

SW Engineering CSC648/848 Spring 2021
“Zooble”
Section 04 Team 2

Team Lead: Edgar Catalan
Team Lead Email: ecatalan@mail.sfsu.edu
Frontend Lead: Cameron Harte
Backend Lead: Em Powers
Additional Members: Daniel Simpson, Wenjie Ye,
Sabrina Dang, Wameedh Mohammed Ali

Milestone 3
Due Date: 04/22/2021

GitHub Repository:
<https://github.com/CSC-648-SFSU/csc648-04-sp21-Team02>

History Version

Milestone/Version	Date
M3 V1	4/22/2021
M2 V2	4/5/2021
M2 V1	4/1/2021
M1 V2	3/20/2021
M1 V1	3/5/2021

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Section I: Data Definitions V3

Entities:

1. **General User** - A General User is any user browsing the website, whether registered or unregistered. A General User has the ability to create an Account.
 - a. Registration Info
 - i. A General User shall provide a unique username on sign up
 - ii. A General User shall provide a password on sign up
 - iii. A General User shall provide a valid email address on sign up
 - iv. A General User shall provide a display name on sign up
2. **Account** - An Account is an entity that will be created by the system on user sign-up and will contain user information such as the username, email, and password.
 - a. Active Account: An account that currently has its information and activity stored in the database
 - b. Banned Account: An Account that has been banned by an Admin,
 - c. Deleted Account: An Account that existed in the database at a certain point in time, but the linked user chose to delete it. Their information and activity is no longer stored in the database
3. **Premium Business Account** - A Premium Business Account is a paid Account which Registered Businesses can sign up for that has all the attributes of a regular Account plus additional features below.
 - a. Search Advertising: Registered Businesses with a Premium Business Account will be featured prominently in searches by Registered Pet Owners near them, when General Users search for Registered Businesses that are in the same Business Category
 - b. Feed Advertising: Posts of Registered Businesses with a Premium Business Account will be featured prominently in the Feed of Registered Users near them
 - c. Posts Near You Advertising: Posts of Registered Businesses with a Premium Business Account will be featured prominently in the Posts Near You of General Users near them
4. **Registered User** - A Registered User is a General User that has created an Account and can be a Pet Owner, Pet Business, Pet Shelter, or Admin.
5. **Admin** - An Admin is a Registered User who moderates the site with elevated privileges, reviewing flagged content, removing content not compliant with site terms and conditions, and messaging or banning problematic users.

- 6. Registered Business** - A Registered Business is a Registered User who indicates that they're representing a business upon sign up.
 - a. Business Category: A Registered Business chooses Business Categories when they sign up, allowing them to show up in filtered search results
 - b. Business Address: The physical address of a Registered Business
 - c. Business Phone Number: The phone number of a Registered Business
 - d. Average Rating: The average of all the Ratings given to a Registered Business by Registered Owners
- 7. Registered Shelter** - A Registered Shelter is a Registered User who indicates that they're representing a shelter upon sign up.
 - a. A Registered Shelter shall have pets
 - i. Pets owned by Registered Shelters shall be available for adoption for General Users to see.
 - b. Shelter Address: The physical address of a Registered Shelter
 - c. Shelter Phone Number: The phone number of a Registered Shelter
 - d. Average Rating: The average of all the Ratings given to a Registered Shelter by Registered Pet Owners
 - e. Pet's Siblings: Is a list of an adoptable pet's siblings if available
- 8. Registered Pet Owner** - A Registered Pet Owner is a Registered User who indicates that they're representing a Pet owner upon sign up.
 - a. A Registered Pet Owner shall have pets
- 9. Pet** - A Pet is created when a Registered Pet Owner or Registered Pet Shelter chooses to add a Pet to their Account. A Pet will have identifying attributes about them assigned by their owner, which are displayed in their Profile and filterable when a General User searches through pets.
 - a. Adoptable Pet: A Pet that is owned by a Registered Pet Shelter shall be adoptable and will have an indicator on their Profile picture and show up in the location based search
- 10. Profile** - A Profile is created when a General User creates an Account and will display entity images and information (listed below) and will act as a conduit for users to interact with one another through private Messages and Post/Image interaction.
 - a. Display Name: The display name chosen by the General User when they create their Account and intended to be their real first name or in the case of Registered Businesses and Registered Shelters
 - b. Profile Picture: The Picture is the image chosen by the Registered User when creating the Profile for the first time or when editing
 - c. About Me: The About Me is a short text written by the Registered User when they create a Profile, and contains anything the Registered User

- wants to include to introduce or provide background for those who view the Profile
- d. Photos: Photos are images uploaded by the Registered User at any point during their use of the website.
 - i. This includes any Photos included in Posts to the Feed and Photos directly added to the Profile during editing
 - ii. Photos can be commented on and liked from
- e. Recent Posts: Recent Posts are a collection of the most recent posts submitted by the Registered User that the Profile belongs to
- f. Online Status: Allows Registered Users to see which Registered Users are currently online

11. Pet Profile - A Pet Profile is a Profile that displays the information/images associated with a Pet entity by the Registered Pet Owner or Pet Shelter Owner acting as its owner.

- a. Siblings: If a Pet is owned by a Registered Pet Owner, Pet's Siblings represents all the other pets the Registered Pet Owner owns. The Registered Pet Owner can display a selection of the Pet's Siblings on the Profile, with the rest of the pets available through a link to display all Siblings of a Pet in a list format
- b. Housemates: If a Pet is owned by a Registered Pet Shelter, Pet's Housemates represents all the other pets the Registered Pet Shelter owns. The Registered Pet Shelter can display a selection of the Pet's Housemates on the Profile, with the rest of the pets available through a link to display all Housemates of a Pet in a list format

12. Registered Pet Owner Profile - Registered Pet Owner Profiles are entities that display the owner information/images associated with a Registered Pet Owner.

- a. My Pets: Displays Profile Pictures and names of pets owned by a Registered Pet Owner and provides links to their Pet Profiles

13. Registered Business Profile - Registered Business Profiles are entities that display the business information/images associated with a Registered Business.

- a. Contact Details: Is the Business Info for how users can contact a business
- b. Business Info: Displays the Address, Phone Number and Business Hours of a Registered Business
 - i. Address: The Address for the business location/office/etc. provided by the Registered Business on sign up to the website, that is verified by the Admin and can be edited at any time, and links to the location on the interactive map search
 - ii. Phone Number: The Phone Number for the business location/office/etc. provided by the Registered Business on sign up

- to the website, that is verified by the Admin and can be edited at any time
 - iii. Hours: The complete business hours provided by the Registered Business whom the Registered Business Profile belongs to and can be edited at any time
- c. Our Reviews: Displays Review Summaries and displays names for most recent reviews written by Registered Pet Owners for the Registered Business that the Profile belongs to. Provides a link to write a Review when viewed by a Registered Pet Owner
 - i. Average Rating: The computed Average Rating calculated from the Ratings provided by Registered Pet Owners
 - ii. Review Preview: The link to the full Review written by user that contains the short Reviewsummary and the name of the user who wrote the Review

14. Registered Shelter Profile - Registered Shelter Profiles are entities that display the business information/images associated with a Registered Shelter, and links to pets sheltered at a Registered Shelter.

- a. Our Pets: Displays the Profile Pictures and names of Pets, with links to their Pet Profiles, selected by the Registered Shelter
- b. Contact Details: Is the information(phone number, address) on how users can contact a shelter

15. Posts - Posts are entities created by Registered Users which are viewable by Registered Users, which contain text and/or Photos.

- a. Post Body: The optional longform text written by a Registered User that is viewable by General Users when viewing multiple Posts in a list format and single Posts
- b. Post Photo: The Photo that is added to a Post by a Registered User that is viewable by General Users when viewing multiple Posts in a list format and single Posts
- c. Post Timestamp: The timestamp generated by the system and linked to a post when a Post is made
- d. Post Likes: The Likes associated with a Post, given to a Post by Registered Users

16. Comment - Comments are texts created by Registered Users that are posted as responses/replies to Posts created by Registered Users.

- a. Comment Body: The longform text written by a Registered User that is viewable by General Users when viewing multiple Comments in a list format

17. Photo - Photos are images uploaded by Registered Users and submitted as Posts or used as Profile pictures.

- a. Photos can be in the jpg or png format
 - b. Photos can have a max file size of 20 MB
- 18. Review** - Reviews are entities submitted by Registered Pet Owners to record their experiences at/with Pet Shelters, Businesses, and with Registered Users choosing to be Pet Sitters, whether online or in-person, which will be visible through those entity's profiles. Reviews require a Rating to be submitted.
- a. Review Summary: The summary of a review is the short form text summary of the full review written by a Registered Pet Owner that is displayed to other General Users browsing/viewing multiple reviews in a list format
 - b. Review Body: The body of a review is the long form text written by a Registered Pet Owner that is displayed to other General Users when they view a single review
- 19. Rating**
- a. Ratings are entities submitted by Registered Pet Owners to quickly record their satisfaction with experiences at/with Pet Shelters, Businesses, and Pet Sitters, whether online or in-person
 - b. Ratings make up the Average Rating of a Registered Business that is displayed to General User on a Registered Business's Profile
 - c. Ratings make up the Average Rating of a Registered Shelter that is displayed to General User on a Registered Shelter's Profile
 - d. Ratings make up the Average Rating of a Registered Pet Sitter that is displayed to Registered Users on a Registered Pet Sitter's Profile
- 20. Message** - A Message will have subject and body and will be sent from Registered Users of any type to Registered Users of any type.
- a. Message Subject: The short form text summary of the Message's contents written by the Registered User writing the Message and displayed to other Registered Users viewing multiple Messages in a list format and when they view a single Message
 - b. Message Body: Long form text written as the content of the Message by a Registered User and displayed to the Registered User viewing a single Message
 - c. Deleted Message: A Deleted Message is any Message that a Registered User deletes from their Messages. Deleted Messages will not be visible for the Registered User who deleted the Message but will not affect visibility for the other Registered User
- 21. Likes** - Likes are entities used by Registered Users to demonstrate a reaction to a Registered User's Posts or Comments.
- 22. Follow** - A Registered User can Follow another Registered User to see their Posts on their own Feed.

- 23. Follows** - Follows indicate the Registered Users who a Registered User is following.
- 24. Followers** - Followers indicate the Registered Users who are following a Registered User.
- 25. Feed** - This entity allows a user to view/interact with all the recent Posts of the Accounts they are following.
- 26. Park** - Parks are entities that are created by Registered Pet Owners to represent a real-world park at a given location.
- 27. Park Profile** - Park Profiles are entities that display the park information/images that are edited/uploaded by Registered Pet Owners.
- a. Park Address: The physical address of the Park
 - b. Park Reviews: Displays review Summaries and display names for most recent reviews written by Registered Pet Owners for the Park that the Profile belongs to. Provides a link to write a review when viewed by a Registered Pet Owner
 - i. Average Rating: The computed average Rating calculated from the Ratings provided by Registered Pet Owners
 - ii. Review Preview: The link to the full review written by user that contains the short review summary and the name of the user who wrote the review
- 28. Forum** - Forums are a collection of Posts by Registered Users separated by topic, and further separated into user-created Forum Threads.
- a. Topics: The Topic of a forum that corresponds an animal type or breed on the website
- 29. Forum Thread** - Forum threads are created by any user, and are continuous sequences of Posts and replies located in an encompassing forum.
- a. Forum Thread Title: The title of the Forum Thread chosen by the Forum Thread Creator and is displayed to other General Users browsing/viewing multiple Forum Threads in a list format
 - b. Forum Thread Starter: The first Forum Thread Post in a Forum Thread written by the Registered User who created the Forum Thread
 - c. Forum Thread Post: Long form text Posts written by Registered Users in a forum thread
 - i. Forum Thread Posts can include an Photo uploaded by the Forum Thread Post creator
- 30. Flag** - A Registered User can flag any content that they find offensive
- a. Flagged Content : Flagged Content is any Photo, Post, Comment, Forum Thread Post, or Forum Thread that a Registered User has flagged

- i. Flagged Content appears on the Admin Control Panel, where the Admin can take further action, in deleting, banning, and/or messaging the offending Registered User(s)

31. Admin Control Panel - The Admin Control Panel is a view available to the Admin that shows Flagged Content and Users Pending Approval.

- a. Users Pending Approval: Any Registered Shelter or Registered Business wishing to create an Account for their shelter or business who have not yet been approved

32. Deleted Content - Deleted Content is any content that has been deleted by an Admin, or created by a Registered User who has deleted their account.

- a. Deleted Post: Deleted Posts and their Comments are not visible to General Users
- b. Deleted Comment: Deleted Comments on any Post are not visible to General Users

33. Banned Content - Banned Content is any content that was previously created by a now-banned Registered User.

- a. Banned Post: Banned Posts and their Comments are not visible to General Users
- b. Banned Photos: Banned Photos and their Comments are not visible to General Users
- c. Banned Forum Threads: Forum Threads made by banned users will be visible, but any forum Posts within the thread made by the banned user will not be

34. Search - The action of searching through website entities that is taken by General Users.

- a. Standard Search: A standard search allows General Users to search Registered Pet Owners, Registered Businesses, and Registered Pet Shelters, Parks and Pets (Forums, Forum Threads and Posts) in a traditional text-based fashion with filtering and sorting options
- b. Location-Based Search: The Location-Based Search is a search wherein a General User inputs a location, either manually or with the browsers location tracking, to see all the entities (Registered Businesses, Registered Pet Shelters, and Pets at Registered Pet Shelters) near that location. They can then sort and filter the results based on their needs

35. Updated Review - An Updated Review is an entity submitted by Registered Pet Owners that amends or records a different experience to their original Review. It will be linked to the original Review, and requires a Rating to be submitted.

- a. Updated Review Summary: The summary of an updated review is the short form text summary of the full review written by a Registered Pet

Owner that is displayed to other General Users and is connected to the original Review

- b. Updated Review Body: The body of a review is long form text that is displayed to other General Users when the Updated Review is viewed

36. Chat - Chat is a functionality that allows Registered Users to send short informal Messages to each other in real time.

37. Block List - Block List shall belong to a Registered User and shall contain a list of Registered Users that the Registered User does not wish to receive Messages from, or see their activity.

38. Siblings - Siblings are the pets that share at least one parent with each other that are assigned by their owner(Registered Pet Owner or Registered Shelter).

39. Recent Activity - Recent Activity encapsulates the actions taken by a Registered User recently including Posting, Commenting, Liking, and Following.

- a. Recent Activity Links: Users can click on Recent Activity Links (can be Recent Post) to jump to the location where the activity was performed

40. Advertising Analytics - Advertising Analytics is the use of data and tools to help Business Owners to determine the marketing efforts.

41. Advertising Time Slots - An Advertising Time Slot is a period of time that the advertisement will be shown in our application.

42. Friends - Registered Users whose Friend Requests are accepted by a Registered User.

- a. Friend Request: A Request sent by a Registered User to another Registered User that is accepted or declined and decides whether a Registered User becomes a Registered User's Friend

Section II: Functional Requirements V3

Priority 1:

1. General User
 - 1.1. General Users shall be able to search for Registered Users (e.g. businesses, shelters, pet owners)
 - 1.2. General Users shall be able to search for Pets
 - 1.3. General Users shall be able to view the Pet Profiles of Registered Users
 - 1.4. General Users shall be able to use search filtering
 - 1.5. General Users can choose to share their location
 - 1.6. General Users shall be able to create an Account
2. Account:
 - 2.1. An Account shall be created by a General User of at least 13 years of age
3. Registered User:
 - 3.1. Registered Users shall inherit the functionality given to General Users
 - 3.2. Registered Users shall be able to log in to the website
 - 3.3. Registered Users shall be able to log out of the website
 - 3.4. Registered Users shall be able to create a Profile
 - 3.5. Registered Users shall be able to provide a Profile Picture
 - 3.6. Registered Users shall be able to change their Profile Picture
 - 3.7. Registered Users shall be able to write an About Me
 - 3.8. Registered Users shall be able to edit their About Me
 - 3.9. Registered Users shall be able to post Posts
 - 3.10. Registered Users shall be able to edit their Posts
 - 3.11. Registered Users shall be able to add Photos to their Profile
 - 3.12. Registered Users shall be able to post under their own Display Name
 - 3.13. Registered Users shall be able to follow other Registered Users
 - 3.14. Registered Users shall be able to be followed by other Registered Users
 - 3.15. Registered Users shall be able to view the profiles of Registered Users
 - 3.16. Registered Users shall be able to retract their likes.
 - 3.17. Registered Users can follow Registered Users
 - 3.18. Registered Users can unfollow Registered Users
 - 3.19. Registered Users can view the Registered Users who Follow Them
 - 3.20. Registered Users can search the Registered Users that Follows/Following them
 - 3.21. Registered Users shall be able to change the ownership of their Pets
 - 3.22. Registered Users shall be able to reset their password

- 3.23. Registered Users shall be able to stay logged in indefinitely until they manually log out (Remember Me)
4. Admin (Move to 2)
 - 4.1.
5. Registered Business
 - 5.1. Registered Businesses shall inherit the functionality given to Registered Users
 - 5.2. Business Addresses of Registered Businesses can be viewed by Registered Users
 - 5.3. Business Hours of Registered Businesses can be viewed by Registered Users
 - 5.4. Registered Businesses shall be able to upgrade to a Premium Business Account.
6. Registered Shelter
 - 6.1. Registered Shelters shall inherit the functionality given to Registered Users
 - 6.2. Registered Shelters shall be able to add Pets to their Account
 - 6.3. Registered Shelters shall be able to delete Pets from their Account
 - 6.4. Registered Shelters shall be able to edit the Profiles of their Pet(s)
 - 6.5. Business Addresses of Registered Shelters can be viewed by Registered Users
 - 6.6. Business Hours of Registered Shelters can be viewed by Registered Users
 - 6.7. Registered Shelters shall be able to change the ownership of their Pets
 - 6.8. Registered Shelters shall be able to change Pet's Availability for Adoption
7. Registered Pet Owner
 - 7.1. Registered Pet Owners shall inherit the functionality given to Registered Users
 - 7.2. Registered Pet Owners shall be able to add Pets to their Account
 - 7.3. Registered Pet Owners shall be able to delete Pets from their Account
 - 7.4. Registered Pet Owners shall be able to edit the Profiles of their Pet(s)
 - 7.5. Registered Pet Owners shall be able to change the ownership of their Pets
 - 7.6. Registered Pet Owners shall be able to change Pet's Availability for Adoption

