SW Engineering CSC 648/848 Spring 2015

Project: **PetFriend**

Team 10
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Milestone 3
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1. Use Cases

1. Mary, a 70 year old retired widow, is living alone and looking for a dog to keep her occupied so she doesn't feel lonely. Using **PetFriend's** easy-to-use interface and buttons that are easy to read, she is able to select a dog of her choice without hassle. Browsing the PetFriend website, she looks at all of the dogs that are available for adoption. She feels satisfied that she is able to read all of the text on the site, as other site's text font is too small to read at her age. She also likes the the size of the buttons on the site for easy clicking. She instantly falls in love with one of the dogs and clicks on the link to adopt. She is pleased when she fills out the form for adoption as the form is grouped nicely and not too confusing or overbearing. She finishes filling out her info and is now the owner of a new **Friend**.

2. Richard, a 25 year old single guy, has had his dog for two months. He finds out that the responsibility of having a dog is too much for him and he'd like to give the dog up for adoption. Navigating to the **PetFriend** website, he starts the process of putting his dog up for adoption. He likes the look and feel of the **PetFriend** website. He notices the colors are easy on the eyes and the layout of the site is easy to navigate. He fills out his dog's information and uploads a couple pictures of the dog. The process is smooth and without incident. He appreciates that the pages load in an acceptable length of time and that he is able to smoothly flow from one page to another. After submitting, he only waits an hour to get an email response from the site admin that the post has been reviewed and approved. The next day, Richard starts receiving responses to his post and quickly gets his dog adopted by a new family.

3. Marco, a 10 year old boy, loves to see pictures of pets while he is browsing the internet. Visiting the **Petfriend** website, he browses both dog and cat pictures. He finds the **Petfriend** website very easy to navigate and loves the aesthetics of the website. Marco doesn't have any intention of adopting a **Friend** just yet as he needs permission from his parents, but he's having a great time seeing all of the different animals on the site. He looks at a few dog and cat pictures, loving how cute they are. He puts a couple **Friends** in his **Wishlist**, hoping to someday get permission from his parents to adopt. Satisfying his need to see pet pictures, he logs off with a smile.

4. Elbert, the site admin, goes to the website to see what new content has been submitted. He sees that there are four new submissions to **PetFriend**. He looks over the first three submissions and everything seems to be in order. He approves the submissions and posts them to the live website. After approval, he emails the three **Gifters** and lets them know that their submission has been posted to the website. The fourth submission looks to be spam and the submission contains inappropriate photos. Elbert emails the person letting them know that their submission was inappropriate and did

not follow the policies of the website. He tells them that if they'd like to try again, they would have to keep the rules in mind and submit a new post. Elbert denies the fourth entry and his work is done.

2. Data Definition/glossary (consistency)

1. **Pets/Friends** - The animals for adoption/donation
   1.1. Dogs
      1.1.1. Sex (Mandatory)
      1.1.2. Breed (Optional, can have multiple?)
      1.1.3. Size (Optional)
      1.1.4. Images (Optional, up to 5, limit to 1MB each)
      1.1.5. Video (Optional, up to 2, limit to 20MB each)
   1.2. Cats
      1.2.1. Sex (Mandatory)
      1.2.2. Breed/Color (Optional)
      1.2.3. Images (Optional, up to 5, limit to 1MB each)
      1.2.4. Video (Optional, up to 2, limit to 20MB each)
2. **Sign up** - Register for user account
   2.1. Sign up form
3. **Login** - Account for the website to be able to adopt/use advanced features
   3.1. Login form
4. **Landing page** - Initial page seen by user
   4.1. Search
5. **Home page** - Main browsing page
   5.1. Filter
   5.2. Search
   5.3. Ads
   5.4. Pet info
6. **Donation/Give up for adoption** - Link for submitting animals for adoption
7. **Rescuer** - Users wanting to adopt
8. **Gifter** - Users wanting to give up for adoption
9. **Wishlist** - A feature where you can "favorite" an animal so it's saved in your account info
   9.1. Stored in database
10. **Recommended services** - Suggested services to go along with the adoption
    10.1. Grooming
    10.2. Veterinary
    10.3. Pet sitting
11. **Non-approved** - User uploaded data that has not been checked by the the website admin for posting on the website.

