# Screen Sketches

Cydrop Reminder App

# Team 3\_Mahdi\_1

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## Actors

## 1. Customers (Pet Owners):

- Log in: Users can securely log in with their credentials to access their personalized dashboard.
- Sign up: New users can create accounts by providing basic details such as name, email, and pet information.
- View home dashboard: Displays a summary of their pets, upcoming medication schedules, and any active reminders.
- View and add personal pets: Users can manage their pets' profiles, including pet details, medications, and reminders.
- Add reminders: Allows users to set custom reminders for pet medication administration, including notifications.
- Ask questions on Question Board: Customers can ask questions related to pet medications, which veterinarians will answer.

#### 2. Veterinarians:

- Log in: Veterinarians can securely log in to access customer information and the question board.
- Sign up: Allows veterinarians to register themselves, providing credentials and veterinary practice details.
- View home dashboard: Displays a summary of customer questions and pet medication schedules.
- View list of customer pets: Veterinarians can see a list of pets linked to their clients and manage their medications.
- Answer questions on Question Board: Veterinarians can provide guidance and answers to pet owners' queries.

#### 3. Admins:

- Log in: Admins can log in to manage all aspects of the app, from users to inventory.
- o Sign up: Admins are registered via special authorization.
- View home dashboard: Displays metrics for all veterinarians, customers, and pets, as well as system-wide statistics such as the number of reminders set or medications in inventory.

# Non-Functional Requirements

#### 1. Performance:

• The application should provide responses to user actions (like adding reminders or viewing pet details) within 2 seconds. The system should handle various users without performance degradation.

## 2. Scalability:

• The backend should be scalable to accommodate an increasing number of customers, veterinarians, and pets as the users grow. This could be achieved by using cloud-based solutions for data storage and processing.

#### 3. Security:

O All user data (personal information, login credentials, medical records) should be encrypted both in transit (using SSL/TLS) and at rest (using AES encryption). The system should implement role-based access control (RBAC) to restrict access to sensitive data (e.g., only veterinarians can access pet medical history).

#### 4. Usability:

O The interface must be intuitive and user-friendly. Both customers and veterinarians should be able to perform key actions (setting reminders, asking questions, etc.) in fewer than five clicks or taps. A comprehensive tutorial or help feature will be available for new users.

#### 5. Reliability:

• The app should have 99.9% uptime, with regular backups of all data to prevent loss in case of a failure. There should be redundancy in place for critical system components, ensuring uninterrupted service.

### 6. Maintainability:

• The codebase should be modular and well-documented to allow future developers to make changes or add features. Version control will be managed via GitLab, and each feature will have unit tests for easier debugging and maintenance.

### 7. Compatibility:

• The app must be compatible with Android 8.0 (Oreo) and above. The backend should be deployable on both Linux and Windows servers.

### 8. Data Privacy:

 The system should comply with relevant data privacy regulations, such as GDPR (General Data Protection Regulation).

## Tables

## 1. Pet Table

<u>Description</u>: The Pet table stores information about the pets enrolled in the app. Each pet is associated with a specific user (owner) and may have scheduled medications and a diagnosis history.

#### Attributes:

- pet id (Primary Key): A unique identifier for each pet.
- name: The name of the pet.
- species: The type of animal (e.g., dog, cat, rabbit, horse).
- breed: The breed of the pet (e.g., Labrador, Persian, etc.).
- age: The age of the pet.
- sex: The sex of the pet.
- color: The color of the pet.
- weight: The weight of the pet.
- spayed/neutered: If the pet is spayed/neutered (yes/no).
- medications: A list of current medications the pet is taking.
- diagnosis: A medical condition or diagnosis given by a vet.
- owner\_id (Foreign Key): A reference to the Users table to associate the pet with its owner.

<u>Foreign Keys</u>:owner\_id → Users(user\_id): This establishes a relationship between the Pet and its owner, linking each pet to a user in the Users table.

#### 2. Users Table

<u>Description</u>: The Users table holds information about the app's registered users, including pet owners. Each user can have one or more pets and access details like pet medication schedules and diagnosis histories.

#### Attributes:

- user id (Primary Key): A unique identifier for each user.
- username: The username(email) chosen by the user.