8. Pet
 - 8.1. Pets shall allow General Users to filter pets by age
 - 8.2. Pets shall allow General Users to filter pets by size
 - 8.3. Pets shall allow General Users to filter pets by color
 - 8.4. Pets shall allow General Users to filter pets by breed
 - 8.5. Pets shall allow General Users to filter pets by type
9. Profile
 - 9.1. Profiles shall be able to display a Profile picture
 - 9.2. Profiles shall be able to display Photos posted by the Registered User it belongs to
 - 9.3. Profiles shall be able to display an About Me (biography)
 - 9.4. Profiles shall provide a way for the browsing Registered User to send a private Message to the profile's affiliated Registered User
 - 9.5. Profiles shall display follows.
 - 9.6. Profile shall display a Registered User's Online Status
10. Pet Profile
 - 10.1. Pet Profile shall inherit the functionality given to Profiles
 - 10.2. Pet Profile shall be able to provide a link to the Registered Pet Owner that owns the Pet that the Pet Profile belongs to
 - 10.3. Pet Profile shall be able to provide a link to the Registered Shelter that owns the Pet that the Pet Profile belongs to
 - 10.4. Pet Profile shall be able to display Pet's Availability for Adoption
 - 10.5. Pet Profile shall display a Pet's Owner's Online Status
 - 10.6. Pet Profile Picture shall be able to be changed by their Owner
 - 10.7. Pet Profile About Me shall be able to be changed by their Owner
11. Registered Pet Owner Profile
 - 11.1. Registered Pet Owner profiles shall inherit the functionality given to Profiles
 - 11.2. Registered Pet Owner Profiles shall provide links to Pet Profiles of pets owned by the Registered Pet Owner
12. Registered Business Profile
 - 12.1. Registered Business Profiles shall inherit the functionality given to Profiles
 - 12.2. Registered Business Profiles shall be able to provide Contact Details
 - 12.3. Registered Business Profiles shall be viewable by General Users

13. Registered Shelter Profile
 - 13.1. Registered Shelter Profiles shall inherit the functionality given to Profiles
 - 13.2. Registered Shelter Profiles shall be able to provide Contact Details
 - 13.3. Registered Shelter Profiles shall be viewable by General Users
 - 13.4. Registered Shelter Profiles shall provide links to Pet Profiles of pets housed by the Registered Shelter

14. Posts
 - 14.1. Posts shall display the Display Name of the Registered User who posted them
 - 14.2. Posts shall direct Registered Users to the Profile of Registered User who posted them
 - 14.3. Posts shall be able to be edited after they are posted by the Registered Users who created them
 - 14.4. Posts shall be able to be liked by Registered Users
 - 14.5. Posts shall be able to be commented on by Registered Users
 - 14.6. Posts shall allow General Users to view the time they were posted
 - 14.7. Posts shall allow General Users to view the date they were posted
 - 14.8. Posts shall be able to display the number of likes.
 - 14.9. Posts shall be able to be deleted by the Registered User who posted them
 - 14.10. Posts shall be able to include a Photo

15. Comments
 - 15.1. Comments shall display the Display Name of the Registered User who posted the comment
 - 15.2. Comments shall direct Registered Users to the Profile of Registered User who posted the comment
 - 15.3. Comments shall be able to be Liked.
 - 15.4. Comments shall be able to display the number of likes.
 - 15.5. Comments shall be able to be deleted by the user who posted them.
 - 15.6. Comments shall allow General Users to view the time they were posted.
 - 15.7. Comments shall allow General Users to view the date they were posted.

16. Messages
 - 16.1. Messages shall be sent from Registered User to Registered User
 - 16.2. Messages shall be viewable by the Registered User it was sent to
 - 16.3. Messages shall be viewable by the Registered User it was sent by
 - 16.4. Messages shall be able to be replied to
 - 16.5. Messages shall allow Registered Users to view the sent time

- 16.6. Messages shall allow Registered Users to view the Display Name of the Registered User who sent the Message
 - 16.7. Messages shall allow users to provide a Subject
 - 16.8. Messages shall allow users to provide a Body
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- 17. Follows
 - 17.1. Follows shall provide a way for Registered Users to access the Profile of the Registered Users who they are Following
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- 18. Followers
 - 18.1. Followers shall provide a way for Registered Users to access the Profile of the Registered Users who they are Following
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- 19. Feed
 - 19.1. Feed shall display the Recent Posts of the Registered Users that a Registered User is Following
 - 19.2. Feed shall allow Registered Users to post Posts
 - 19.3. Feed shall display the Recent Posts of Registered Business with a Premium Business Account.
-
- 20. Map Search
 - 20.1. Map Search shall display the location of Registered Businesses.
 - 20.2. Map Search shall display the location of Registered Shelter
 - 20.3. Map Search shall display the Pets located at Shelters
 - 20.4. Map Search shall allow General Users to search Pets
 - 20.5. Map Search shall allow General Users to search Registered Businesses
 - 20.6. Map Search shall allow General Users to search Registered Shelters
 - 20.7. Map Search shall allow General Users to filter results by Proximity
 - 20.8. Map Search shall allow General Users to filter Pet results by Breed
 - 20.9. Map Search shall allow General Users to filter Pet results by Type
 - 20.10. Map Search shall allow General Users to filter Pet results by Age
 - 20.11. Map Search shall allow General Users to filter Pet results by Color
 - 20.12. Map Search shall allow General Users to filter Pet results by Size
 - 20.13. Map Search shall allow General Users to sort Pet results by Age
 - 20.14. Map Search shall allow General Users to sort Pet results by Pet Account Age
 - 20.15. Map Search shall allow General Users to sort Registered Business results by Proximity

- 20.16. Map Search shall allow General Users to sort Registered Business results by Category (checkboxes of business categories)
 - 20.17. Map Search shall allow General Users to sort Registered Shelter results by Proximity
 - 20.18. Map Search shall allow General Users to sort Registered Shelter results by Types Of Pets
 - 20.19. Map Search shall allow General Users to search Pets by Name
 - 20.20. Map Search shall allow General Users to search Pets by Type
 - 20.21. Map Search shall allow General Users to search Pets by Breed
 - 20.22. Map Search shall allow General Users to search Pets by Color
 - 20.23. Map Search shall allow General Users to search Pets by Size
 - 20.24. Map Search shall allow General Users to search Pets by Age
 - 20.25. Map Search shall allow General Users to search Registered Businesses by Name
 - 20.26. Map Search shall allow General Users to search Registered Businesses by Address
 - 20.27. Map Search shall allow General Users to search Registered Businesses by Category
 - 20.28. Map Search shall allow General Users to search Registered Shelters by Name
 - 20.29. Map Search shall allow General Users to search Registered Shelters by Address
 - 20.30. Map Search shall allow General Users to search Registered Shelters by Available Types of Pets
21. Notification
 - 21.1. Notifications shall display when a Registered User receives a Message

Priority 2:

1. General Users
 - 1.1. General Users shall be able to send a Message to Registered Businesses
 - 1.2. General Users shall be able to send a Message to Registered Shelters
 - 1.3. Messages can be sent from General Users to Registered Shelters
 - 1.4. Messages can be sent from General Users to Registered Businesses
 - 1.5.
 - 1.6. General Users shall be able to receive correspondence from Registered Businesses at an email address provided by them
 - 1.7. General Users shall be able to receive correspondence from Registered Shelter at an email address provided by them

- 1.8. General Users can filter for adoptable pets (owned by Shelters)
 - 1.9. General Users shall be able to search followers
 - 1.10. General Users shall be able to filter followers
 - 1.11. General Users shall be able to sort followers
 - 1.12. General Users shall be able to search reviews
 - 1.13. General Users shall be able to filter reviews
 - 1.14. General Users shall be able to sort reviews
 - 1.15. General Users shall be able to search messages
 - 1.16. General Users shall be able to filter messages
 - 1.17. General Users shall be able to sort messages
3. Registered Users
 - 3.1. Registered Users shall be able to Flag Posts
 - 3.2. Registered Users shall be able to Flag Comments
 - 3.3. Registered Users shall be able to Flag Messages
 - 3.4. Registered Users shall be able to attach images to messages
 4. Admin
 - 4.1. Admin shall be able to Delete Photos posted by Registered Users
 - 4.2. Admin shall be able to browse Registered User Profiles
 - 4.3. Admin shall be able to Delete Posts
 - 4.4. Admin shall be able to Delete Comments from Posts
 - 4.5. Admin shall be able to ban Accounts
 - 4.6. Admin shall be able to remove Accounts
 - 4.7. Admin shall be able to reactivate Accounts
 - 4.8. Admin shall be able to Message Registered Users
 - 4.9. Admin shall be able to approve Registered Businesses for use of the site
 - 4.10. Admin shall be able to approve Registered Shelters for use of the site
 7. Registered Pet Owner
 - 7.1. Registered Pet Owners shall be able to leave Reviews to Registered Business
 - 7.2. Registered Pet Owners shall be able to leave Reviews to Registered Shelter.
 - 7.3. Registered Pet Owners shall be able to leave Ratings to Registered Business.
 - 7.4. Registered Pet Owners shall be able to leave Ratings to Registered Shelter.
 - 7.5. Registered Pet Owners shall be able to leave Reviews to Parks.
 - 7.6. Registered Pet Owners shall be able to leave Ratings to Parks.

8. Pets
 - 8.1. Pets shall be able to be marked as missing Pets by their owners
9. Profile
 - 9.1. Profiles shall display recent Posts
10. Pet Profile
 - 10.1. Pet Profiles shall be able to display Siblings
 - 10.2. Pet Profiles shall display if the Pet is missing
12. Registered Business Profile
 - 12.1. Registered Business Profiles shall provide a way for Registered Pet Owners to view Registered Business Reviews
 - 12.2. Registered Business Profiles shall provide a way for Registered Pet Owners to view Registered Business Ratings
 - 12.3. Registered Business Profiles shall provide a way for Registered Pet Owners to view a Registered Business's Average Rating
 - 12.4. Registered Business Profiles shall provide a way for Registered Pet Owners to leave Ratings
13. Registered Shelter Profile
 - 13.1. Registered Shelter Profiles shall provide a way for Registered Pet Owners to view Reviews
 - 13.2. Registered Shelter Profiles shall provide a way for Registered Pet Owners to view Ratings
 - 13.3. Registered Shelter Profiles shall provide a way for Registered Pet Owners to view Registered Business Reviews
 - 13.4. Registered Shelter Profiles shall provide a way for Registered Pet Owners to view their Ratings
 - 13.5. Registered Shelter Profiles shall provide a way for Registered Pet Owners
15. Comments
 - 15.1. Comments shall be able to be edited by the user who posted them
16. Messages
 - 16.1. Messages shall be deletable by the Registered User who receives them
 - 16.2. Messages shall be deletable by the Registered User who sends them
 - 16.3. Message Thread shall be deletable

20. Map Search
 - 20.1. Map Search shall display the location of Parks
 - 20.2. Map Search shall allow General Users to sort Registered Business results by Average Rating
 - 20.3. Map Search shall allow General Users to sort Registered Shelter results by Average Rating
21. Notification
 - 21.1. Notifications shall display when a Registered User's Post is Liked
 - 21.2. Notifications shall display when a Registered User's Comment is Liked
 - 21.3. Notifications shall display when a Registered User gains a Follower
 - 21.4. Notifications shall display when a Registered User's Post is Commented on
22. Park
 - 22.1. Parks shall be able to be created by Registered Users
 - 22.2. Parks shall be able to be edited by Registered User(s)
 - 22.3. Parks shall be searchable by General Users
 - 22.4. Parks shall display an Average Rating
23. Park Profile
 - 23.1. Park Profiles shall provide a way for Registered Pet Owners to view Reviews
 - 23.2. Park Profiles shall provide a way for Registered Pet Owners to view Ratings
 - 23.3. Park Profiles shall display Photos uploaded by Registered Users
 - 23.4. Park Profiles shall display an Address uploaded by a Registered User
 - 23.5. Park Profiles shall display Hours uploaded by a Registered User
 - 23.6. Park Profiles shall display an About section edited by a Registered User
 - 23.7. Park Profiles shall be viewable by General Users
24. Reviews
 - 24.1. Reviews shall be editable by the Registered Pet Owners who posted them.
 - 24.2. 25.2 Reviews shall be provided with a Summary.
 - 24.3. 25.3 Reviews shall be provided with a Body.
 - 24.4. Reviews shall be able to be viewed by General Users
 - 24.5. Reviews shall display a creation date
 - 24.6. Review shall display the last edited date
 - 24.7. Reviews shall display their Author

- 24.8. Reviews shall provide a link to their Author's Profile
25. Ratings
 - 25.1. Ratings shall be able to be edited by the Registered User who gave the Rating

Priority 3:

3. Registered Users
 - 3.1. Registered Users shall be able to Flag Forum Threads
 - 3.2. Registered Users shall be able to Flag Forum Posts
 - 3.3. Registered Users shall be able to hide Posts on their Feed
 - 3.4. Registered Users shall be able to hide Comments on their Posts
 - 3.5. Registered Users shall be able to retract their flags
 - 3.6. Registered Users shall be able to add Registered Users to their Block List
 - 3.7. Registered Users shall be able to remove Registered Users from their Block List.
 - 3.8. Registered Users shall be able to apply formatting to their posts in forum threads
 - 3.9. Registered Users shall be able to view when a user was last online
 - 3.10. Registered Users shall be able to upload multiple photos at once
6. Registered Shelter
 - 6.1. Registered Shelters can choose a Pet's Siblings
 - 6.2. Registered Shelters shall be able to Post under the name of their Pets.
 - 6.3. A Registered Shelter can transfer ownership of their Pets to Registered Pet Owners
7. Registered Pet Owners
 - 7.1. Registered Pet Owners can manually enter the Type of their Pet
 - 7.2. Registered Pet Owners can manually enter the Breed of their Pets
 - 7.3. Registered Pet Owners can choose a Pet's Siblings
 - 7.4. Registered Pet Owners shall be able to Post under the name of their Pets
 - 7.5. Registered Pet Owners shall be able to send a Friend Request to other Registered Pet Owners
 - 7.6. Registered Pet Owners shall be able to accept Friend Requests
 - 7.7. Registered Pet Owners shall be able to decline Friend Requests
 - 7.8. Registered Pet Owners shall be able to share their Location with Friends
 - 7.9. Registered Pet Owner Profiles shall be able to indicate Pet Sitting availability

9. Profiles
 - 9.1. Profiles shall display the Recent Activity of a Registered User's Followers
10. Pet Profiles
 - 10.1. Pet Profiles shall be able to display the Registered Shelter they were adopted from
14. Posts
 - 14.1. Posts shall be able to be saved by Registered Users
 - 14.2. Posts can display multiple photos.
 - 14.3. Posts that are liked shall be able to be viewed by the Registered Users who liked them.
 - 14.4. Posts shall be able to be shared by Registered Users
15. Comments
 - 15.1. Comments shall be able to be replied to
16. Messages
 - 16.1. Messages shall allow the General User to read the display name of the Registered Business who sent them the Message
 - 16.2. Messages shall allow the General User to read the display name of the Registered Shelter who sent them the Message
18. Followers
 - 18.1. Followers shall allow Registered Users to search through their Followers
19. Feed
 - 19.1. Feed shall display the most liked Posts of the current day Registered Users
20. Map Search
 - 20.1. Map Search shall display the location of Pets
21. Notifications
 - 21.1. Notifications shall display when a Registered User's Forum Post is Liked
22. Likes
 - 22.1. Likes shall be able to be given to Forum Threads by Registered Users
 - 22.2. Likes shall be able to be given to a Forum Post by Registered Users

23. Reviews

23.1. Reviews can be updated by the Registered Pet Owner who Posted Them.

24. Chat

- 24.1. Chats can be sent from Registered User to Registered User
- 24.2. Chat shall be viewable by the Registered User it was sent to
- 24.3. Chat shall be viewable by the Registered User it was sent by
- 24.4. Chat shall be able to be replied to
- 24.5. Chat shall allow Registered Users to view the sent time
- 24.6. Chat shall allow Registered Users to view the Display Name of the Registered User who sent the text
- 24.7. Chat shall be deletable by the Registered User who receives them
- 24.8. Chat shall be deletable by the Registered User who sends them

25. Forums

- 25.1. Forums shall allow General Users to search through them.
- 25.2. Forums shall be viewable by General Users.
- 25.3. Forums shall be searchable by General Users.
- 25.4. Forums shall be filterable by General Users.

26. Premium Business Account

- 26.1. A Registered Business with a Premium Business Account shall be able to track Advertising Analytics
- 26.2. A Registered Business with a Premium Business Account shall be able to choose Advertising Time Slots.

27. Photos

- 27.1. Photos shall allow General Users to download them.

28. Forum Post

- 28.1. Forum Post shall be able to be liked by Registered Users.