3. Functional Specs
Priority 1
1. There shall be a Landing Page
   1.1. User shall be able to select a category from Dog, Cat or Both to link to the Home Page
   1.2. There shall be a Put Up For Adoption link
      1.2.1. Leads to "put up for adoption" page
   1.3. There shall be a user login and signup page
      1.3.1. Leads to login and signup page
   1.4. There shall be a company logo
      1.4.1. Leads to "About us" page
2. There shall be a Homepage
   2.1. There shall be pictures
      2.1.1. Dogs
      2.1.2. Cats
   2.2. There shall be a summarized pet information
      2.2.1. Dog information
      2.2.2. Cat information
   2.3. There shall be a basic search (Priority 2)
   2.4. There shall be a filter for searching
      2.4.1. Sex
      2.4.2. Age
      2.4.3. Breed
      2.4.4. Size
3. There shall be a Pet Details page
   3.1. Display all the available information for the selected pet
4. There shall be a Cart Page
   4.1. Show what is currently in your cart
      4.1.1. Stored in database if user is logged in
      4.1.2. Stored using "cookies" if the user does not have an account or is not logged in
   4.2. Show **Wishlist**
      4.2.1. Stored in database
   4.3. Allow user to remove pets that are put into cart
5. There shall be a Checkout Page
   5.1. There shall be a section for recommended services
      5.1.1. Ads
      5.1.2. Accessories for pets
   5.2. There shall be an indicator of each step from the beginning to the end of the checkout phase
   5.3. There shall be a notification of success or error
6. There shall be a Put Up For Adoption Page
   6.1. There shall be a prompt for user login or sign up if not already done
   6.2. There shall be a form to fill out pet information
   6.3. There shall be an upload option to upload pictures and videos
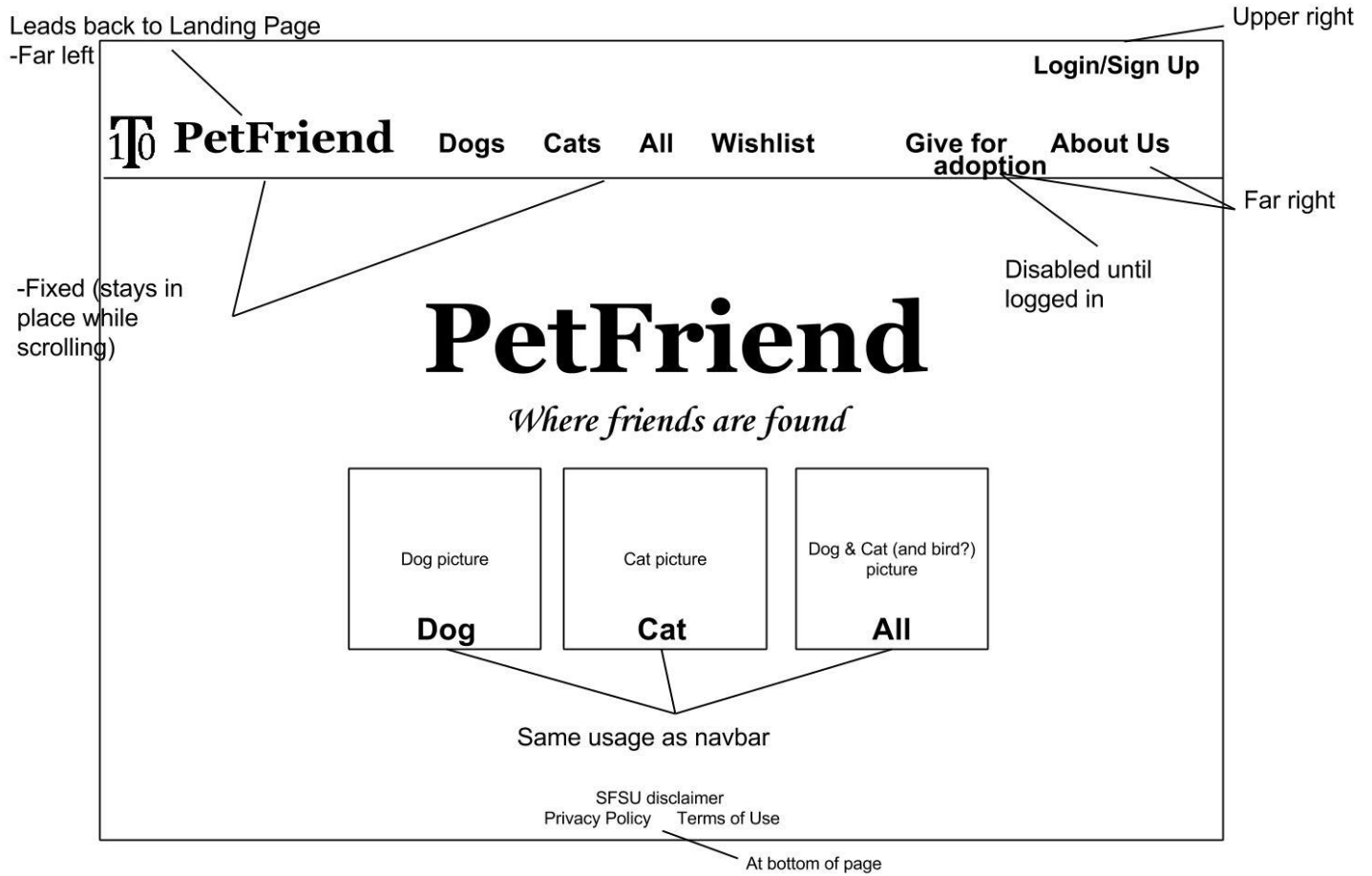7. There shall be a Login Page