- password: The user's encrypted password for login.
- phone: The contact number of the user.
- address: The residential address for delivery of pet supplies, etc.
- created at: Timestamp of when the user account was created.

<u>Foreign Keys</u>: None directly, but it can be linked to other tables such as the Pet table (via owner\_id) or potentially to an Orders table for shopping functionalities in the app.

## 3. Vet Table

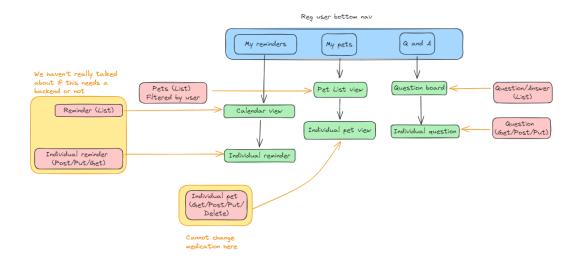
<u>Description</u>: The Vet table stores information about the registered veterinarians using the app. Each vet can answer questions, diagnose pets, and provide prescriptions.

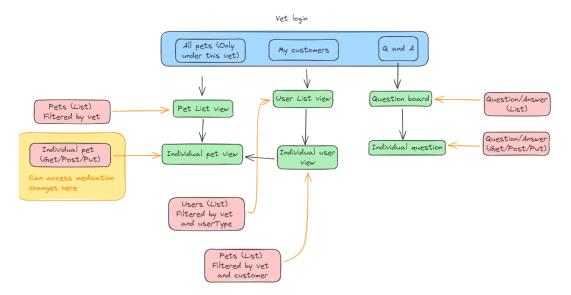
#### Attributes:

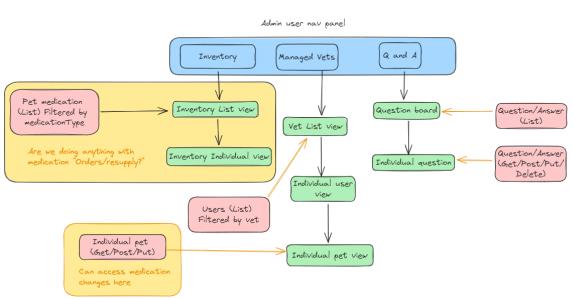
- vet\_id (Primary Key): A unique identifier for each veterinarian.
- name: The full name of the vet.
- specialization: The vet's area of expertise (e.g., ophthalmology, cardiology, etc.).
- license number: The vet's medical license number.
- email: The vet's contact email address.
- phone: The vet's contact number.
- clinic\_address: The address of the clinic or hospital where the vet works.

<u>Foreign Keys:</u> None directly, but it could be associated with a Diagnosis or Prescription table if these features are implemented, allowing vets to assign diagnoses to pets or issue prescriptions.

# Screen Flow Diagram









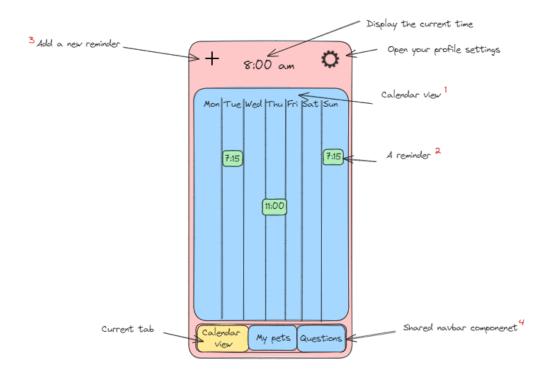
- 1. Questions Section (1): This section lists all the incoming questions from pet owners, who are seeking advice on medications and prescriptions for their pets. Each question is accompanied by the pet owner's name in parentheses.
- 2. Individual Question (2): This is an example of a specific question submitted by a pet owner. In this case, "where can I buy this drug?" asked by "Fury." Each question can be tapped or clicked, prompting the vet to answer it. The vet can easily identify the customer and the nature of their inquiry before responding.
- 3. Answer Button (3): This large button allows vets to tap or click to provide their answer to a selected question. Once pressed, the vet can write a response to the pet owner's offering medical advice or recommendations about the medication or prescription.
- 4. **Settings Icon (4):** The settings icon in the bottom left corner takes the vet to a personalized section where they can view their profile, including their name, area of specialization.