29. Forum Thread

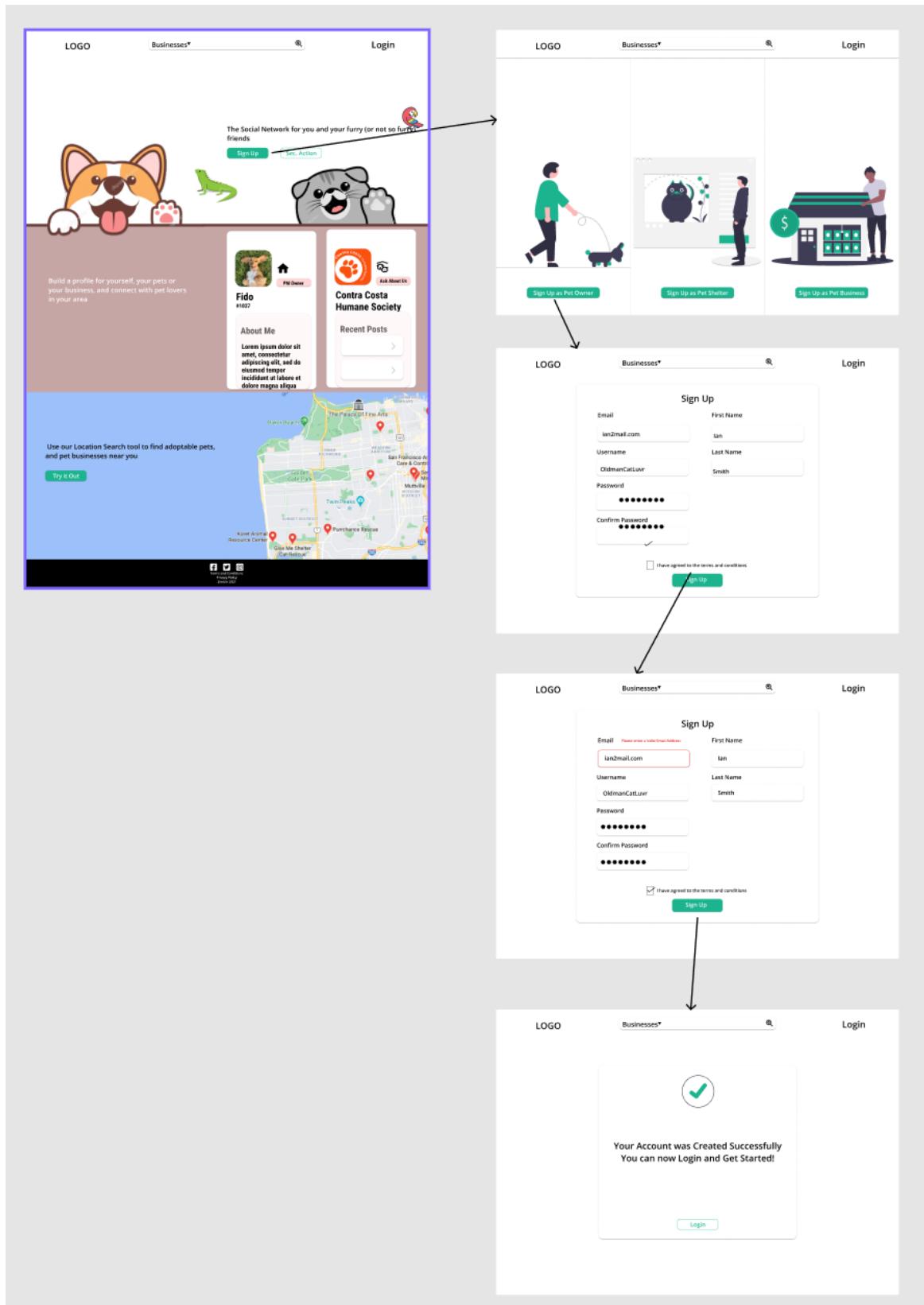
- 29.1. Forum Threads shall be able to be replied to
- 29.2. Forum Thread Posts shall Display the Name associated with the post.

30. Posts Near You

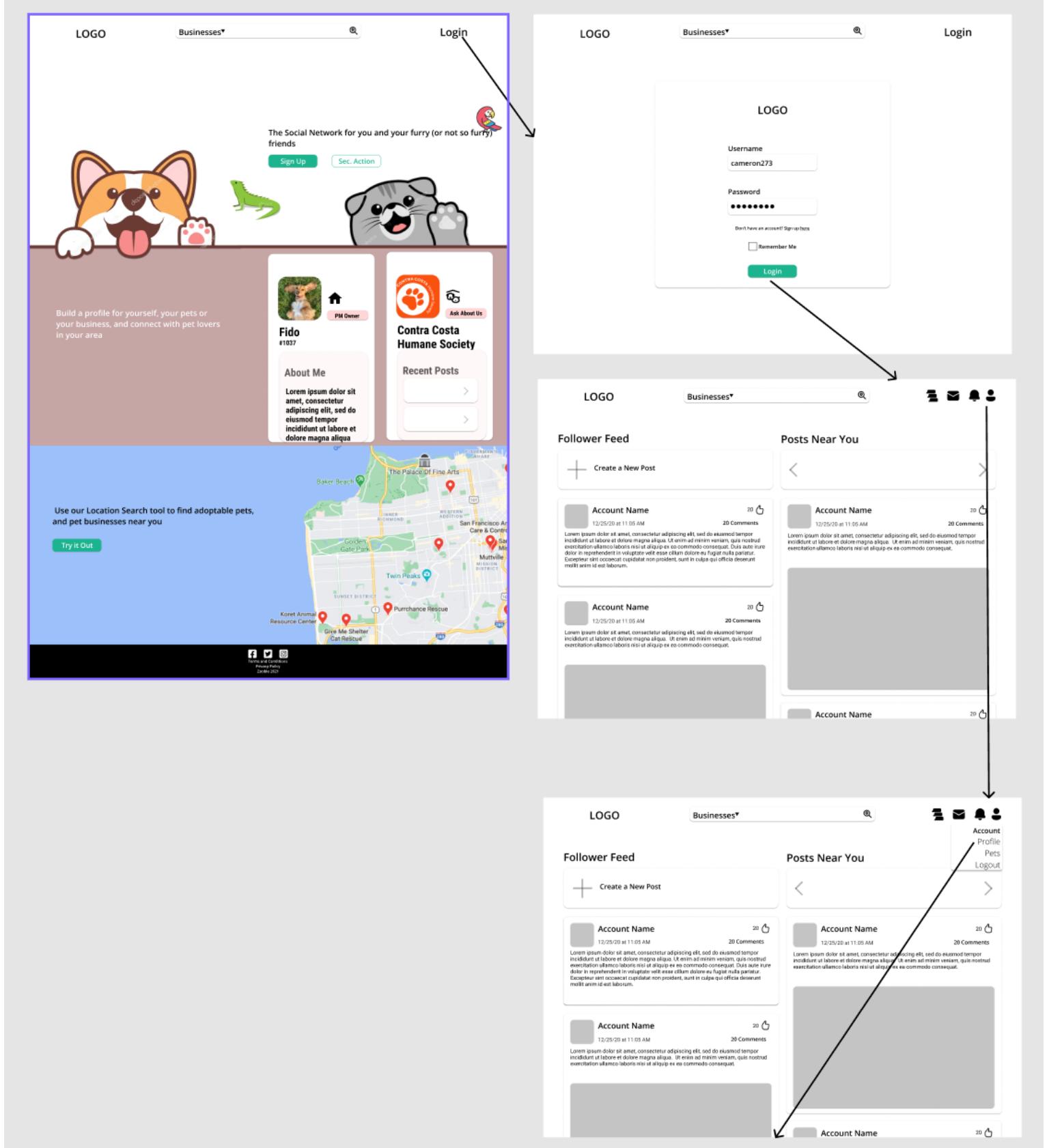
- 30.1. Posts Near You shall display the Recent Posts near the General User's location.

Section III: Wireframes

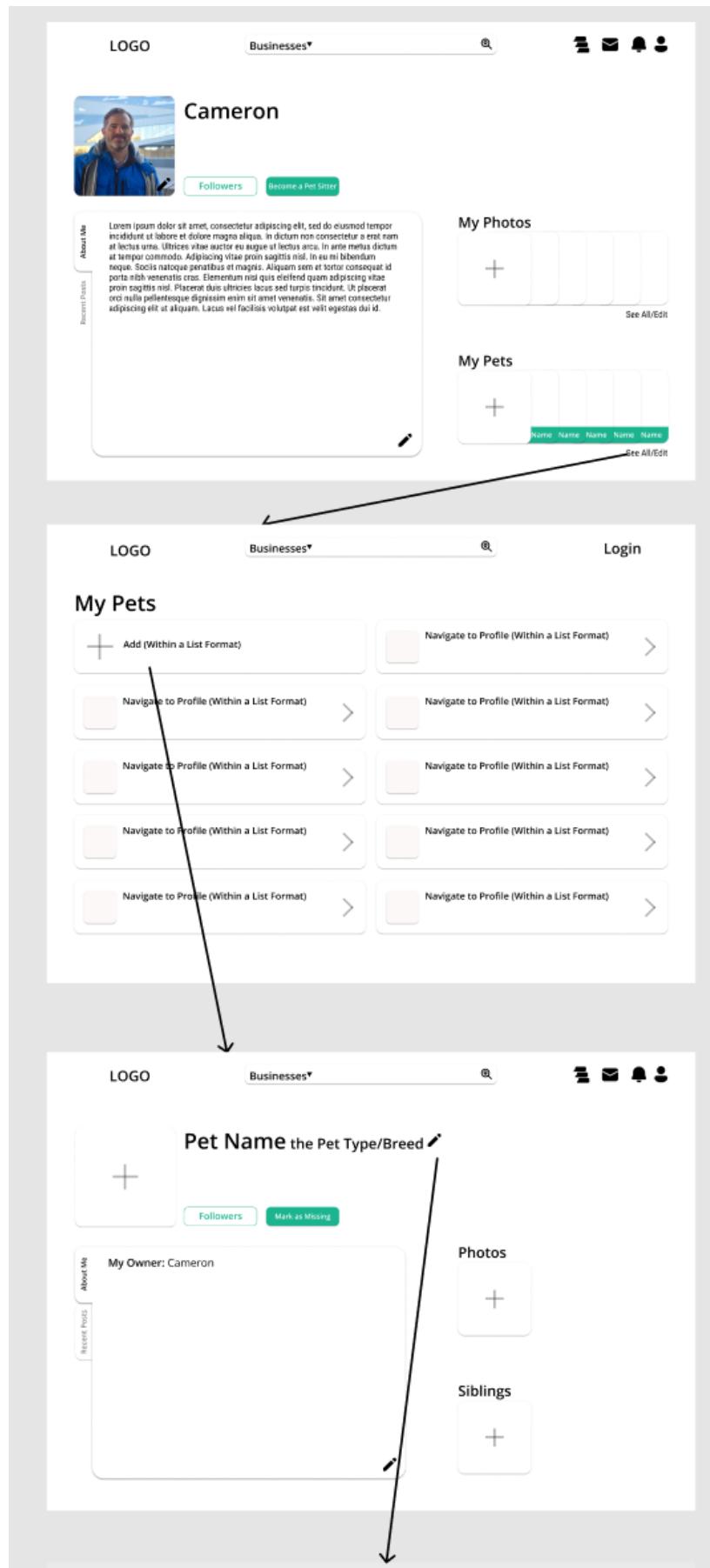
Use Case 1



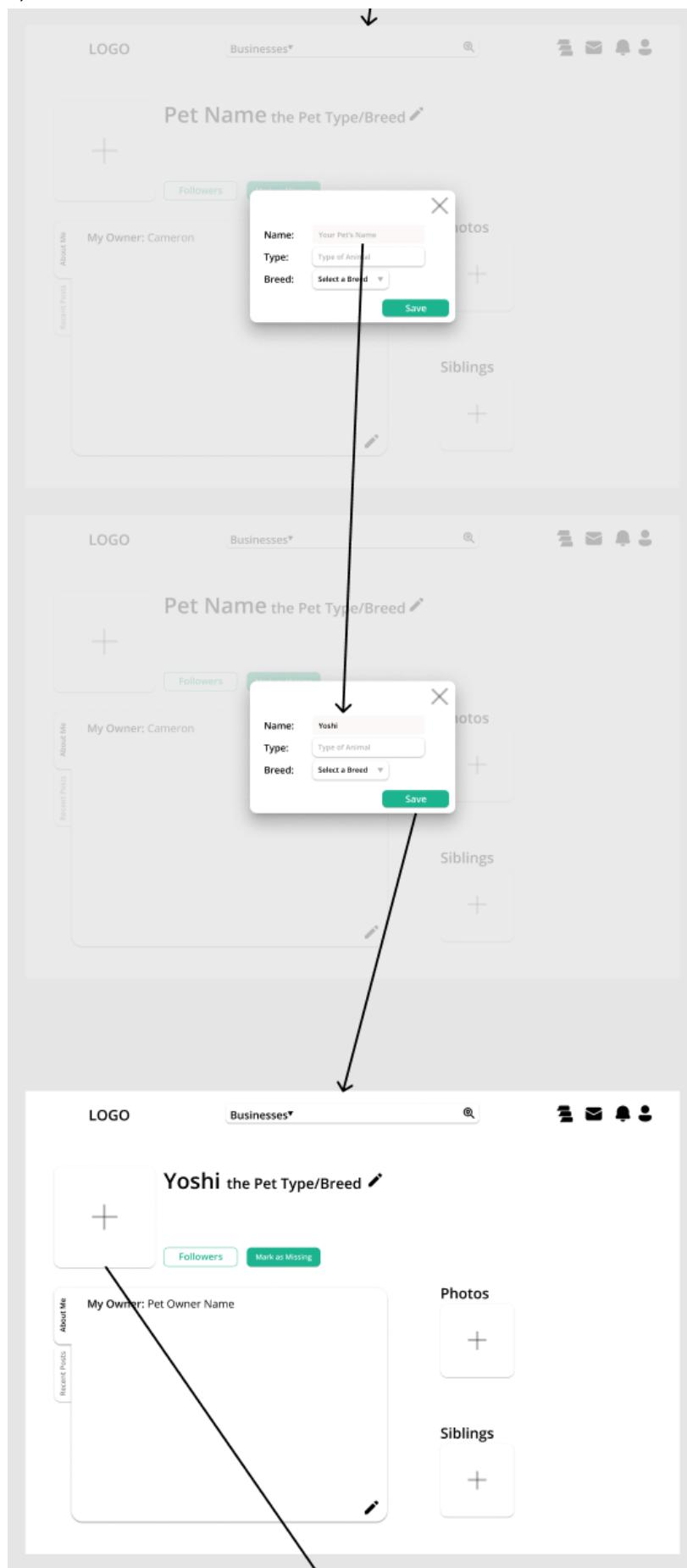
Use Case 2 (1 of 9)



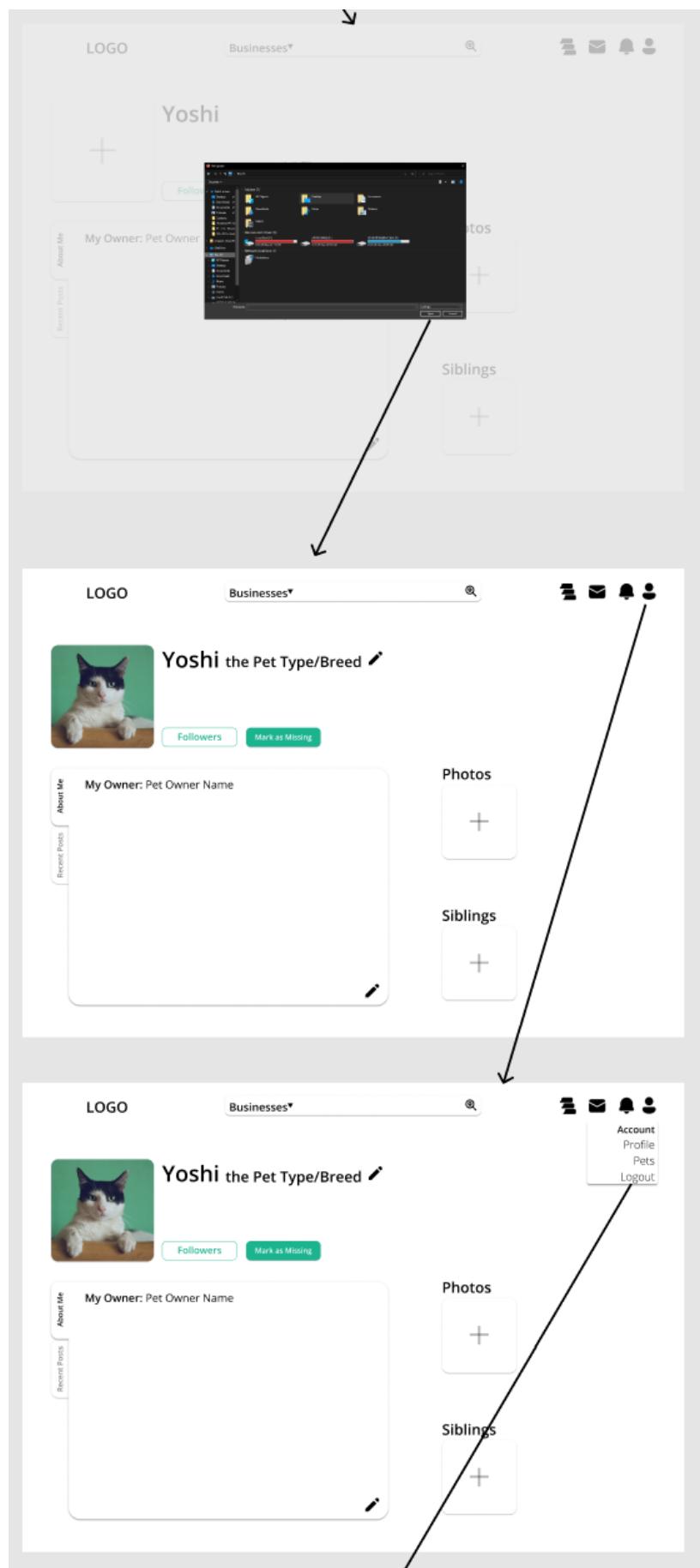
Use Case 2 (2 of 9)