      7.1.   There shall be a login form
8. There shall be a Sign Up Page
      8.1.   There shall be a user sign up form
9. There shall be an About Us page
      9.1.   There shall be a list of the team members
10. There shall be a navigation bar at the top of every web page except the checkout page

4.   Non-functional Specs

1.   Supported web browsers
    1.1.   Google Chrome
        1.1.1.   Version 40
        1.1.2.   Version 41
    1.2.   Apple Safari
        1.2.1.   Version 7 for Apple OS X 9 Mavericks
        1.2.2.   Version 8 for Apple OS X 10 Yosemite
2.   Every page shall load within 5 seconds
3.   Image file size shall be limited to 2MB
4.   Video clips shall be limited to 20MB or up to 1 minute
5.   Users that have basic computer knowledge shall be able to select and adopt a pet within 7 minutes.
6.   Navigation bar shall be visible on every page
7.   There shall be an SFSU demo website disclaimer on every page
8.   Website visitors shall be restricted from accessing non-approved images
9.   System expected load
    9.1.   The systems target capacity at a time shall be 1000 users.
10.   Media storage
    10.1.   File system method shall be used as opposed to using database blobs to maintain performance.
11.   Security
    11.1.   Non-approved images shall not be accessible to website visitors
    11.2.   User login shall be password protected
    11.3.   User passwords shall be encrypted in the database
12.   Database
    12.1.   The database shall contain necessary information from the user
    12.2.   The database shall contain information about the pets for adoption
    12.3.   The database shall contain information for non-approved pets
13.   User data
    13.1.   User data shall only be used for notification purposes
14.   Google Analytics
    14.1.   Data collected by Google Analytics shall only be used to improve user experience.
    14.2.   Data collected by Google Analytics shall not be sold or given to any third party.

5.   UI Mockup

Landing Page

Leads back to Landing Page
-Far left

Upper right

Login/Sign Up

𝕋₁𝕆₀ **PetFriend**   **Dogs   Cats   All   Wishlist   Give for   About Us**
adoption

Far right

-Fixed (stays in
place while
scrolling)

Disabled until
logged in

PetFriend
Where friends are found

| Dog picture | Cat picture | Dog & Cat (and bird?) picture |
| **Dog** | **Cat** | **All** |

Same usage as navbar

SFSU disclaimer
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At bottom of page

Home Page

Selected category highlighted

Background picture changes depending on what category is selected

Login/Sign Up

T₁₀ PetFriend | Dogs | Cats   All   Wishlist   Give for adoption   About Us

-Fixed (stays in place while scrolling)
-Separators to keep things organized

Filters

Sex:
■ Male (5)
■ Female (6)
❑ Fixed (11)

Age:
❑ 0-3 Months
❑ 3-6 Months (2)
❑ 6 Months-1 Year
■ 1+ Years (6)

Breed:

All ▽

Drop down menu of available breeds
-Checkboxes to select multiple

Size:
❑ Small
■ Medium(3)
❑ Large

Search Results

Sisi

Picture

| Details | Adopt Now |
| Add to Wishlist | |

Wishbone

Picture

| Details | Adopt Now |
| Remove from Wishlist | |

Blacky

Picture

| Details | Adopt Now |
| Add to Wishlist | |

Sue

Picture

| Details | Adopt Now |
| Add to Wishlist | |

Sponsored

Ad

Grooming

Ad

Veterinary Care

Sponsored ads/links

Top ⇧   Fixed and translucent

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Adoption Page

Login/Sign Up

PetFriend   **Dogs**   **Cats**   **All**   **Wishlist**   **Give for adoption**   **About Us**

Wishbone

Wishbone

Add/Remove from Wishlist

Remove from Wishlist

Adopt Now!

Leads to Confirmation Page

Picture

Picture

Sponsored

Ad

Grooming

Click to Enlarge -Use Left/Right keys to browse pictures

Picture

Video

Ad

Corresponds to filters

- **Sex:** Male
- **Age:** 1 year
- **Breed:** Dachshund
- **Size:** Medium
- **Description/Story:**

Veterinary Care

BACK   NEXT

Click to enlarge and play video

Back to search results

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Top

Goes to next/Prev in search results

Login/Signup Page

Login/Sign Up

PetFriend **Dogs**   **Cats**   **All**   **Wishlist**   **Give for adoption**   **About Us**

Popup from pushing
Login/Sign Up button

Login

Email

Password   Forgot password

Login

Sign Up

Email address

Password

Confirm Password

☐ I agree to PetFriend's
    Terms and Conditions

SUBMIT

Background greyed out to
put focus on Login box
-Disappears when clicking
outside box
-Disappears when Logging
in/Signing up and goes
back to page they were on

Design similar to:
https://www.petfinder.com/

to test
user: abc@gmail.com
pw: Test1234

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Donation Page

Richard .

