

# Requirement Analysis

## 1. Project Overview

This project is a task management app where users complete tasks to earn points and progress with their pet. The project aims to increase user engagement through gamification principles. The user can earn points for their pet through doing sustainable tasks and events set by themselves or the website. This website is called Ecolution.

## 2. Functional Requirements (FR)

The functional requirements that Kayan's Kanban is aiming to complete for the first sprint are:

### 1. User Authentication

The system will allow users to sign up for a new account with their own created password, and then log into this account they have created.

ID	Requirement	Priority
FR1	Users must be able to log in to their account.	High
FR2	Users must be able to sign up for a new account.	High
FR3	Users will be able to create their own password	High

### 2. User Settings

The system will allow to change the settings of their account:

ID	Requirement	Priority
FR4	Users must be able to delete their account.	High
FR5	Users must be able to change their password.	Medium
FR6	Users must be able to change their name.	Medium
FR7	Users must be able to change their pet's name.	Low

### 3. Pet Management

The user will have a pet when they sign up for an account, and they will be able to view their pet

ID	Requirement	Priority
FR8	Users must be able to view their pet.	High

## 4. Task Management

The user will be able to add task to their board and complete those task to gain points and exp for their pet

ID	Requirement	Priority
FR9	Users must be able to add a task (from predefined list or user-created).	High
FR10	Users must be able to mark a task as complete.	High
FR11	Admins must be able to specify tasks.	Low

## 5. Events & Map Integration

The user will be able to partake in events that consist of multiple task. These events will be location based.

ID	Requirement	Priority
FR12	Users must be able to join events	High
FR13	Users must be able to complete events	High
FR14	Users must be able to view events linked to a map.	High

## 6. Points & Rewards System

The user will be able to gain rewards for completing there tasks or events

ID	Requirement	Priority
FR15	Users must be able to EXP points for their pets by completing tasks or events.	High
FR16	Users must be able to earn points by completing tasks or events.	High

## 7. Database & Back end

The users data and pet data will be stored in a Django database

ID	Requirement	Priority
FR14	The system must store user data securely.	High
FR15	The system must track user progress (tasks, pet status).	High

### 3. Non-Functional Requirements (NFR)

In addition to the previously mentioned functional requirements we have the following non-functional requirements for the project:

ID	Requirement	Description	Priority
NFR1	GDPR	The system will provide a user with their protection rights	High
NFR2	Security	User passwords must be securely stored and hashed.	High
NFR3	Usability	The UI should be intuitive and easy to navigate.	High