Use Case 2 (3 of 9)



Use Case 2 (4 of 9)



Use Case 2 (5 of 9)

The Social Network for you and your furry (or not so fury) friends

[Sign Up](#) [Sec. Action](#)

Build a profile for yourself, your pets or your business, and connect with pet lovers in your area

Fido #1037

About Me

Lore ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Contra Costa Humane Society

Recent Posts

Try it Out

Baker Beach, The Palace Of Fine Arts, WESTERN Addition, San Francisco Animal Care & Control, San Mateo, MISSION DISTRICT, Twin Peaks, Hunchance Rescue, Koret Animal Resource Center, Give Me Shelter Cat Rescue

LOGO Businesses Login

Create a New Post

Follower Feed

Posts Near You

Account Name 12/25/20 at 11:05 AM 20 Comments

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Account Name 12/25/20 at 11:05 AM 20 Comments

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28

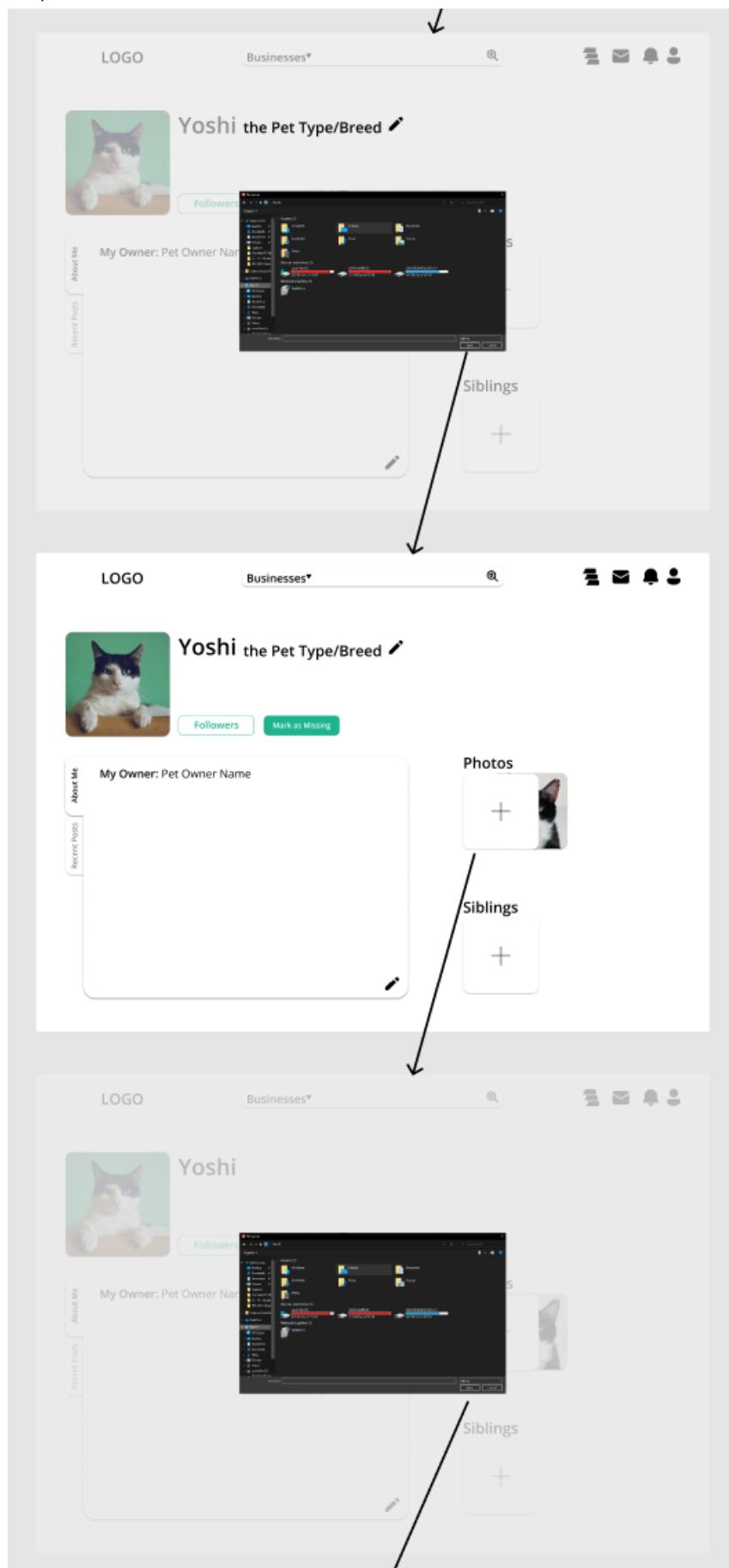
Use Case 2 (6 of 9)

The diagram illustrates a user flow through three wireframe screens:

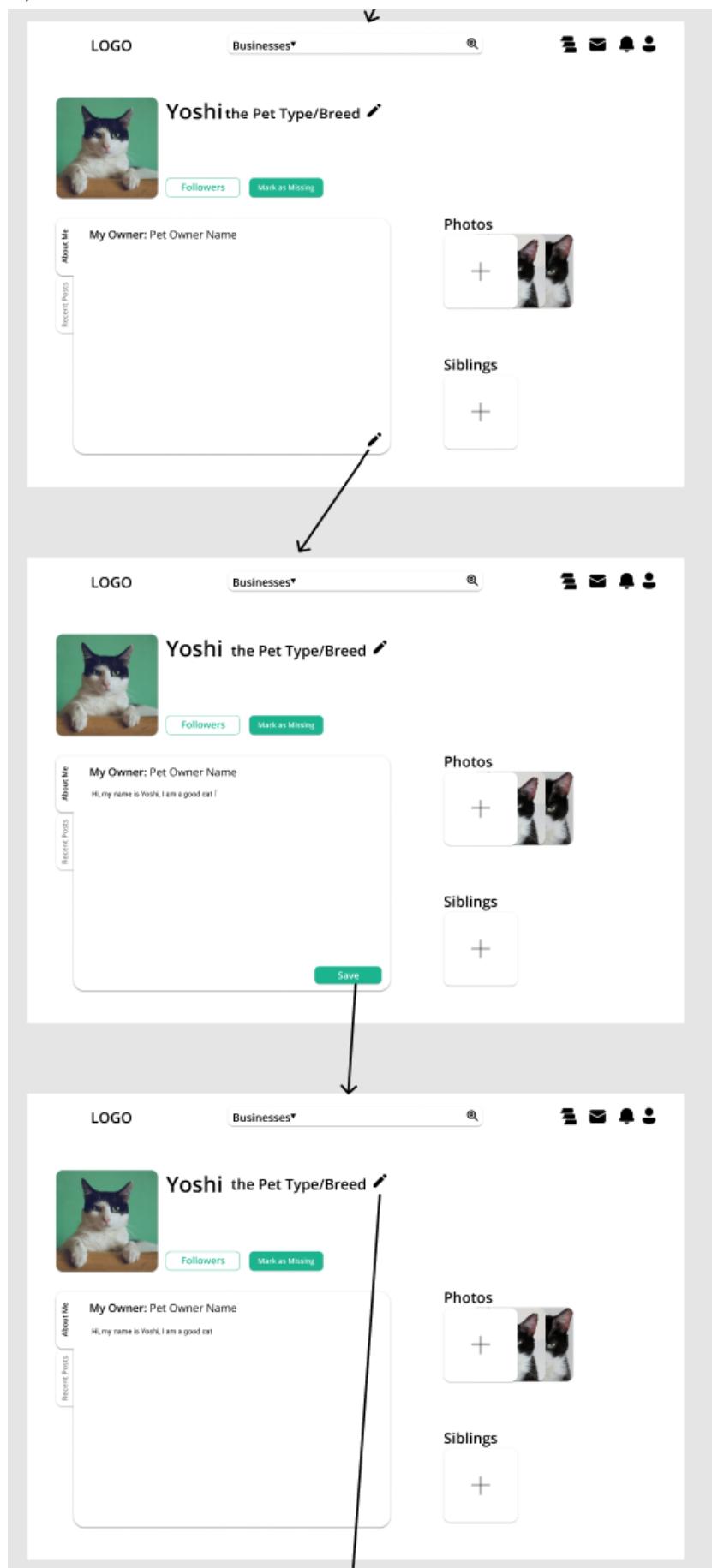
- Top Screen: Follower Feed**
 - Header: LOGO, Businesses, Search icon.
 - Left Column: "Follower Feed" section with a "Create a New Post" button.
 - Right Column: "Posts Near You" section showing three post cards. Each card includes an account name, timestamp (12/25/20 at 11:05 AM), a comment count (20 Comments), and a like button.
 - Top right corner: Account Profile, Pets, Logout buttons.
- Middle Screen: My Pets**
 - Header: LOGO, Businesses, Search icon, Login button.
 - Section: "My Pets" with a "Add (Within a List Format)" button.
 - List: A grid of six items, each labeled "Navigate to Profile (Within a List Format)" followed by a right-pointing arrow.
- Bottom Screen: Yoshi's Pet Profile**
 - Header: LOGO, Businesses, Search icon.
 - Profile Picture: Yoshi (a black and white cat).
 - Section: "Followers" with a "the Pet Type/Breed" button.
 - Content Area: "My Owner: Pet Owner Name".
 - Right Side: "Photos" (with a plus sign) and "Siblings" (with a plus sign).
 - Left Side: "About Me" and "Recent Posts" sections.

Arrows indicate the flow from the top screen down to the middle screen, and from the middle screen down to the bottom screen.

Use Case 2 (7 of 9)



Use Case 2 (8 of 9)



Use Case 2 (9 of 9)

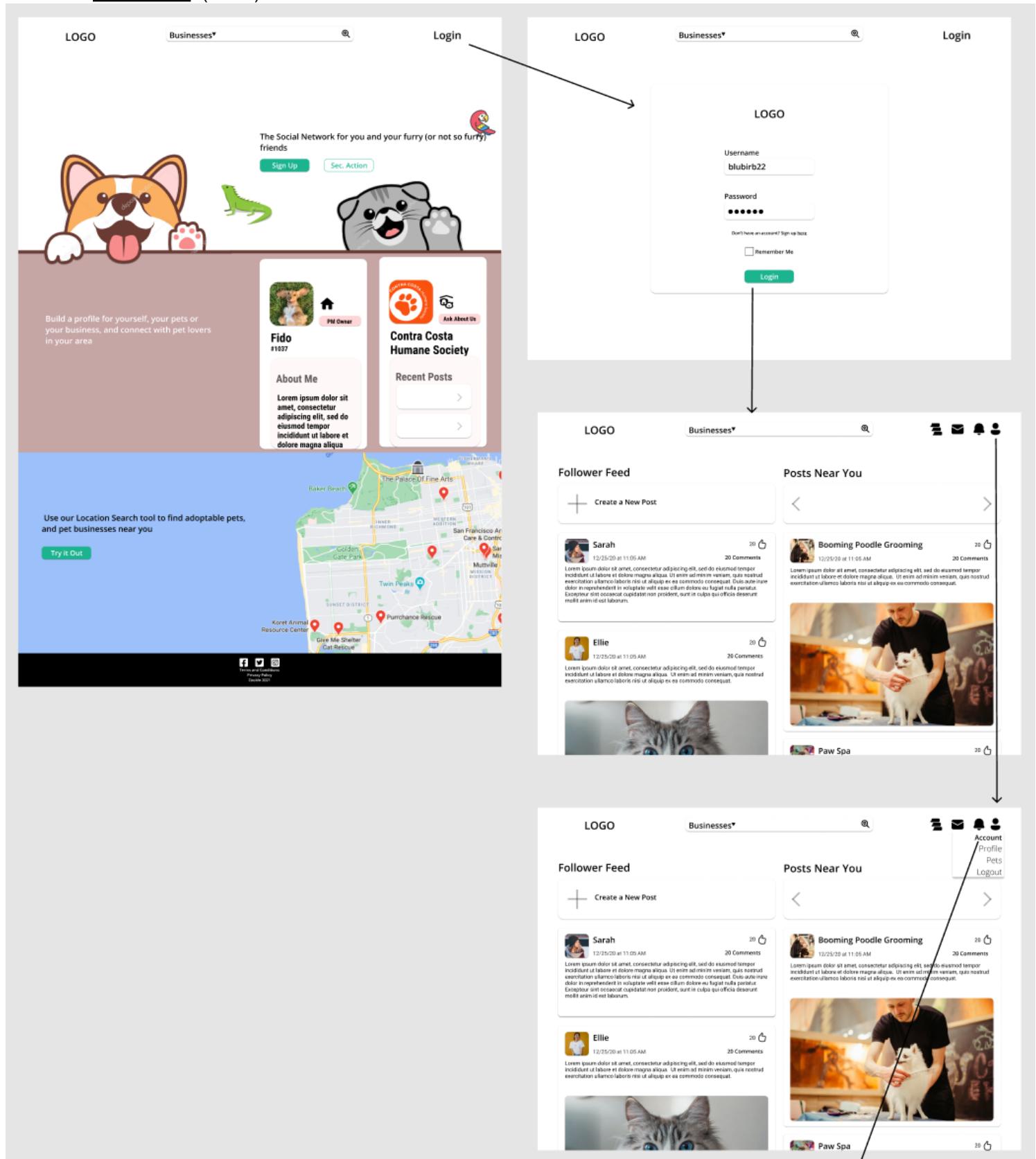
The image consists of two vertically stacked screenshots of a mobile application interface. Both screenshots show a pet profile for a cat named "Yoshi".

Screenshot 1 (Top): This screenshot shows a modal dialog box overlaid on the main profile screen. The modal contains fields for "Name" (set to "Yoshi"), "Type" (set to "Type of Animal"), and "Breed" (set to "Select a Breed"). A green "Save" button is at the bottom right of the modal. The background of the app shows a profile picture of a cat, the name "Yoshi", a "Followers" button, and tabs for "Recent Posts" and "About Me".

Screenshot 2 (Bottom): This screenshot shows the same modal dialog box, but the "Breed" field is now populated with "Siamese". The "Save" button remains at the bottom right. The background shows the same profile picture, name, and tabs as the first screenshot.

A large black arrow points from the "Breed" field in the top screenshot down to the "Breed" field in the bottom screenshot, indicating the progression of the user action.

Use Case 3 (1 of 3)



Use Case 3 (2 of 3)

The diagram illustrates the flow of navigation between three user profiles: Alex B., Joey, and Sarah.

Profile Page - Alex B.

This page shows the profile of user Alex B. It includes a placeholder for a logo, a search bar, and a header with icons for messages, notifications, and account management. Below the header is a profile picture of Alex B. with the name "Alex B." next to it. A green button labeled "Followers" and a blue button labeled "Send a Message" are visible. A text bio placeholder is present, along with sections for "Recent Posts" and "About Me". To the right, there are sections for "My Photos" (with a grid of five thumbnail images) and "My Pets" (with a grid of three thumbnail images for pets named Momo, Eric, and Belinda). A "See All/Edit" link is provided for each section.

Account: My Followers

This screen displays a list of users followed by Alex B. It features a header with a logo, a search bar, and a dropdown menu set to "Pets". Below the header is a table-like structure with two columns. The left column contains profile pictures and names: Joey, Violet, Navigate to Profile (Within a List Format), Navigate to Profile (Within a List Format), and Navigate to Profile (Within a List Format). The right column contains profile pictures and names: Sarah, Eric, Belinda, Justin, and Kayla. Each row has a right-pointing arrow icon at the end.

Profile Page - Joey

This page shows the profile of user Joey. It has a similar layout to the first profile page, with a placeholder for a logo, a search bar, and a header with icons. Below the header is a profile picture of Joey with the name "Joey" next to it. A green button labeled "Following" and a blue button labeled "Send a Message" are visible. A text bio placeholder is present, along with sections for "Recent Posts" and "About Me". To the right, there are sections for "My Photos" (with a grid of five thumbnail images) and "My Pets" (with a grid of three thumbnail images for pets named Felix, Eric, and Belinda). A "See All/Edit" link is provided for each section.

Use Case 3 (3 of 3)

Pet Owner Profile - Joey (Sending A Message)

Pet Owner Profile - Joey (Message Sent)

LOGO Businesses Businesses

About Me Recent Posts

Felix ena

Send a Message

To: Joey

Subject:

Lore ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Send

Felix ena

See All/Edit

Message Successfully Sent!