Must be logged in to give up for adoption

1₀ PetFriend   **Dogs**   **Cats**   **All**   **Wishlist**   **Give for adoption**   **About Us**

Give up a friend for adoption

*Required
- ***Pet Type:** [Select one ▽] — Dog, Cat, or Other (specify)
- ***Pet's Name:** [ ]
- ***Sex:** [Select one ▽] — Male, Female
- **Age:** [ ] [Months ▽] — Days, Months, or Years
- **Breed:** [▽] — Can select more than 1
- ***Size:** [▽] — Small, Medium, or Large
- **Description/ Story:** [Tell us about your pet!]

(Max 5 Pictures [1MB Limit each], 2 Videos [20MB limit each])

[Picture] [Picture] [Video]

Button to upload files

⬆ Upload Media

☐ *I agree to PetFriend's Terms and Conditions

Submit to site Admin for approval

[Submit for approval]

Thumbnail Preview -Drag/Drop to organize

Top ⬆

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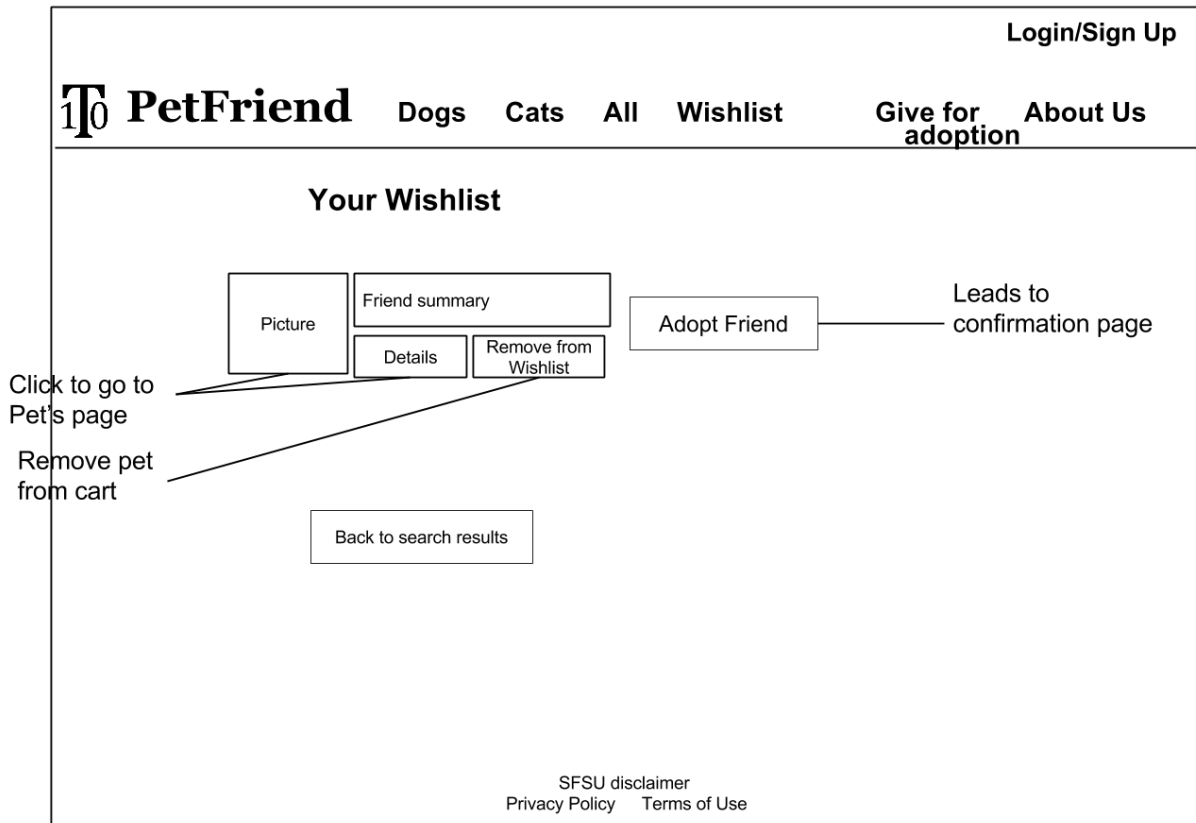
Wishlist Page

Login/Sign Up

T̲0̲ PetFriend **Dogs** **Cats** **All** **Wishlist** **Give for adoption** **About Us**

Your Wishlist

| Picture | Friend summary |
| | Details | Remove from Wishlist |

Adopt Friend

Leads to confirmation page

Click to go to Pet's page

Remove pet from cart

Back to search results

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Confirmation Page

PetFriend   **Dogs   Cats   All   Wishlist   Give for   About Us**
                                                              adoption

Enlarged picture of
Friend

You've selected this cutie!
Please confirm your choice
below.

