**CAPSTONE 2: Pet Finder App**

**Function**

A web application designed to help users find pets available for adoption and connect with animal welfare organizations.

**Features**

The app provides a user-friendly interface where users can:

* Search for pets using various filters, such as animal type, location, organization, breed, and age.
* Search for animal welfare organizations.
* View detailed pet profiles, including location, organization, breed, age, temperament, photos, and videos.

**General Technical Details:**

* **Application Type**: Full-stack web application.
* **Design**: Responsive design for compatibility across different devices.
* **Components**: Integration with external APIs.
* **Data**: The app will provide information for either a specific pet type or all available pet types.
* **Technology Stack**: HTML, CSS, React, JavaScript, Node.js, PostgreSQL.

**Database Schema**

**Tables and the information they would contain (without including join tables)**

**Users**

* Username
* First Name
* Last Name
* Email
* Password
* Profile Image

**Pets**

* Id
* Type
* Name
* Status
* Breed
* Age
* Gender
* Size
* Image
* Video

**Breeds**

* Id
* Pet\_type
* Breed\_name
* Color
* Other\_characteristics

**Pet-traits**

* Spayed\_neutered
* Vaccinated
* House\_trained
* Spayed\_neutered
* Special\_needs
* Personality

**Adoption\_contacts**

Id

Organization\_name

Phone

Address

City

State

**App Features**

**Landing Page**

* **Logged-out Users**: App description and other relevant information.
* **Logged-in Users**: App description and additional personalized information.

**Search Functionality**

* Search for pets using filters (type, location, organization, breed, age, etc.).
* Search for animal welfare organizations.

**User Validation and Authentication**

* Registration
* Login/Logout

**User Area**

* View Profile
* Edit/Delete Profile

**Menu and Navigation**

* Home
* Pets
* Breeds
* Organizations
* Profile
* Login/Logout

**Data Collection**

**Data Sources**

* [Petfinder API](https://www.petfinder.com/developers/v2/docs/#using-the-api)

**Challenges and Solutions**

* Integrating an external API for real-time pet adoption data.
* Ensuring a smooth user experience with optimized search functionality.
* Implementing secure authentication and user data protection.

**App Enhancements for the future**

* Mobile version for improved accessibility.
* Additional features, including:
  + Password change and retrieval.
  + Help section.
  + Saved searches.
* Blog for sharing adoption stories and pet care tips.