

Functional Requirements

1. **User Authentication and Registration:**
 - Users can create accounts and log in using their email and password.
 - User registration requires valid email addresses and secure passwords.
 - Users can reset their passwords if forgotten.
2. **Plant Discovery and Information:**
 - Users can search for plant species by name, category, or characteristics.
 - Detailed information about each plant includes names, categories, characteristics, and benefits.
3. **Personalized User Profiles:**
 - Users can personalize their profiles with a profile picture and a brief bio.
 - Profiles display users' collections, favorited plants, and badges.
4. **Adding Plants to Collection and Favorites:**
 - Users can add plants to their personalized collections.
 - Users can mark plants as favorites for quick access.
5. **Community Interaction:**
 - Users can comment on plants, events, and other users' contributions.
 - Discussions and interactions are facilitated through comment sections.
6. **Contributing Plant Information:**
 - Users can contribute plant photos and descriptions to expand the plant database.
 - Contributed plant information is subject to approval by administrators.
7. **Plant Care Recommendations:**
 - Users receive personalized plant care recommendations based on their collections and preferences.
 - Recommendations help users maintain the health of their plants.
8. **Event Management:**
 - Users can create, manage, and join plant-related events.
 - Event details include titles, descriptions, dates, locations, and requirements.
9. **Organization Profiles:**
 - Organizations can create profiles to represent plant-related groups or initiatives.
 - Profiles display organization details, events, and contributions.
10. **Payment Processing:**

- Users can make payments for events, donations, or premium features using the integrated Stripe payment platform.

11. ****Badge System:****

- Users can earn badges based on their contributions, activity, and achievements.
- Badges provide recognition and incentives for user engagement.

12. ****Notifications:****

- Users receive notifications for activities such as comments, event updates, and badge achievements.
- Notifications enhance user engagement and keep users informed.

13. ****User Roles and Permissions:****

- Users have different roles, including user, moderator, and administrator, each with varying permissions.
- Moderators and administrators have additional privileges for content management and user interactions.

These functional requirements outline the core features and capabilities of the PlantifyUs Android application, providing users with a comprehensive and engaging plant-related experience.