Adopt!

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Checkout Page

Login/Sign Up

T 10 **PetFriend**   **Dogs**   **Cats**   **All**   **Wishlist**   **Give for adoption**   **About Us**

Success!

Enlarged picture of Friend

You have successfully submitted an adoption request! We'll start processing this request and email you within 24 hours with further instructions.

Recommended Services

| Toys | Food, home | Furniture |

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About Us Page

Login/Sign Up

T₁₀ PetFriend   **Dogs**   **Cats**   **All**   **Wishlist**   **Give for adoption**   **About Us**

About Us

Picture

Picture

Picture

Mike
Job description

Malav
Job description

Priya
Job description

Picture

Picture

Elbert
Job description

Mark
Job description

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6. High-level System Architecture and Database Organization

1. LAMP Stack hosted on Amazon EC2 instance
2. Programming Languages
   2.1. jQuery 2.1.3
   2.2. JavaScript 1.8.5
   2.3. HTML/HTML5
   2.4. CSS 3
   2.5. php 5.3.10
   2.6. AJAX
   2.7. Bootstrap 3.2
3. Subversion
   3.1. Version 1.6.17 (r1128011)
4. Supported browsers:
   4.1. Google Chrome
      4.1.1. Version 40
      4.1.2. Version 41
   4.2. Apple Safari
      4.2.1. Version 7
      4.2.2. Version 8
5. Google Analytics
   5.1. petfriend.team10@gmail.com
6. NetBeans for IDE
   6.1. Version 8.0.2
7. Uploaded Images
   7.1. File type: jpeg / png
   7.2. Description for the image
   7.3. Thumbnail size : 90 x 90 Pixels
   7.4. Maximum File size: 2 Megabytes
   7.5. The image is stored using File structure.
8. Database Design using MySQL
9. File system Design used for Media Storage

**Database Organization: File System Design**
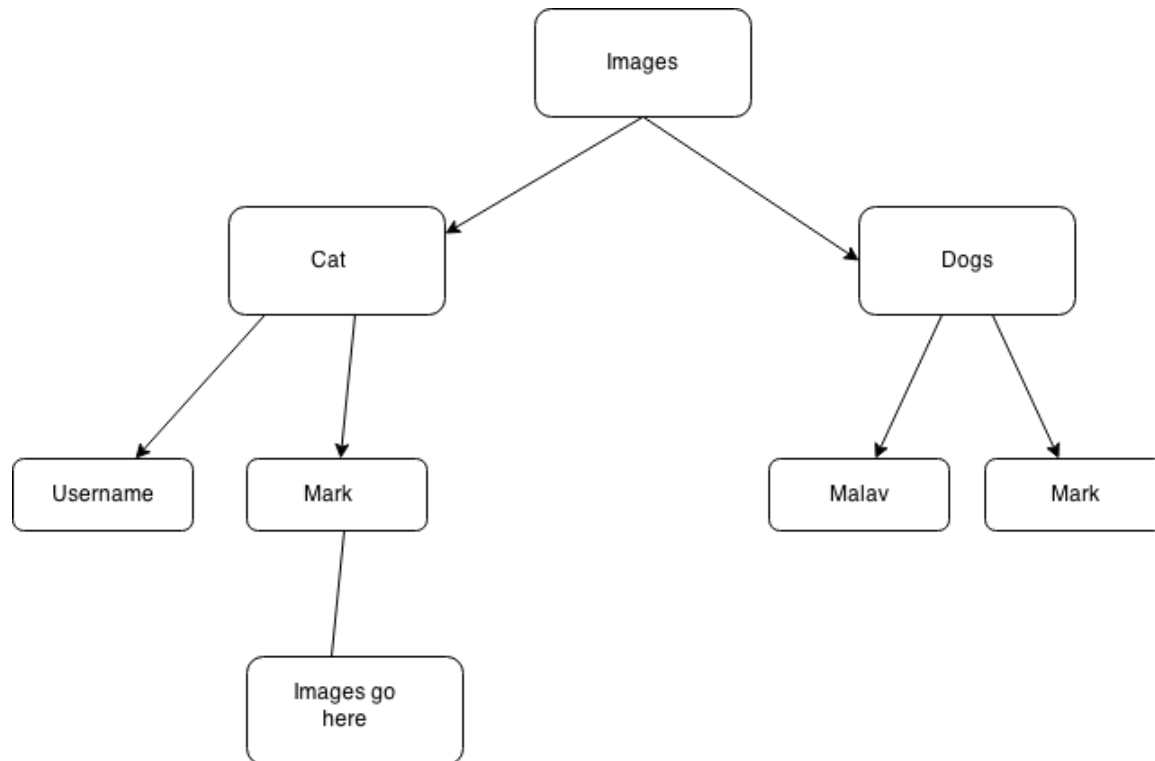

Search and Filters:

1. Basic Search engine will take keywords from the textbox and look for similar words in the database to give the relevant results. For example, "male cat brown" will give list of all male brown colored cats from database. Ajax and PHP will be used to get the result from the MySQL database and displayed on the page.