## Admin Home Page - Prakarsha Poudel



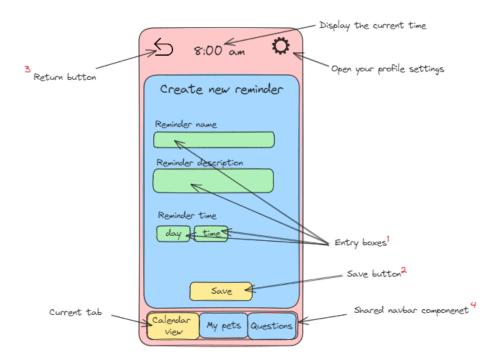
- 1. Admin Title (1): This is the main title indicating that the current view is for admins only. Admins can manage various backend functionalities, such as inventory and vet information, ensuring the app runs smoothly for all users.
- 2. **Medications Inventory (2):** Clicking on this option allows admins to check the current stock of medications available. It shows which supplies are low and need to be reordered.
- 3. Diagnosis Reported (3): This section provides a summary of all pet diagnoses reported by the users. Admins can see a count of diagnoses under each category, giving them insights into common health issues pets face in the system.
- 4. Vets Enrolled and Information (4): This option gives a detailed breakdown of all vets registered within the system. Admins can view each vet's name, area of specialization, and how many vets are enrolled in the app.
- 5. Questions (5): When selected, this option will show a list of questions asked by the users to vets.
- 6. **Settings Icon (6):** The settings button is also present here, allowing admins to access system settings, review their profile, or adjust how they manage the admin section of the app.

# <u>User Calendar View</u> - Niraj Amin



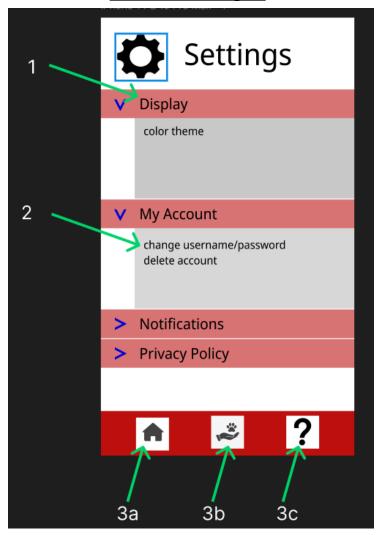
- Calendar view: This section of the app is dedicated to displaying all the alerts scheduled across the week. Alerts are organized horizontally, separated into the days of the week. They are vertically organized by time of day.
- 2. Reminder: This box represents a reminder that has been created. These reminders are automatically created when you add a medication to one of your pets. They can also created manually. Clicking on this alert will allow you to edit or dismiss it this week.
- 3. Add reminder: This button is used to create manual reminders. Clicking this button switches to the User Create Reminder view.
- 4. Shared navbar component: This navbar is the main navigation tool for the user. Users can quickly navigate through the app by clicking on these three buttons. The currently selected tab is highlighted.

## <u>User Create Reminder</u> - Niraj Amin



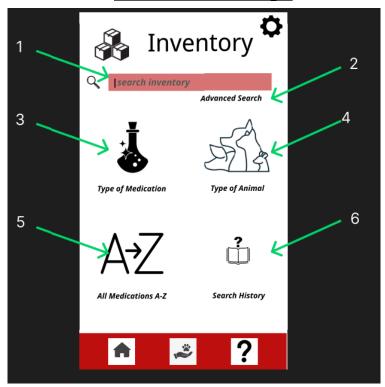
- 1. **Entry boxes**: These boxes are used to enter data for the new reminder. The *Reminder name* and *Reminder time* fields are mandatory, while the *Reminder description* is optional.
- 2. **Reminder:** This button saves the current reminder. Reminders are saved locally, and each one creates a push notification at the time that the medication should be administered. Clicking this button returns to the *User Calendar View*.
- 3. Add reminder: This button returns to the *User Calendar View*. Clicking this button servers the user a popup informing the user that their reminder will not be saved and asking the user to confirm or cancel.
- 4. Shared navbar component: This navbar is the main navigation tool for the user. Users can quickly navigate through the app by clicking on these three buttons. The currently selected tab is highlighted.