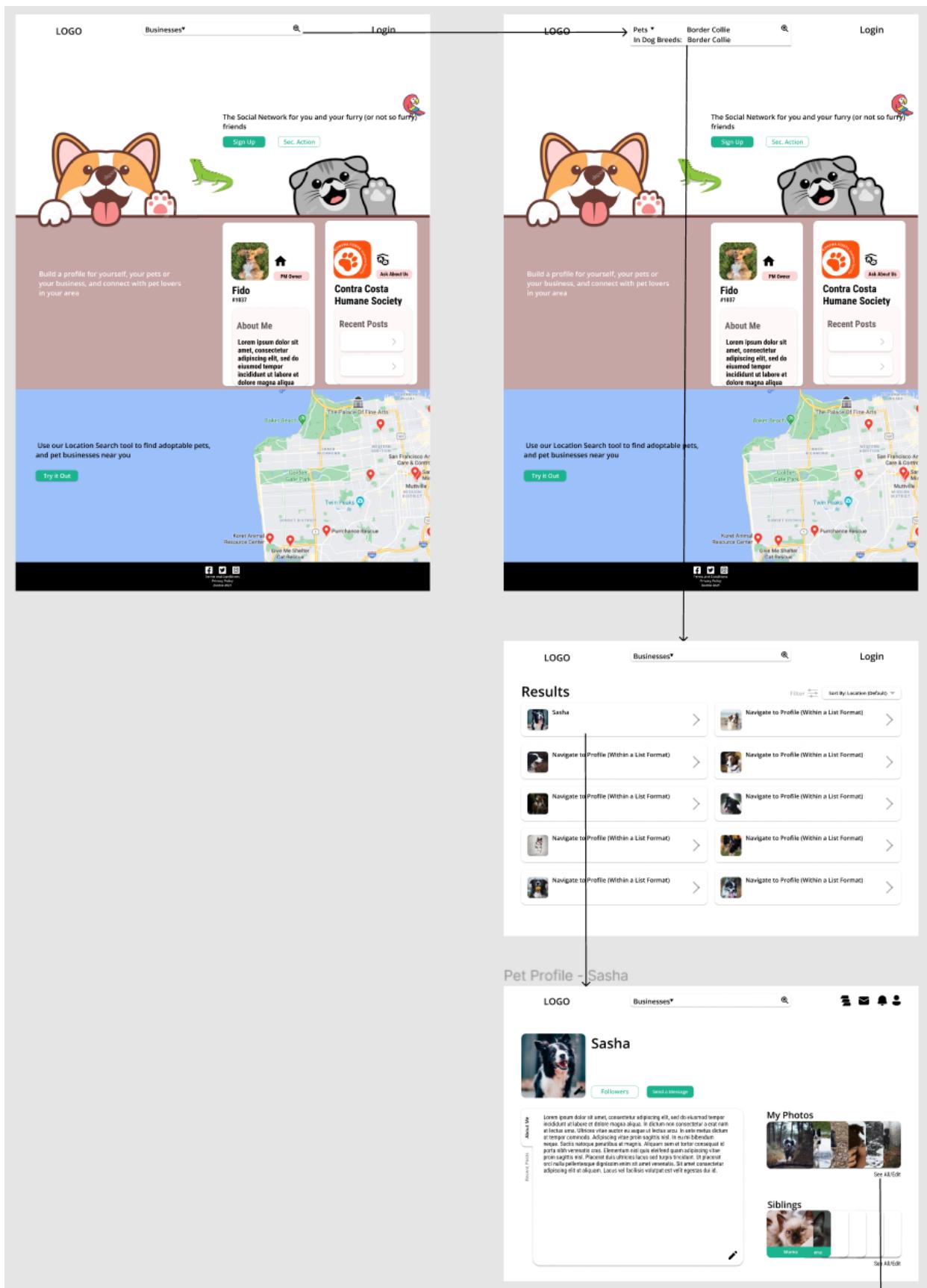
OK

My Pets

Felix ena

See All/Edit

Use Case 4 (1 of 3)



Use Case 4 (2 of 3)

Pet Profile: Photo Library

LOGO Breeds ▾ Border Collie Login

Sasha's Photos

Pet Profile: View Post

LOGO Breeds ▾ Border Collie Login

Sasha's Photos

Lily 3/19/21 at 5:29 PM 20 likes
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Madam FussyBritches 12/25/20 at 11:05 AM 20 likes
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Steve 12/25/20 at 11:05 AM 20 likes
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Write a Comment... Comment

Use Case 4 (3 of 3)

Home Page -> Business Search

The Social Network for you and your furry (or not so furry) friends

[Sign Up](#) [See Action](#)

Fido #1037

About Me

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Use our Location Search tool to find adoptable pets, and pet businesses near you

[Try it Out](#)

Baker Beach, The Palace Of Fine Arts, San Francisco Animal Care & Control, Muttville Mission District, Purchance Rescue, Twin Peaks, Golden Gate Park, Koret Animal Resource Center, Give Me Shelter Cat Rescue

[Follow](#) [Send a Message](#)

Booming Poodle Grooming

Address: 326 Oak St, Burgsdale CA
Phone Number: (435) 465-8544

Hours

Sun: Closed
Mon: 12:00 AM - 12:00 AM
Tue: 12:00 AM - 12:00 AM
Wed: 12:00 AM - 12:00 AM
Thu: 12:00 AM - 12:00 AM
Fri: 12:00 AM - 12:00 AM
Sat: Closed

Photos

See All

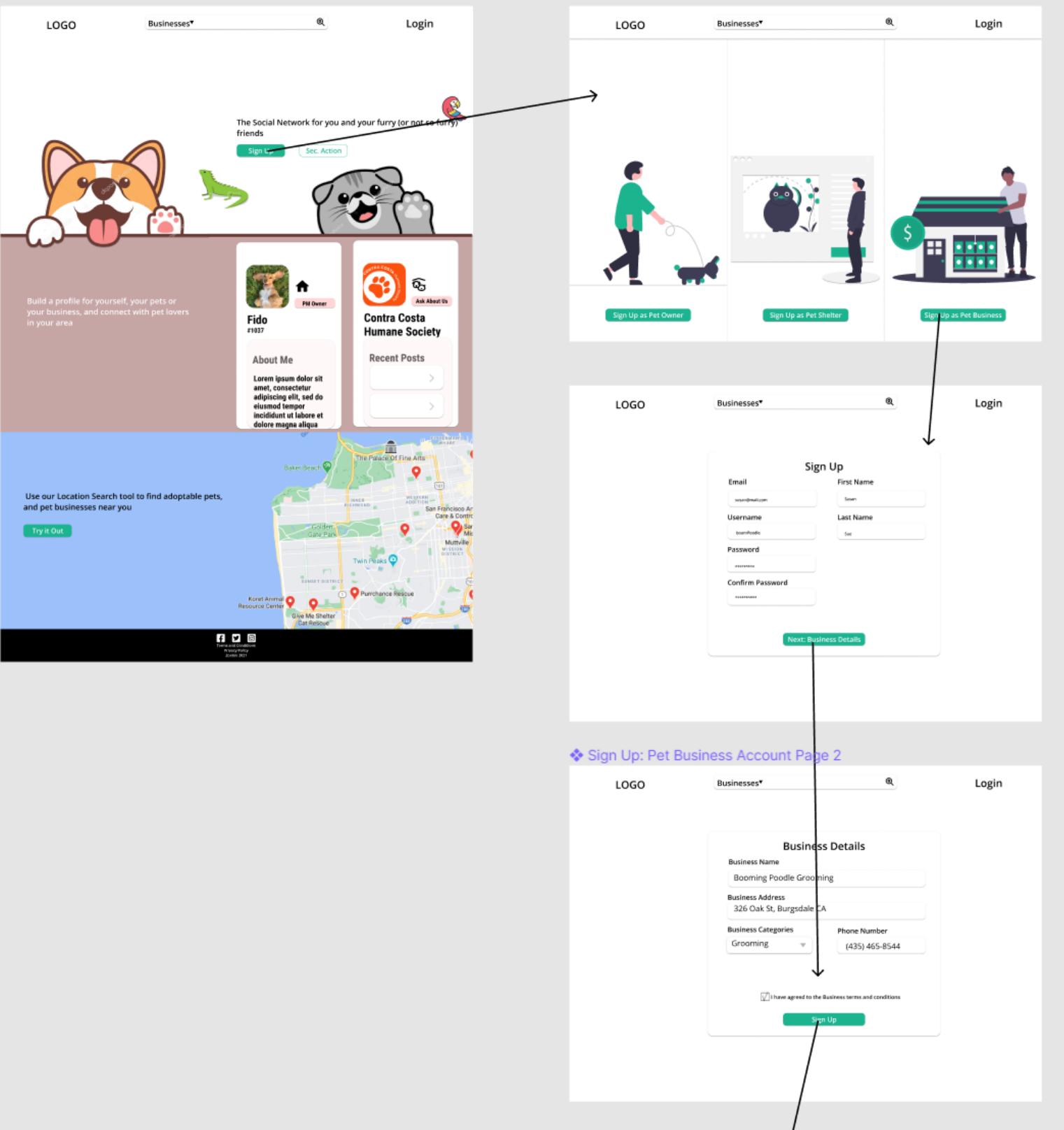
Reviews

Review Summary 1m1ary 1m1ary 1m1ary 1m1ary 1m1ary
Review Summary 1m1ary 1m1ary 1m1ary 1m1ary 1m1ary
Review Summary 1m1ary 1m1ary 1m1ary 1m1ary 1m1ary
Review Summary 1m1ary 1m1ary 1m1ary 1m1ary 1m1ary

★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★

[Write a Review](#) [See All](#)

Use Case 5 (1 of 3)



Use Case 5 (2 of 3)

The image consists of three vertically stacked screenshots from a mobile application interface.

Screenshot 1: Account Creation Confirmation

- Header:** LOGO, Businesses▼, Search icon, Login.
- Content:** A large central box contains a green checkmark icon. Below it, the text "Your Account was Created Successfully" and "You can now Login and Get Started!". At the bottom is a "Login" button.

Screenshot 2: Pet Business Profile: Self View

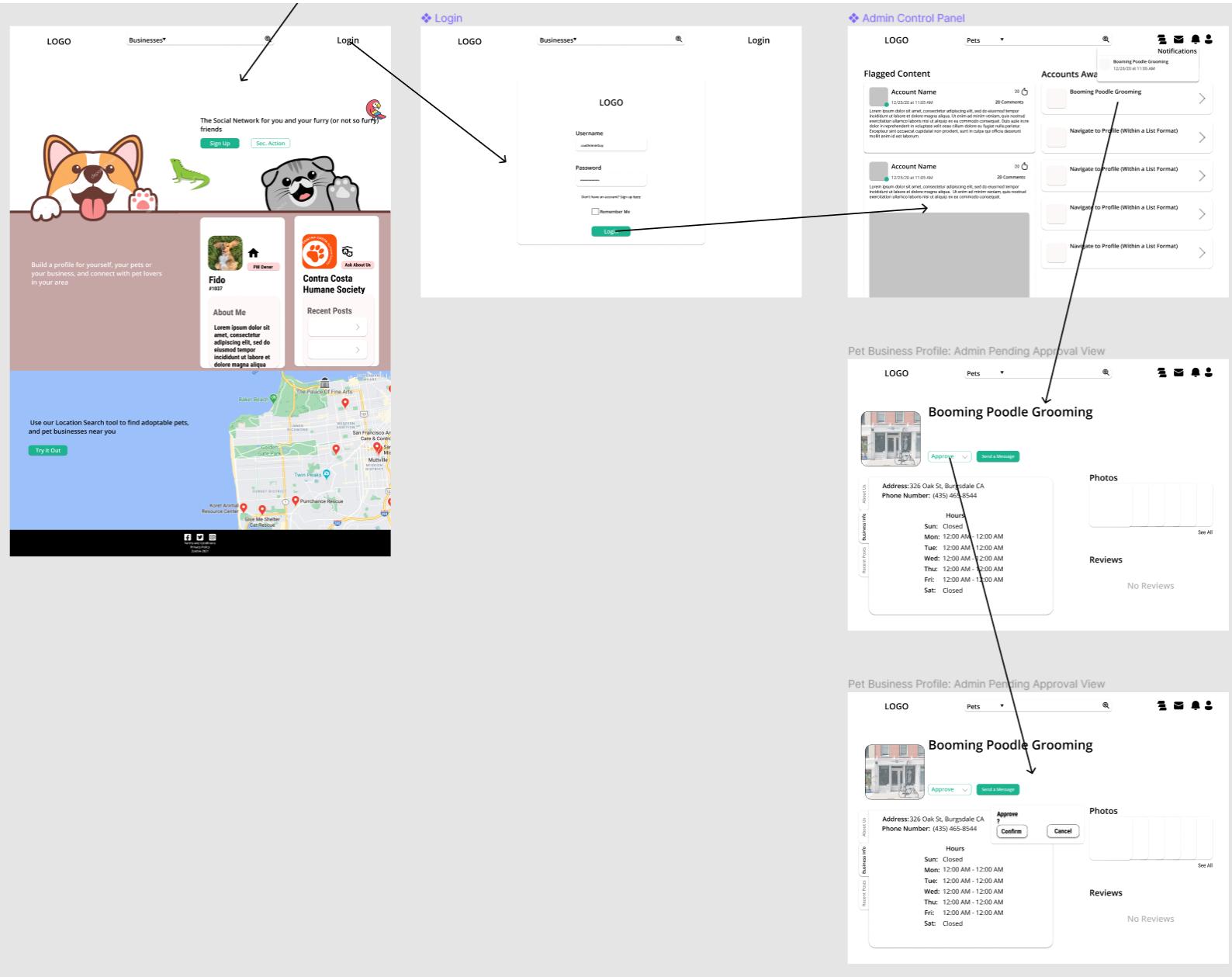
- Header:** LOGO, Businesses▼, Search icon, icons for messages, notifications, and users.
- Section 1:** "Pet Business Name" (placeholder text).
- Section 2:** Buttons for "Follow" (with dropdown) and "Send a Message".
- Section 3:** "Address: 326 Oak St, Burgsdale CA" and "Phone Number: (435) 465-8544".
- Section 4:** "Business Info" tab selected, showing "Recent Posts" and "About Us".
- Section 5:** "Hours" table:

	Hours
Sun:	Closed
Mon:	12:00 AM - 12:00 AM
Tue:	12:00 AM - 12:00 AM
Wed:	12:00 AM - 12:00 AM
Thu:	12:00 AM - 12:00 AM
Fri:	12:00 AM - 12:00 AM
Sat:	Closed
- Section 6:** "Photos" section with a plus sign to add photos and a "See All" link.
- Section 7:** "Reviews" section with "No Reviews".

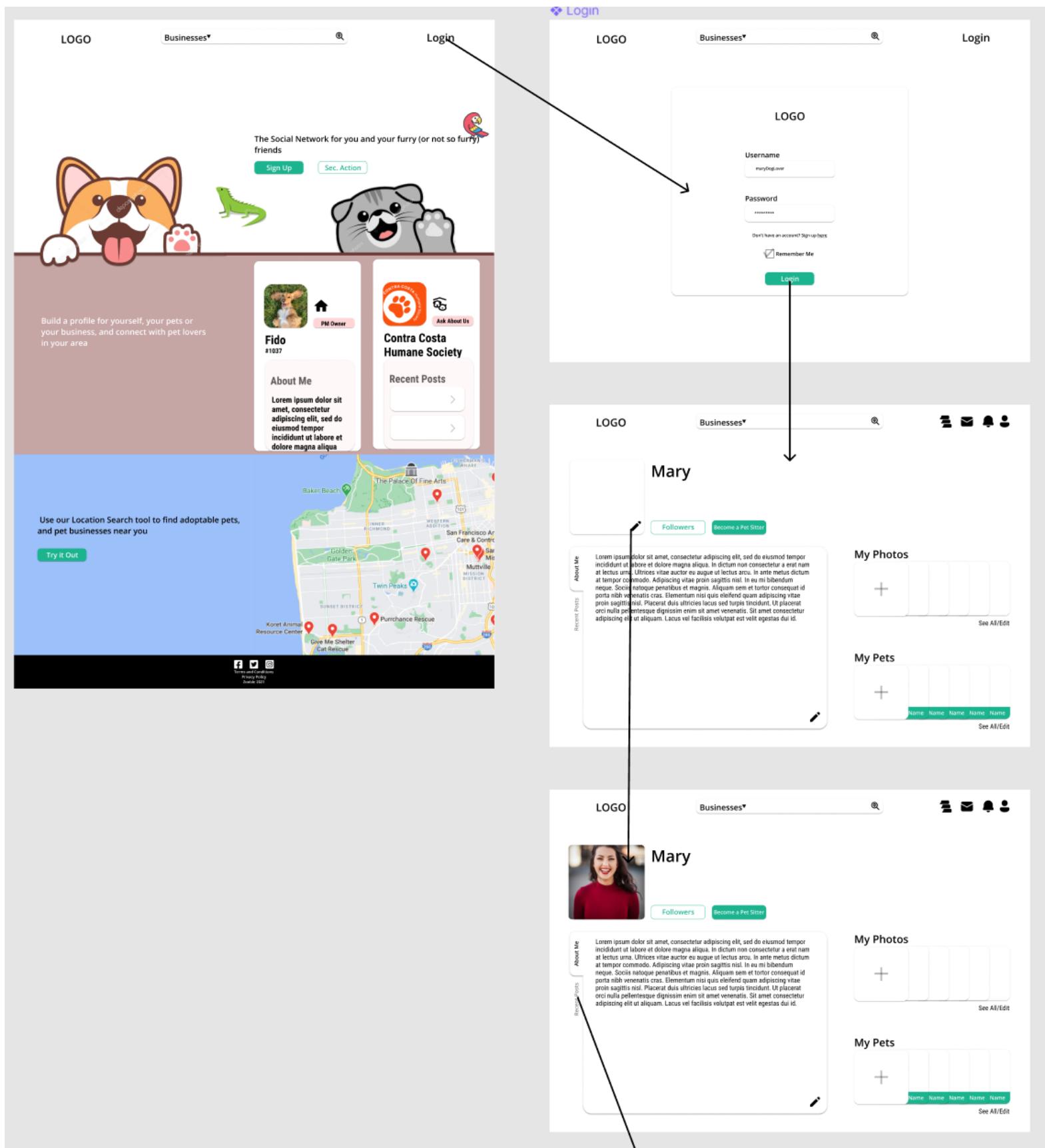
Screenshot 3: Business Profile View

- Header:** LOGO, Businesses▼, Search icon, icons for messages, notifications, and users.
- Section 1:** Profile picture of "Booming Poodle Grooming" and "Follow" (with dropdown) and "Send a Message" buttons.
- Section 2:** "Address: 326 Oak St, Burgsdale CA" and "Phone Number: (435) 465-8544".
- Section 3:** "Business Info" tab selected, showing "Recent Posts" and "About Us".
- Section 4:** "Hours" table (same as Screenshot 2).
- Section 5:** "Photos" section with a plus sign to add photos and a "See All" link.
- Section 6:** "Reviews" section with "No Reviews".