2. The filter feature will be available to refine the result when users select radio buttons on filter types, such as pet type(cat/dog/other), age, sex. For example, when user selects Dog as pet type, all the results will be refined to only dogs available for adoption. Ajax and PHP will be used to get the result from the MySQL database and passing filter option to the query to display on the page.
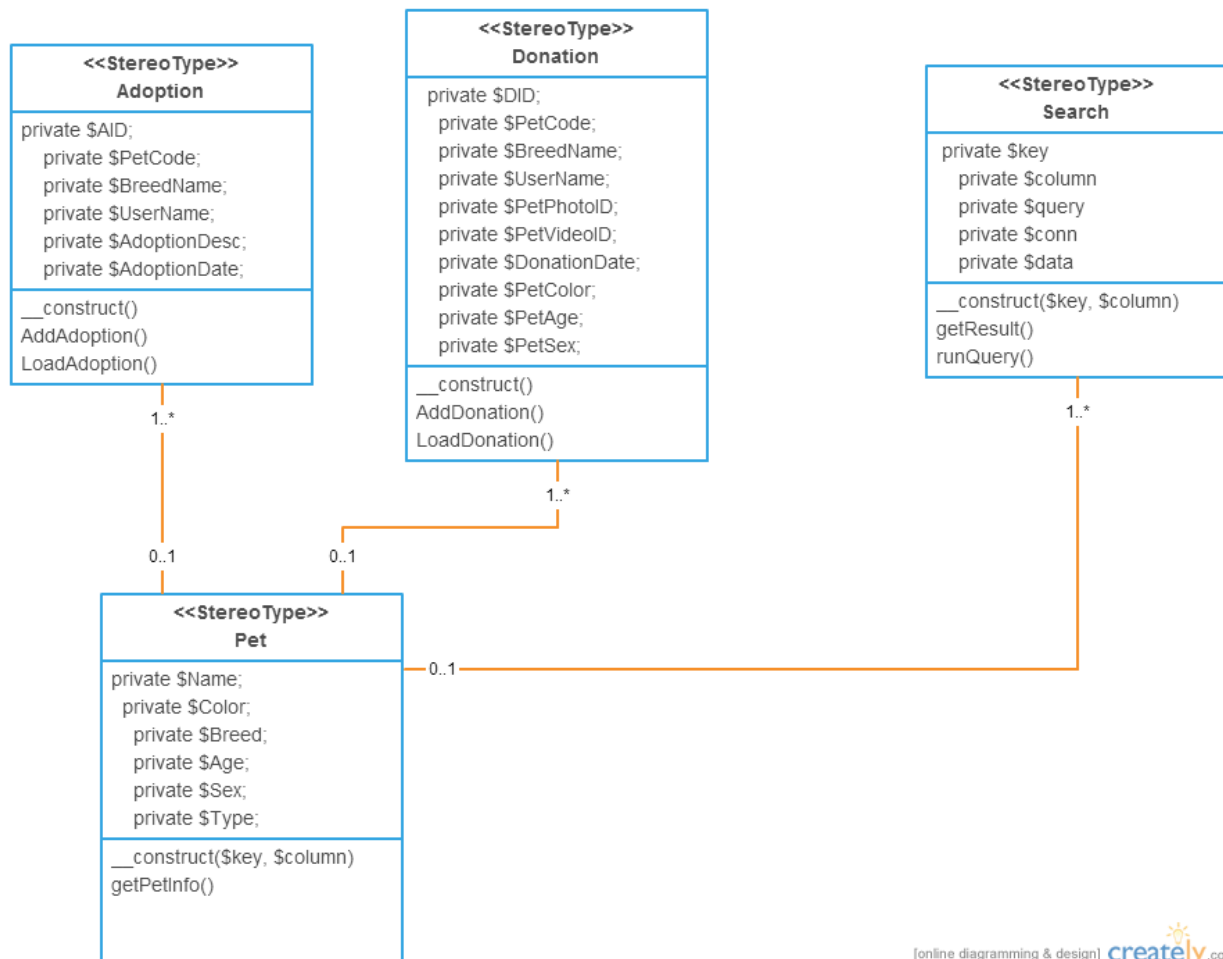
7. **UML Diagram**
Database UML Diagram:
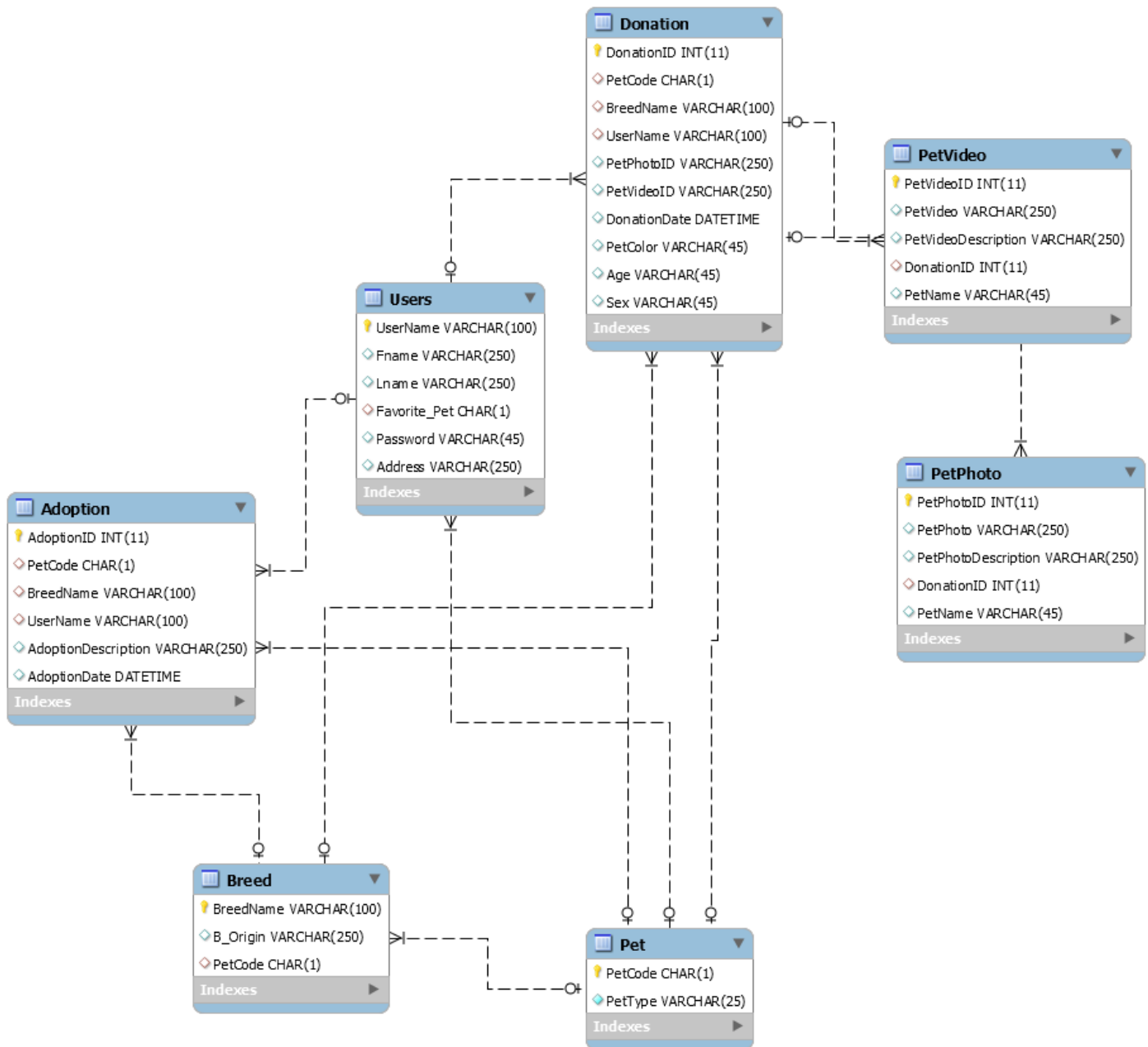
Architecture UML Diagram
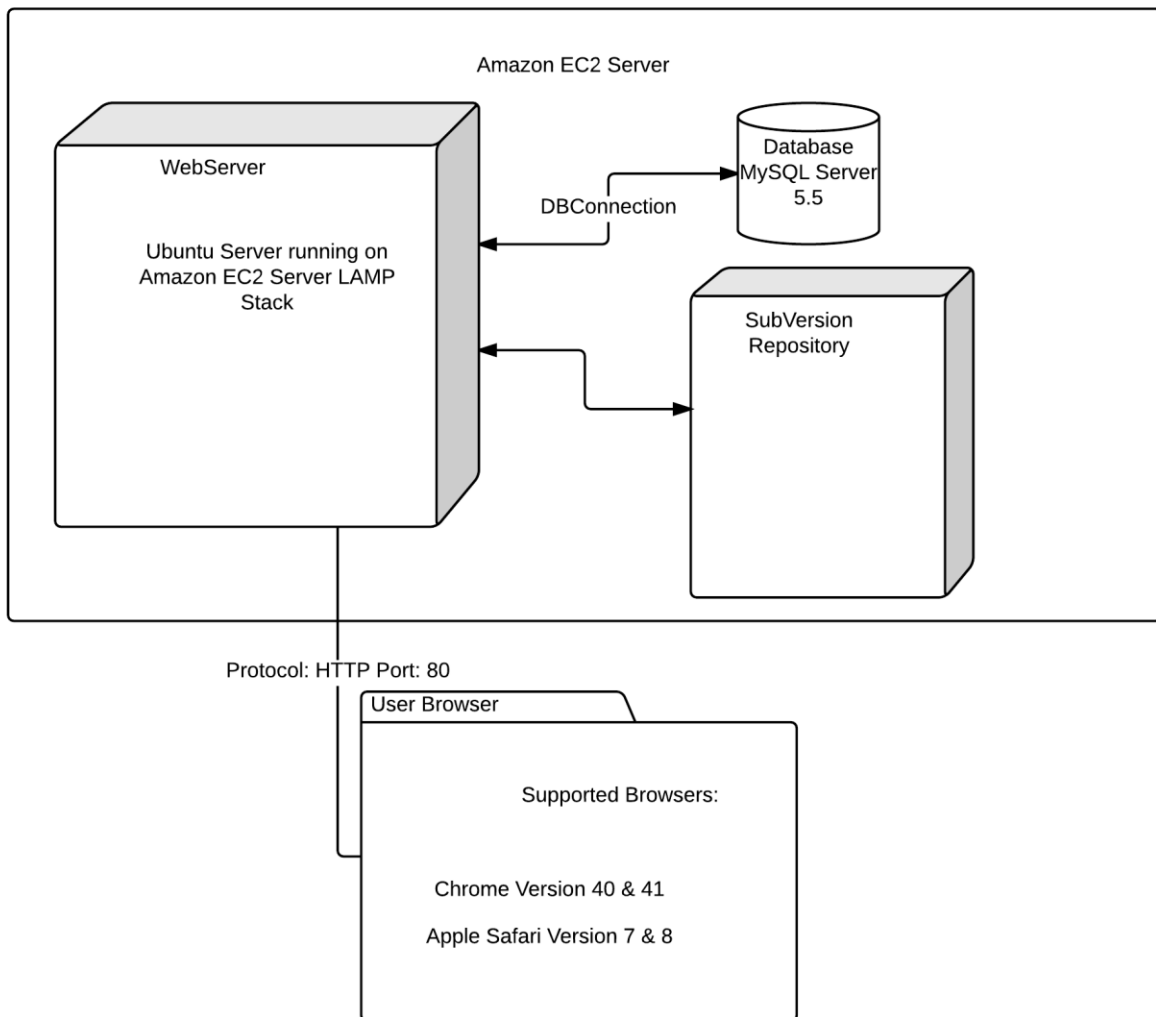
PHP UML Class Diagram

