**Functional Requirements Document (FRD)**

1. **System Functionalities**

**Functionality 1: Pet Browsing and Search**

* **Description**: Users should be able to browse through a comprehensive list of available pets and search for specific pets based on various criteria such as species, breed, age, and location.
  + **Sub-Functionalities:**
    - View a list of all available pets.
    - Filter pets by species, breed, age, and gender.
    - View detailed pet profiles including photos, descriptions, and adoption status.
    - Sort pets by relevance, distance, or adoption status.
  + **Use Case Scenario**:
    - A user visits the Petopia website and navigates to the "Browse Pets" section.
    - The user selects the desired species.
    - The system displays a list of pets matching the specified criteria.
    - The user clicks on a pet profile to view more details and photos.

**Functionality 2: Adoption Application Submission**

* **Description:** Users should be able to submit adoption applications for pets they are interested in adopting. The application process should be straightforward and include necessary information such as personal details, living situation, and pet preferences.
  + **Sub-Functionalities:**
    - Fill out and submit an adoption application form.
    - Provide personal information including name, contact details, and address.
  + **Use Case Scenario**:
    - After finding a pet they are interested in, a user clicks on the "Adopt Me" button on the pet's profile page.
    - The user fills out the adoption application form, providing all required information.
    - Upon submission, the system sends a confirmation email to the user and notifies the adoption agency.

1. **Requirements Prioritization and Dependencies**

**Priority: High**

**1- Pet Browsing and Search:**

This functionality is essential for users to find pets that match their

preferences and needs, forming the core of the Petopia platform.

**2- Adoption Application Submission:**

Allowing users to submit adoption applications directly through the

platform streamlines the adoption process and increases user engagement.

**Priority: Low**

* Social Media Integration:
  + Integration with social media platforms for sharing pet profiles and adoption success stories could enhance the visibility and reach of the Petopia platform but is not critical for initial functionality.

**Dependencies:**

* User Authentication:
  + Both functionalities rely on users being authenticated and registered on the platform to access features such as submitting adoption applications and saving favorite pets.
* Database Management:
  + Proper database management is essential for storing and retrieving pet data, user information, and adoption applications efficiently. It serves as a foundational dependency for all system functionalities.