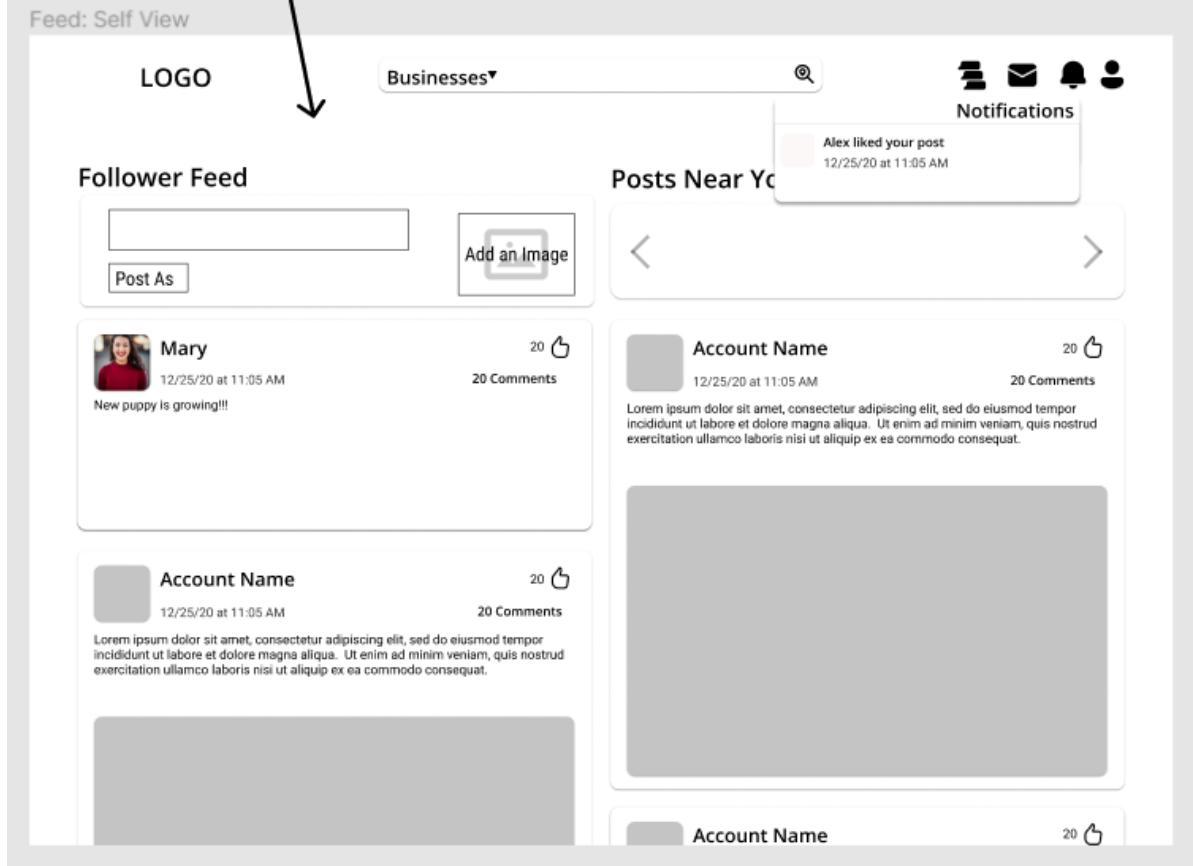
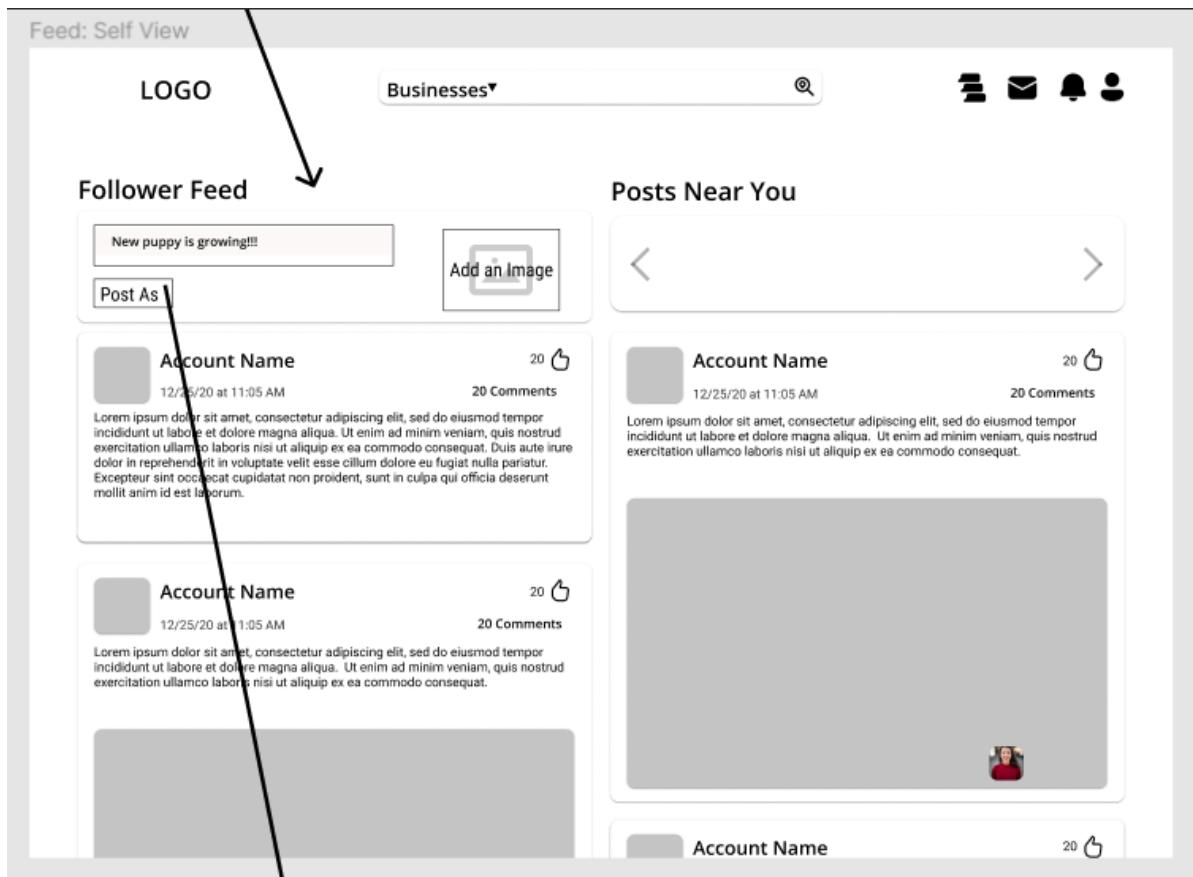
Use Case 5 (3 of 3)



Use Case 6 (1 of 2)



Use Case 6 (2 of 2)



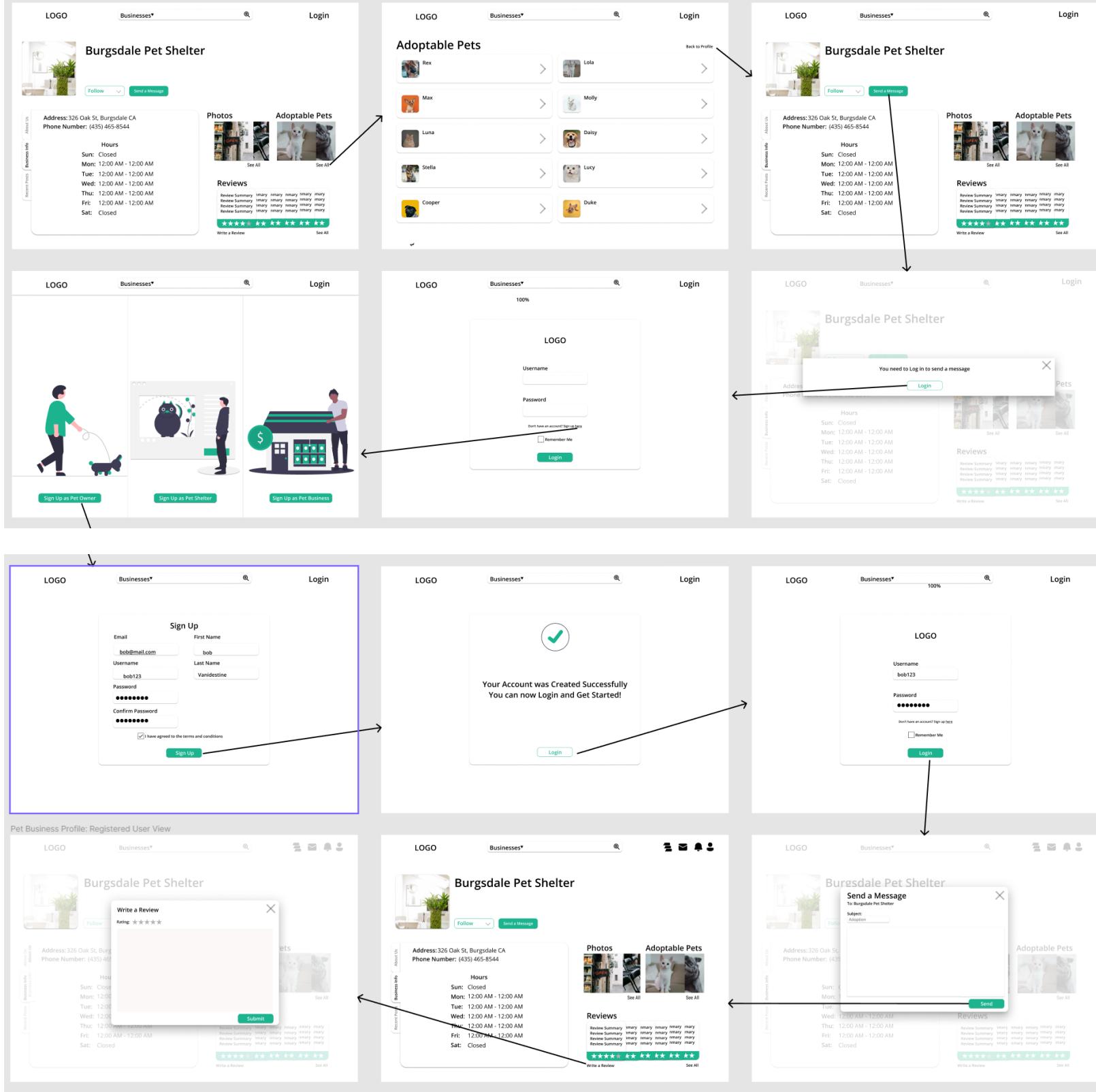
Use Case 7

The diagram illustrates a user flow for a pet social network website, featuring three main screens connected by arrows:

- Home Screen:** Shows a header with "LOGO" and a search bar. Below the header is a decorative banner with cartoon animals (a dog, a lizard, and a cat). The main content area includes sections for "About Me" (with placeholder text), "Recent Posts" (listing "Fido" and "Contra Costa Humane Society"), and a map with a "Location Search" tool.
- Login Screen:** A standard login form with fields for "Username" (Sarah) and "Password" (*****). It includes a "Remember Me" checkbox and a "Login" button.
- Search Results Screen:** Shows a map of the San Francisco Bay Area with various locations marked. A search bar at the top right shows "21 S St, CA". The results sidebar on the right lists "Parks", "Users", "Businesses", "Events", "Forums", and "Pets". Below the map is a "Results" sidebar listing accounts such as "Central Park", "Account Name", etc.

Arrows indicate the flow from the Home Screen to the Login Screen, and from the Login Screen to the Search Results Screen.

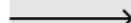
Use Case 8



Use Case 9 (1 of 5)

LOGO

Pets



LOGO

Pets



The Social Network for you and your furry (or not so furry) friends

[Sign Up](#)

[Sec. Action](#)



Build a profile for yourself, your pets or your business, and connect with pet lovers in your area



Fido

#1837

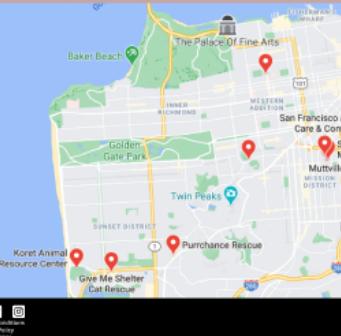
About Me

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Contra Costa
Humane Society

Recent Posts



Use our Location Search tool to find adoptable pets, and pet businesses near you

[Try It Out](#)

[Terms and Conditions](#)

[Privacy Policy](#)

[End User License](#)

[Feedback](#)

LOGO

Username

Password

[Don't have an account? Sign up here!](#)

Remember Me

[Login](#)

Feed: Registered User View

LOGO

Pets ▾ German Shepherds



Follower Feed

[+ Create a New Post](#)

Posts Near You

[Pet Express](#)
Check out our site today!

Jonathan

4/10/21 at 9:00 PM

20

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Spud

4/10/21 at 5:27 PM

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Paw Spa

4/10/21 at 2:27 PM

20

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Burgsdale Pet Shelter

20

LOGO

Pets ▾ German Shepherds



Results

Filter Sort By

joe

Laker

Darvin

Quelisha

Bartley

Gibo

Ursa

Zami

Luna

Reuben

Use Case 9 (2 of 5)

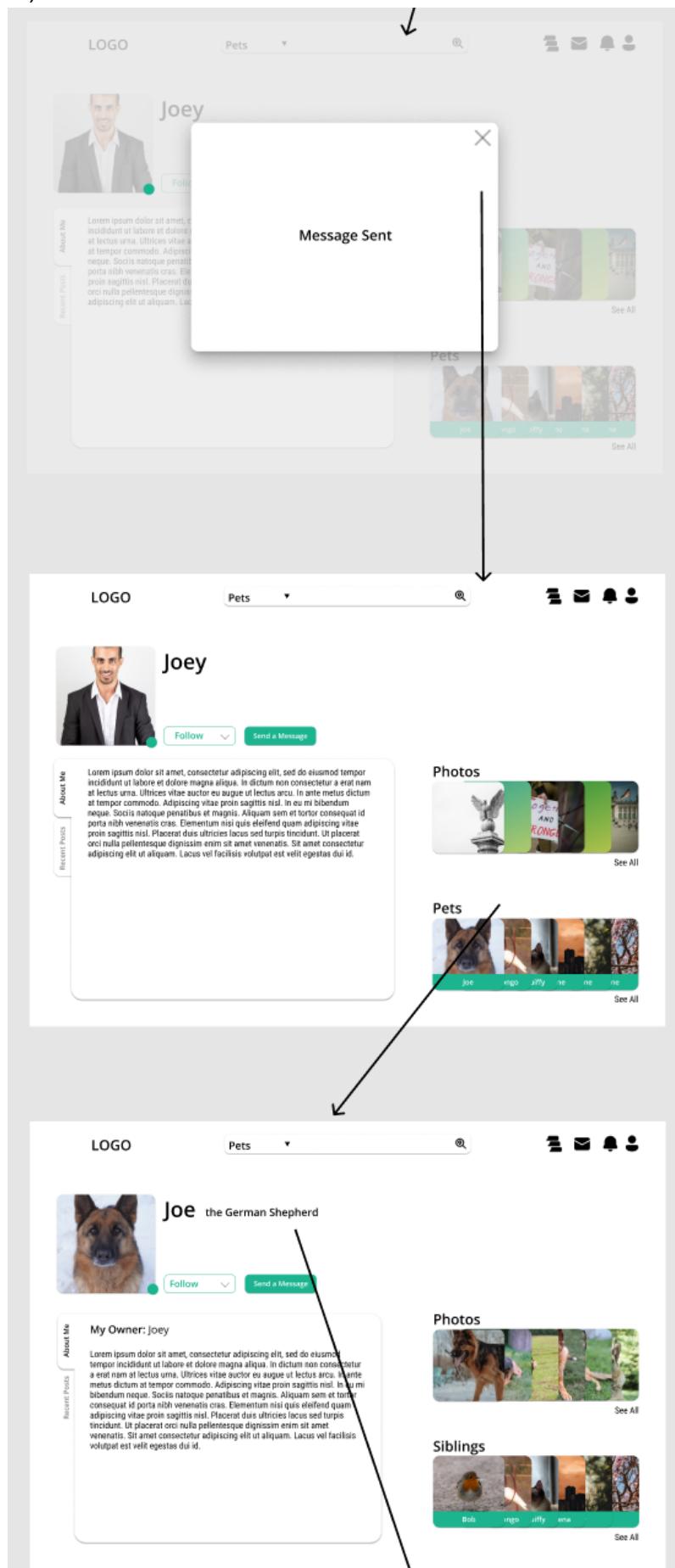
The image consists of three vertically stacked screenshots of a mobile application interface, likely a social media platform for pets. Each screenshot shows a different user profile page with a blue outline and a downward-pointing arrow indicating the flow of the process.

Screenshot 1: The top profile belongs to "Joe the German Shepard". It features a profile picture of a German Shepherd, the name "Joe the German Shepard", a "Follow" button, and a "Send a Message" button. Below the name is a section titled "About Me" with placeholder text. To the right, there are sections for "Photos" (with a "See All" button) and "Siblings" (with a "See All" button). A black arrow points from the "Send a Message" button down to the second screenshot.

