their daily lives.

2.0 Stakeholders

1. Students
2. Game Keepers
3. Developers

3.0 Functional Requirements

1. User Registration and Authentication
 - a. User must be able to create account and log in to the system
 - b. User authentication should be secure
2. Habit Tracker
 - a. Users should be able to log daily habits once a day. Score would be acquired to the users based on the number of habits and added to the total score
3. Map
 - a. Users should be able to go to the desired location to collect seed packs. Score would be awarded to the user based on the rareness of the seeds.
4. Virtual Garden
 - a. User should be able to plant flowers that has been acquired
 - b. User should be able to increase the bee's happiness by completing daily habit tracker
 - c. Page should display a different background depending on the real-time season
5. Leaderboard
 - a. User should be able to view the leaderboard of all users, and would be ranked by their scores
6. Administrator
 - a. Users with "superuser" permission would be able to grant special seeds to the users after completion of the daily habit tracker

4.0 Non-Functional Requirements

1. Security
 - a. Implement secure login and authentication for user's information
 - b. Protect against common web application vulnerabilities
2. Usability
 - a. The website should have an intuitive and responsive design for both desktop and mobile app users

5.0 Assumptions and Constraints

1. Legal Compliance
 - a. Ensure compliance with data protection regulations (GDPR)
2. Usability
 - a. User would be able to use the website regardless of their locations

6.0 Player Actions

1. Log in and complete a daily habit tracker by clicking on the checkbox. Obtain seed packs and scores
2. Plant seeds at the virtual garden by dragging the seed from the seed inventory and dragging into planting spots
3. Click on the flowers that has been planted to obtain information on the flowers
4. Pet virtual bee to improve the "happiness bar"
5. Ranking in leaderboard would be updated according to player's scores