8. Key Risks
- 8.1. *Skills* risks
  - 8.1.1. Team members know their job
    - 8.1.1.1. Ask Mike if any general help is needed
    - 8.1.1.2. Ask Malav if tech help needed
  - 8.1.2. Team members proficient in their skills
- 8.2. *Schedule* risks
  - 8.2.1. Can we deliver on time?
    - 8.2.1.1. Stick to deadlines as much as possible
  - 8.2.2. Will the team stick to deadlines?
    - 8.2.2.1. Keep in constant contact with team members about progress
  - 8.2.3. Can team members meet frequently to discuss progress, updates, and changes?
    - 8.2.3.1. Meetings every Thursday at 6:30pm
- 8.3. *Technical* risks
  - 8.3.1. Implementing the search algorithm
    - 8.3.1.1. Do research on searching and consult Malav
- 8.4. *Teamwork* risks
  - 8.4.1. Make sure everyone works together in a professional manner
    - 8.4.1.1. Run meetings smoothly and keep everyone apprised
  - 8.4.2. Are there any conflicts?
    - 8.4.2.1. Address conflicts immediately and make sure they are resolved professionally
- 8.5. L*egal/content* risks
  - 8.5.1. Is there any software we need that is copyrighted?
    - 8.5.1.1. Research material that might have a conflict
  - 8.5.2. Are images free-to-use?
    - 8.5.2.1. Make sure the images come from a verified free-to-use site
    - 8.5.2.2. Use own images

9. Team Organization

9.1. Michael "Mike" Smith
    9.1.1. Team Lead
    9.1.2. Documentation
    9.1.3. Marketing
    9.1.4. UI / UX
9.2. Malav Shah
    9.2.1. CTO
    9.2.2. Backend
9.3. Priya Karambelkar
    9.3.1. UI / UX
    9.3.2. SVN
9.4. Elbert Dang
    9.4.1. Documentation
    9.4.2. QA / Submission admin
    9.4.3. UI / UX
9.5. Mark Favis
    9.5.1. Backend
    9.5.2. Marketing