<u>User Settings</u> - Madeleine Carydis



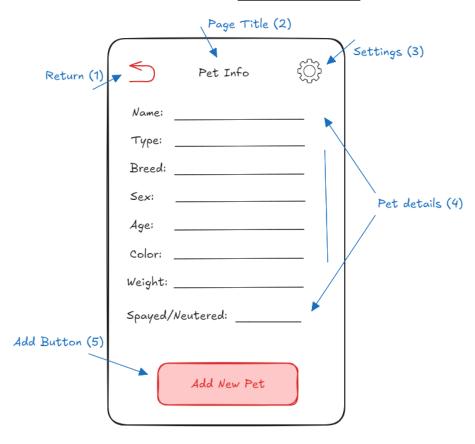
- 1. Settings Categories These drop down sections facilitate locating certain settings the user would like to change. When the user clicks in the pink boxes, settings in the drop down menu either become visible or disappear depending on the prior state.
- 2. Specific Settings Settings like change name or color theme, when the user clicks on the text, new pages popping up allowing the user to change their app preferences.
- 3. Shortcut Buttons
  - ${\bf a.\ Home\ -}$  Click to return to the homepage.
  - b. My Pets Click to view your pets.
  - c. Q&A Click to see question and answer section.

## <u>Admin Inventory</u> - Madeleine Carydis



- Search Bar This text entry box allows the admin to search for a specific medication.
- 2. Advanced Search Button This link leads to a new page giving special search options (e.g. searching for a specific medication that's an antihistamine given to birds that starts with an 's')
- 3. Type of Medication Button When the user clicks the icon, they're led to a new page. This page shows all the medications sorted by method of application, topical, injection, or oral.
- 4. Type of Animal Button When the user clicks the icon, they're led to a new page. This page shows all the medications sorted by the animal they're given to (medications may be listed multiple times depending on if they're given to different animals).
- 5. All Medications A-Z Button When the user clicks the icon, they're led to a new page. This page shows all the medications listed from A-Z.
- 6. Search History When the user clicks the icon, they're led to a new page. This page shows the medication search history allowing the user to look for prior medications they searched for.

# <u>Pet Details</u> - Madison Vosburg

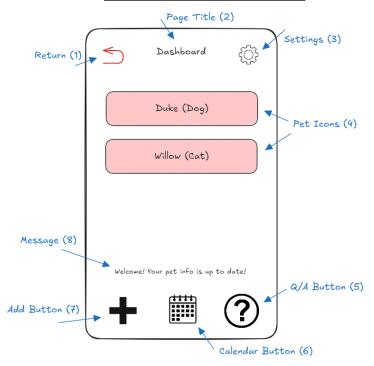


- 1. Return Button: This button returns back to the user dashboard.
- 2. Page Title: This section displays the input lines for pet information. Those details include name, type, breed, sex, age, color, weight, and if they are spayed/neutered.
- 3. Settings Button: The settings button allows users to access app settings where they can view their profile, make changes to personal preferences, or access general app information.
- **4. Pet Details:** To add a pet detail, press on the line and type using the pop-up keyboard. After entering, it should look like this:

Name:	Duke

5. Add New Pet Button: After inputting pet details, this button will add the pet to the customer's profile and return back to the dashboard. The user should now see their updated pet banner.

## Customer Dashboard- Madison Vosburg



- 1. Return Button: This button logs the user out of the app and returns to the home login/signup page.
- 2. Page Title: This section displays the customer's dashboard. The user can navigate to other pages and view relevant pet information from this page.
- 3. Settings Button: The settings button allows users to access app settings where they can view their profile, make changes to personal preferences, or access general app information.
- **4. Pet Icons:** Pet icons show the customer's pets in a list format. Clicking on a pet's name will open up a detailed profile for that specific pet.
- **5. Q/A Button:** This button takes the user to the question/answer page where they can post questions and get answers from their veterinarian.
- **6. Calender/Reminder Button:** This button takes the user to the calender page where they can view and set reminders for their pet's medication.
- 7. Add Button: This button allows the customer to add a new pet to their list. It takes the user to the add pet page, where they can input their pet's relevant details. These details include name, type, breed, sex, age, color, weight, and if they are spayed/neutered.
- 8. Message Bar: This area can be used for alerts such as welcome messages, update messages, and notification messages.