Screenshot 2: The middle profile belongs to "Joey". It features a profile picture of a man, the name "Joey", a "Follow" button, and a "Send a Message" button. Below the name is a section titled "About Me" with placeholder text. To the right, there are sections for "Photos" (with a "See All" button) and "Pets" (with a "See All" button). A black arrow points from the "Send a Message" button down to the third screenshot.

Screenshot 3: The bottom profile also belongs to "Joey". It features a profile picture of a man, the name "Joey", a "Follow" button, and a "Send a Message" button. Below the name is a section titled "About Me" with placeholder text. A "Send a Message" dialog box is open over the screen, containing fields for "To: Joey", "Subject: Get any tips?", and a message body with placeholder text. The "Send" button is at the bottom of the dialog. To the right, there are sections for "Photos" (with a "See All" button) and "Pets" (with a "See All" button).

Use Case 9 (3 of 5)



Use Case 9 (4 of 5)

The diagram illustrates a user flow from a forum post to a login page. A large black arrow points downwards from the top section to the bottom section.

Top Section (Forum Post):

- Logo:** LOGO
- Navigation:** Pets ▾, Search icon, Notifications icon.
- Section Title:** German Shepherd Forum
- Post Preview:**
 - Title:** Tips for New Owners
 - Statistics:** Views: 1500, Replies: 500
 - Creation Info:** Created by Tom at 3/2/21 at 12:34 PM
 - Last Reply:** Last Reply by: Paige At: 4/10/21 at 1:15 PM
- Make a Thread** button.

Bottom Section (Login Page):

- Logo:** LOGO
- Navigation:** Pets ▾, Search icon, Login link.
- Section Title:** Tips for New Owners
- Post 1:**
 - Author:** Tom
 - Time:** 3/21/20 at 12:34 PM
 - Content:** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
 - Reply:** 20
- Post 2:**
 - Author:** Todd
 - Time:** 3/21/20 at 1:05 PM
 - Content:** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
 - Reply:** 20
- Post 3:**
 - Author:** Paige
 - Time:** 3/21/20 at 1:15 PM
 - Content:** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
 - Reply:** 20
- Post 4:**
 - Author:** Todd
 - Time:** 12/25/20 at 11:05 AM
 - Content:** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
 - Reply:** 20

Pagination: < 1 2 3 ... 22 >

Use Case 9 (5 of 5)

The diagram illustrates a user flow from a post creation dialog to a forum thread.

Initial State: A screenshot of a forum interface titled "Tips for New Owners". It shows several posts by users Tom, Todd, Paige, and Dave. A "Make a Post" dialog box is open in the center, containing a text input field with the placeholder "Thanks, Tom!" and a "Post" button.

Transition: A large arrow points downwards from the "Post" button in the dialog box to the same "Post" button in the main forum thread below.

Final State: A screenshot of the forum interface showing the newly posted message by Tom at the bottom of the thread. The message reads "Thanks, Tom!". The "Post" button is now inactive and grayed out.

Use Case 10 (1 of 3)

The diagram illustrates a user flow across four screens:

- Top Left Screen:** A landing page for the "Social Network for you and your furry (or not so furry) friends". It features a cartoon dog and cat at the top, a "Sign Up" button, and a "Sec. Action" button. Below is a profile section for "Fido" (#1037) and a "Recent Posts" section for "Contra Costa Humane Society". A map shows locations like Baker Beach, The Palace of Fine Arts, and Twin Peaks. A "Try It Out" button is at the bottom.
- Top Right Screen:** A "Login" page with fields for "Username" (Fakeemail@email.com), "Password" (redacted), and a "Remember Me" checkbox. It includes a "Sign-up here" link and a "Login" button.
- Bottom Left Screen:** An "Admin Control Panel" for "Bad Boy Dog Pound". It shows flagged content for "Bad Boy Dog Pound" and "Account Name". Both entries have a timestamp of 12/25/20 at 11:05 AM and 20 comments. Each entry has a "Navigate to Profile (Within a List Format)" link.
- Bottom Right Screen:** A business profile for "Bad Boy Dog Pound". It shows the address (326 Oak St, Burgsdale CA), phone number (435) 465-8544, and hours of operation (Sun: Closed, Mon-Fri: 12:00 AM - 12:00 AM, Sat: Closed). It also displays a "Ban User" and "Send a Message" button, a "Photos" section with a "See All" link, and a "Reviews" section with a 5-star rating and a "Write a Review" button.

Use Case 10 (2 of 3)

The screenshot shows a list of reviews for 'Bad Boy Dog Pound'. Each review card includes the reviewer's name, their comment, and a star rating. An arrow points from the top navigation bar to the search icon.

Reviewer Name	Review Summary	Rating
Bob	This place sucks	★★★★★
Rick	Lost my dog	★★★★★
Morty	Blah blah blah	★★★★★
Susan	NA	★★★★★
Frank	reviewing reviewing	★★★★★

The screenshot displays the profile page for 'Bad Boy Dog Pound'. It includes the business name, address, phone number, hours of operation, and a section for reviews. A vertical line connects the 'Reviews' section on the right to the review cards on the left.

Bad Boy Dog Pound

Address: 326 Oak St, Burgsdale CA
Phone Number: (435) 465-8544

Hours

- Sun:** Closed
- Mon:** 12:00 AM - 12:00 AM
- Tue:** 12:00 AM - 12:00 AM
- Wed:** 12:00 AM - 12:00 AM
- Thu:** 12:00 AM - 12:00 AM
- Fri:** 12:00 AM - 12:00 AM
- Sat:** Closed

Photos

Reviews

Review Summary nmary nmary nmary nmary nmary
 Review Summary nmary nmary nmary nmary nmary
 Review Summary nmary nmary nmary nmary nmary
 Review Summary nmary nmary nmary nmary nmary

★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★

[Write a Review](#) [See All](#)

Use Case 10 (3 of 3)

Pet Owner Profile: Send a Message

Pet Owner Name

Send a Message

To: Bad Boy Dog Pound

Subject: Post Removal

Your post has been removed due to violation of policies, and may result in being banned if violations continue.

Send

About Me

Recent Posts

See All

LOGO

Pets

Unfo

Flagged Content

Account Name

12/25/20 at 11:05 AM

20 Comments

Booming Poodle Grooming

Navigate to Profile (Within a List Format)

Account

Profile

Pets

Logout

Accounts Awaiting Approval

Booming Poodle Grooming

Navigate to Profile (Within a List Format)

See All

See All

Section IV: High Level Database Architecture and Organization V2

Business Rules

1. General User
 - a. A General User shall be able to be a Registered User
 - b. A General User shall have one unique user id
 - c. A General User shall have one first name
 - d. A General User shall have one last name
 - e. A General User shall have one email
2. Registered User
 - a. A Registered User shall have one unique registered user id
 - b. A Registered User shall have one address.
 - c. A Registered User shall have many pets
3. Address
 - a. An Address shall have a unique address id
 - b. An Address shall be associated with one user
 - c. An Address shall have one address line 1
 - d. An Address shall have one address line 2
 - e. An Address shall have one city
 - f. An Address shall have one state
 - g. An Address shall have one zipcode
 - h. An Address shall have one country
4. Business
 - a. A Business shall be owned by one Registered User
 - b. A Business shall have one unique business id
 - c. A Business shall have one name
5. Shelter
 - a. A Shelter shall be a Business
 - b. A Shelter shall have one unique Shelter id
6. Commerce
 - a. A Commerce shall be a Business
 - b. A Commerce shall have one unique commerce id
 - c. A Commerce shall have one Business Type
7. Business Type
 - a. A Business Type shall be associated with many Commercials
 - b. A Business Type shall have one unique business type id
 - c. A Business Type shall have one name
 - d. A Business Type shall have one description

8. Pet

- a. A Pet shall have one unique pet id
- b. A Pet shall have one name
- c. A Pet shall have one age
- d. A Pet shall have at least one color
- e. A Pet shall have one size
- f. A Pet shall have only one owner.

9. Dog

- a. A Dog is a Pet
- b. A Dog shall have one unique dog id.
- c. A Dog shall have at least one Dog Breed.

10. Cat

- a. A Cat is a Pet
- b. A Cat shall have one unique cat id
- c. A Cat shall have at least one Cat Breed

11. Other Pet

- a. An Other Pet is a Pet
- b. An Other Pet shall have one other pet id.
- c. An Other Pet shall have one type.

12. Age

- a. An Age shall have one unique age id
- b. An Age shall have one age name
- c. An Age shall have one age description
- d. An Age shall belong to many Pets

13. Size

- a. A Size shall have one unique size id
- b. A Size shall have one size name
- c. A Size shall have one size description
- d. A Size shall belong to many Pets

14. Color

- a. A Color shall have one unique color id.
- b. A Color shall have one color name
- c. A Color shall have one hex value.
- d. A Color shall belong many pets

15. Dog Breed

- a. Dog breed shall have one unique dog breed id.
- b. Dog breed shall have one dog breed forum link.
- c. Dog breed shall have one dog breed name
- d. A Dog breed shall belong to many Dogs

16. Cat breed

- a. A Cat Breed shall have one unique cat breed id.
- b. A Cat Breed shall have one cat breed forum link
- c. A Cat Breed shall have one unique cat breed name
- d. A Cat Breed shall belong to many Cats

17. Type

- a. A Type shall have one unique type id.
- b. A Type shall have one type name.
- c. A Type shall have one type forum link
- d. A Type shall belong to many Other Pets

List of Main Entities, Attributes, and Keys

1. General User(Strong)

- a. user_id: key, numeric
- b. email: alphanumeric
- c. first_name: alphanumeric
- d. last_name: alphanumeric
- e. full_name: composite, alphanumeric

2. Registered User (Strong)

- a. reg_user_id: key, numeric
- b. address_id: key, numeric
- c. user_id: key, numeric

3. Business (Weak)

- a. reg_business_id: key, numeric
- b. reg_user_id: key, numeric
- c. name: alphanumeric

4. Shelter (Weak)

- a. shelter_id: key, numeric
- b. business_id: key, numeric

5. Commerce (Weak)

- a. commerce_id: key, numeric
- b. business_type_id: key, numeric
- c. business_id: key, numeric

6. Business Type(Strong)

- a. business_type_id: key, numeric
- b. business_type_name: alphanumeric
- c. business_type_desc: alphanumeric

7. Address (Weak)

- a. address_id: key, numeric
- b. address_1: alphanumeric

- c. address_2: alphanumeric
 - d. zipcode: alphanumeric
 - e. city: alphanumeric
 - f. state: alphanumeric
 - g. country: alphanumeric
8. Pet (Weak)
- a. pet_id: key, numeric
 - b. name: alphanumeric
 - c. age_id: key, numeric
 - d. size_id: key, numeric
 - e. reg_user_id: key, numeric
9. Size (Strong)
- a. Size_id: key, numeric
 - b. Size_name: alphanumeric
 - c. Size_desc: alphanumeric
10. Age (Strong)
- a. age_id: key, numeric
 - b. age_name: alphanumeric
 - c. age_desc: alphanumeric
11. Color (Strong)
- a. color_id: key, numeric
 - b. color_name: alphanumeric
 - c. hex_value: alphanumeric
12. Dog (Weak)
- a. dog_id: key, numeric
 - b. pet_id: key, numeric
13. Dog Breeds (Weak)
- a. dog_breeds_id: key, numeric
 - b. dog_id: key, numeric
 - c. dog_breed_id: key, numeric
14. Dog Breed (Strong)
- a. dog_breed_id: key, numeric
 - b. dog_breed_name: alphanumeric
 - c. dog_breed_forum_link: alphanumeric
15. Cat (Weak)
- a. cat_id: key, numeric
 - b. pet_id: key, numeric
16. Cat Breeds(Weak)
- a. cat_breeds_id: key, numeric
 - b. cat_breed_id: key, numeric

c. cat_id: key, numeric

17. Cat Breed (Strong)

a. cat_breed_id: key, numeric

b. cat_breed_name: alphanumeric

c. cat_breed_forum_link: alphanumeric

18. Other Pet (Weak)

a. other_pet_id: key, numeric

b. type_id: key, numeric

c. pet_id: key, numeric

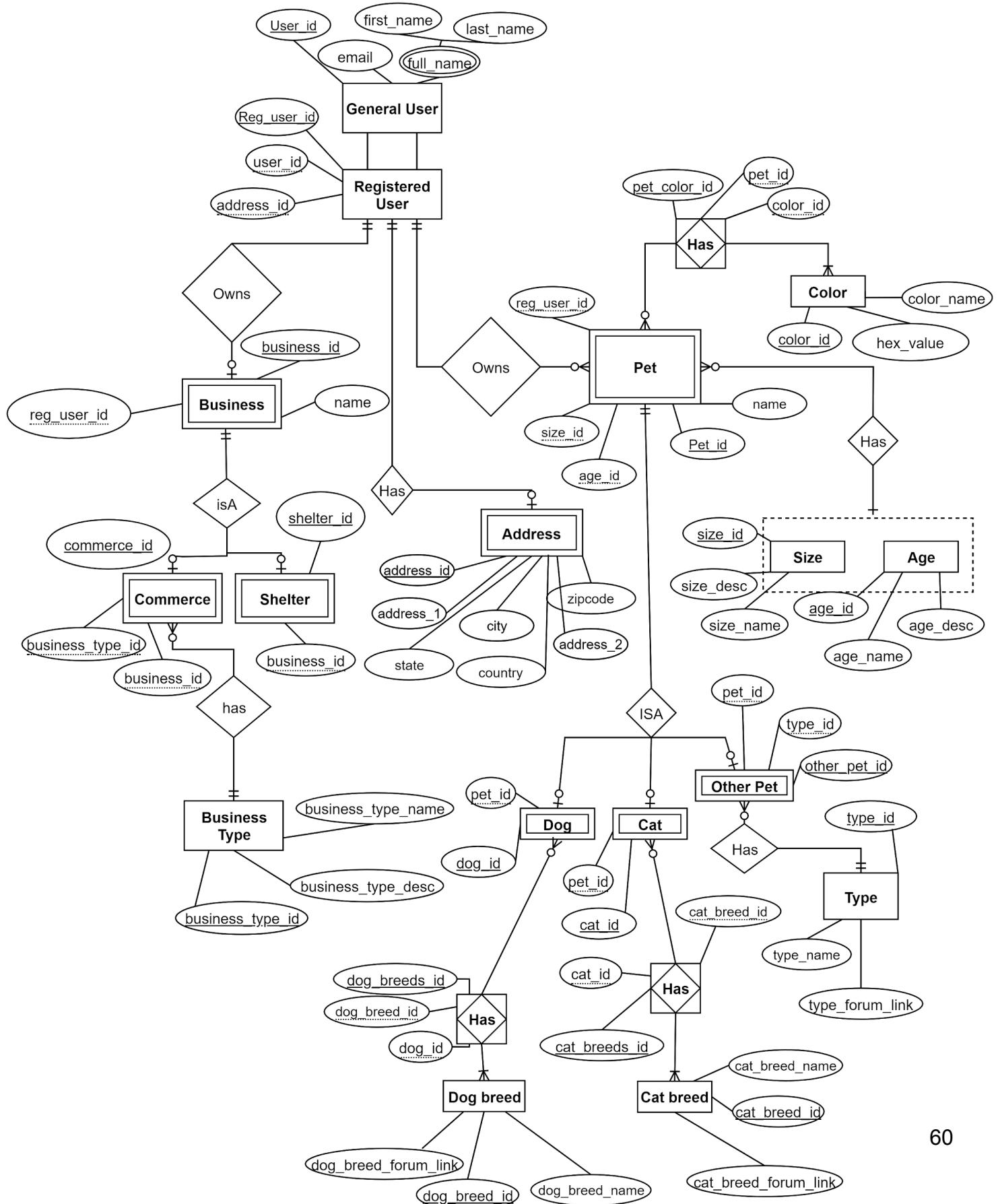
19. Type (Strong)

a. type_id: key, numeric

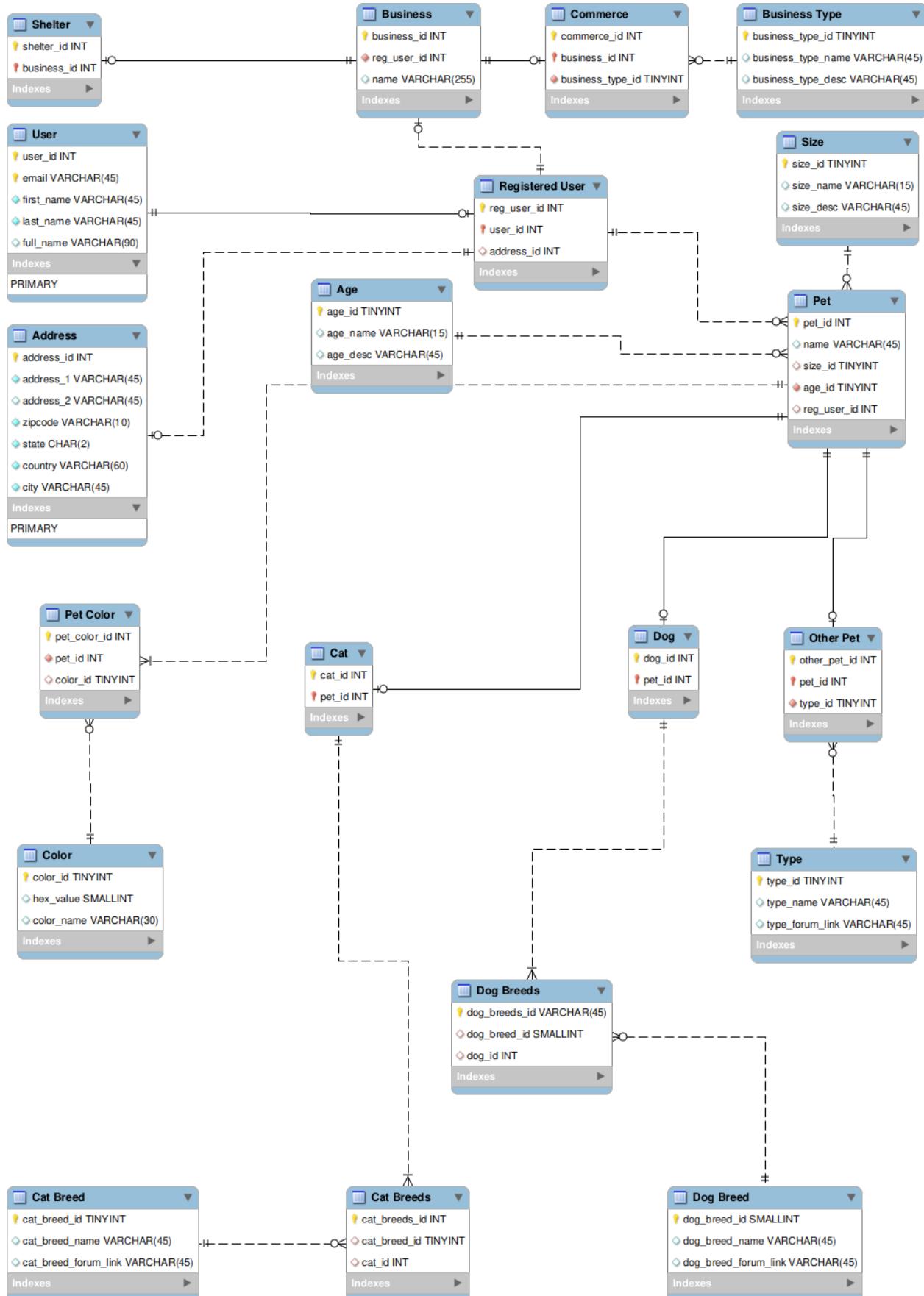
b. type_name: alphanumeric

c. type_forum_link: alphanumeric

ERD Diagram



EER Diagram



DBMS:

We will use MySQLWorkbench as the DBMS, because it has been used by team members in the past, and supports the creation of database models.

Media storage:

All Media Files will be kept in a file system.

Search/filter architecture and implementation:

The user would be able to choose the type of entity they are trying to search Users, Businesses, Pets and Shelters then they would enter a search term or click a location from the suggestions provided by Google Places Autocomplete. The user is shown results that can be filtered and sorted based on the user choice.

If users are searched for, the map markers indicating location and all other map features will be unavailable for viewing. Pets not owned by businesses and shelters will share this behavior, but will also show up in the same results page with those Pets whose locations are kept.

In order to filter search terms and support autocomplete, we will use SQL's %like command.

By default, entities are sorted by proximity to the user's inputted address, or if a term was inputted, the number of characters matching between search query and result (relevancy)

Search Terms:

Users:

Name
Username

Businesses:

Name
Address
Category

Pets:

Name
Type

- Breed
- Color
- Size
- Age

Shelters:

- Name
- Address
- Available types of pets

Filters:

Businesses:

- Category

Pets:

- Breed
- Type
- Age
- Color
- Size

Shelters:

- Available types of pets

Sorting:

Businesses:

- Proximity
- Average Rating

Shelters:

- Proximity
- Average Rating

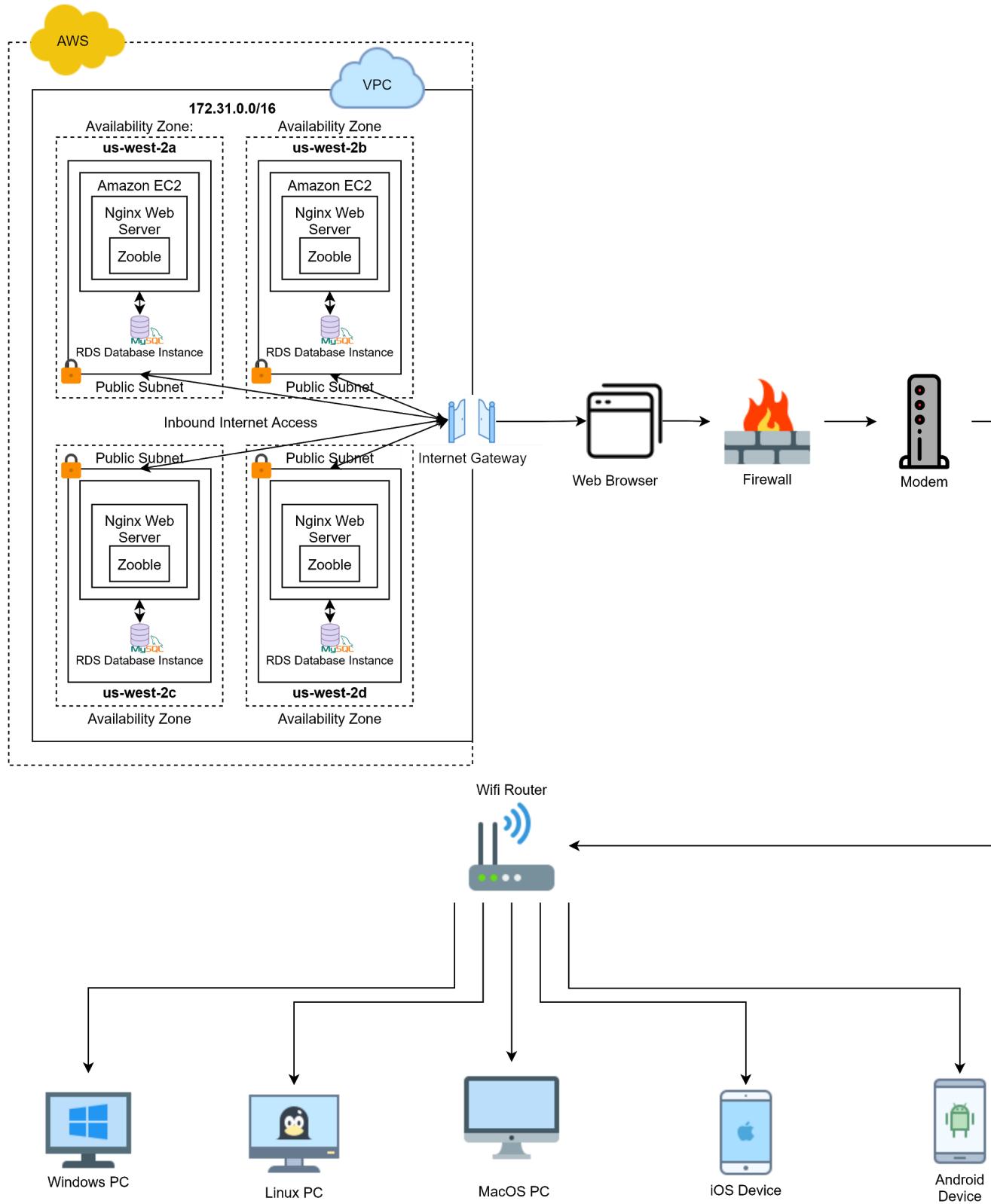
Pets: Age

- Pet Account Age
- Proximity

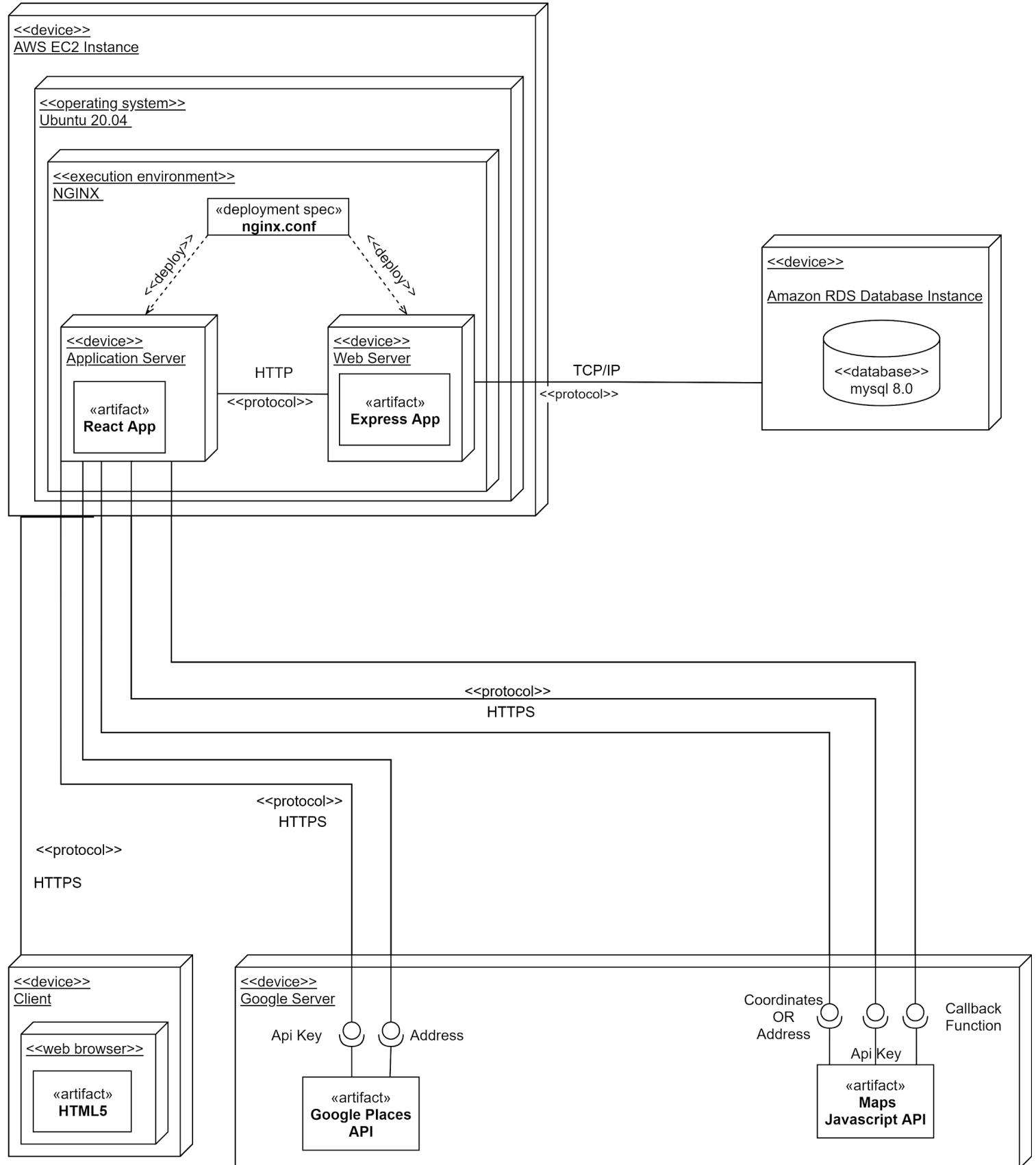
Media Storage: We will be using a file system-based storage system.

Section V: High Level Diagrams V2

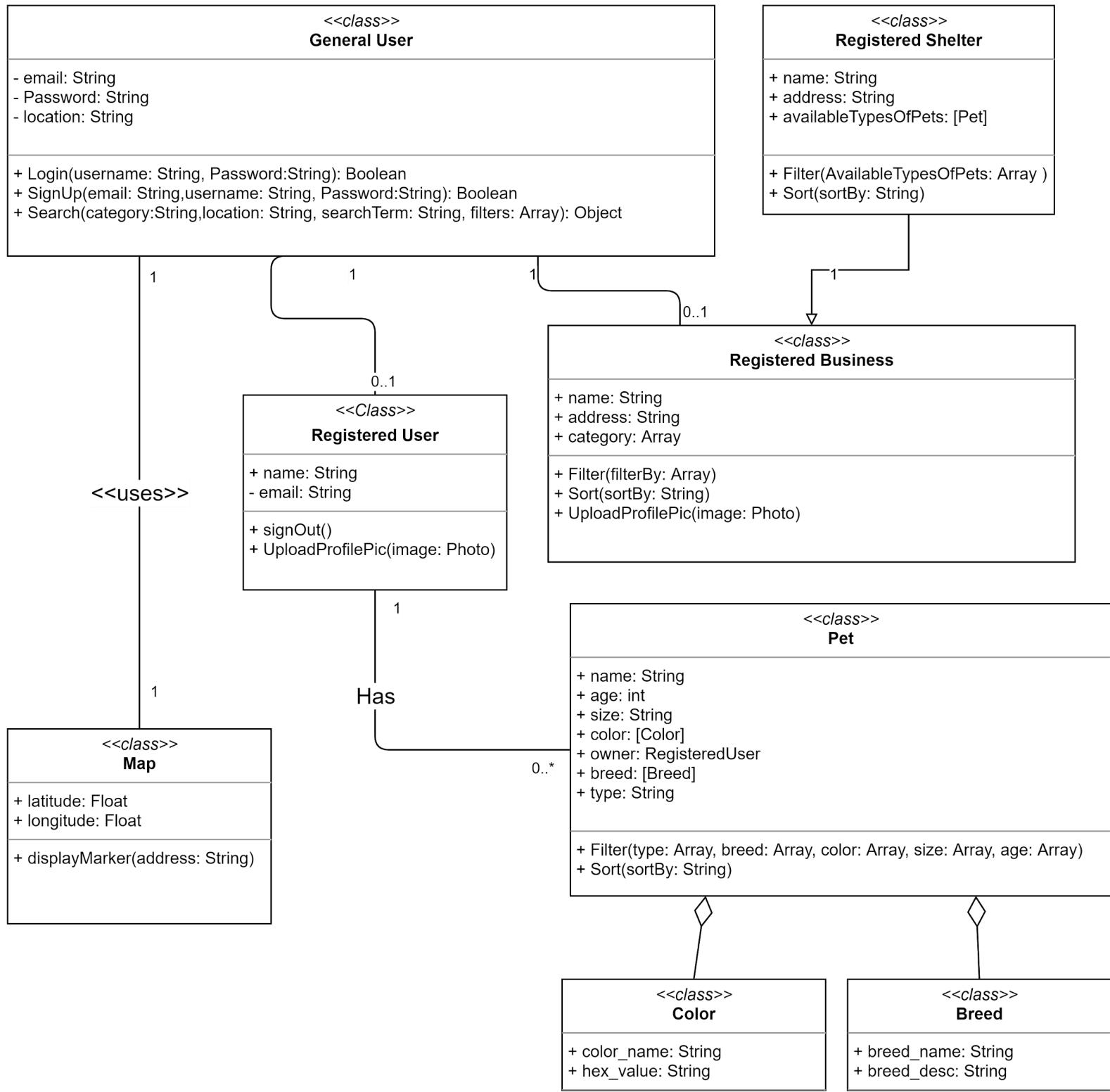
Deployment Diagram:



Deployment Diagram:



UML Diagram:



Section VI: Contribution Details

Starting with the backend team, our backend team lead Em worked on coding the sign up page in the backend. Em also worked on coding and connecting the login page from our backend to the frontend. Wameedh was part of the backend and the frontend team. On the backend, Wameedh worked on the EER he focused on setting up the database model from our ERD and making sure the table relationships matched the foreign keys. Wameedh also worked on revising the Entity Descriptions/Business rules. Wameedh also worked on fixing bugs on the frontend and improving the css style of the site. Our team member Daniel was working on the frontend and backend. On the backend, Daniel worked on revising the Entity Descriptions/Business rules. Worked With Wameedh on improving the ERD by removing unnecessary entities that could potentially waste more space. Daniel was also the github admin where he was in charge of merging into master and pushing to AWS. For the frontend section of this milestone. The frontend lead, Cameron worked on Wireframes for use cases 5,6, and 10. Cameron also worked on the Login, AccountType, Signup, ShelterSignups, BusinessSignUps, and the Footer for the horizontal prototype. Cameron also debugged these components for the frontend. Cameron also updated Trello with the bugs that needed to be fixed before moving on to the next priorities. He created Trello cards for the frontend team to stay on track. He communicated with the backend team to make sure we were completing tasks to finish the horizontal prototype. Cameron also lead the frontend team every Friday by going over the documentation, prototype, and possible implementations. Cameron also made an edit to the document by adding the correct page number on each page of the documentation to match the page numbers in the table of contents. Wenjie is also another contributor to the frontend, he worked on wireframes 7 and 8. Wenjie worked on Profiles, Photos, and Reviews for the horizontal prototype. Wenjie also worked on debugging these components for the frontend. Wenjie also gave great ideas in the frontend meetings when discussing the documentation, prototype, and possible implementations. Sabrina was also a contributor to the frontend team. She worked on wireframes 3 and 4. She worked on the ProfileCard, ExploreUsers, and Followers for the horizontal prototype. Sabrina also debugged these components and kept track of each bug on Trello to keep a clear track of which bugs to fix. Sabrina also worked on the logo for the application and modified the documentation to give the pages the right page number to match the table of contents. Daniel also contributed to the frontend by working on wireframes 1,2, and 9. He worked on MyPets, Messages, Edit Modal, and Pets for the horizontal prototype. Daniel created the frontend and backend trello workspaces to keep both teams on track. Daniel also updated Trello by listing the bugs from the horizontal prototype. He worked with Wameedh to make sure all the pages were responsive. Daniel also made sure both teams were on track, providing answers to questions in the general team meetings. He

also participated greatly going over the documentation, prototype, and possible implementations.