Your one stop for puppers, doggos, and good bois

TEAM MEMBERS:
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Updates for BRD

Ashley (Works Full-Time)

Personal Background

- ★ 30 years old
- ★ Married with no kids
- ★ Owns two dogs named Milo and Snooky

Challenges

Neither her or her husband has time during the day to take care of their dogs

They both don't have time to walk them, feed them etc.

She also doesn't have time to groom them.

Lifestyle

- ★ Works full-time along with her husband
- ★ Both of them aren't home for the majority of the day
- ★ Both of them are exhausted by the time they get home from work

How We Can Help

We can help them find someone to take care of their dogs while both of them are at work

We can provide a list of dog grooming places and dog product stores

Richard (Retired)

Personal Background

- ★ 70 years old
- ★ Lives alone
- ★ Owns two dogs named Spot and Koko

Challenges

- ★ Isn't able to take his dogs for a walk
- ★ He is unable to manage his schedule and is forgetful.

Lifestyle

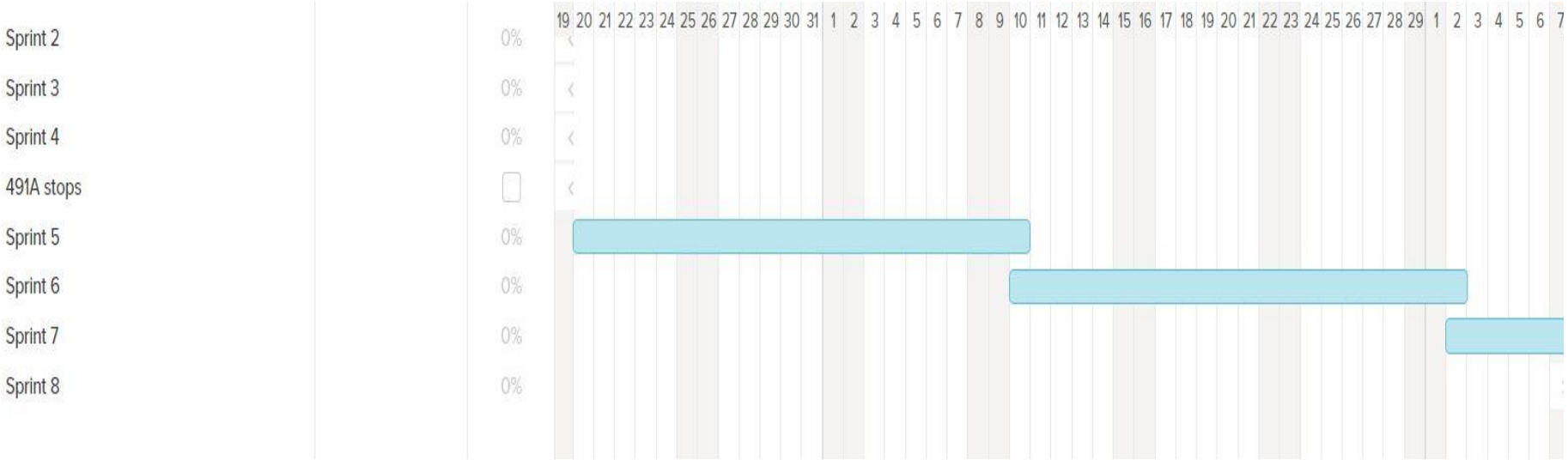
- ★ Is at home all day since his retirement
- ★ Has to use a wheelchair when moving around the house

How We Can Help

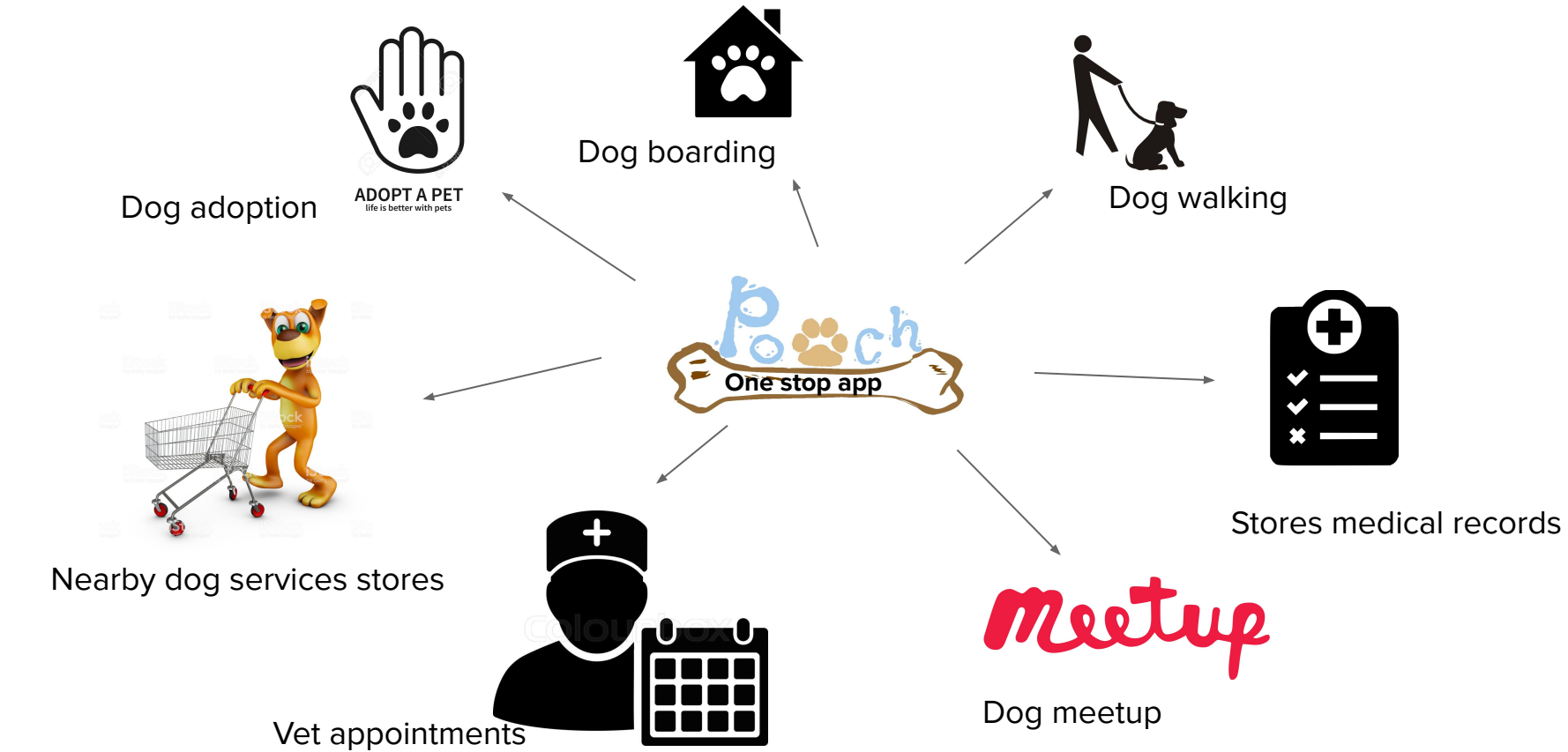
- ★ We can help him find someone to walk his dogs for him
- ★ We can help him schedule a vet appointment and remind him about the appointment.

Updates to Management Plan:Gantt Chart

Gantt chart (continued)



Product Requirements Document (GOALS)



User Stories

- As a first time user, I want to CREATE AN ACCOUNT, so that the user can use the application.
- As a first time user, I want to CREATE OWNER PROFILE, to saved up my details to use features of the web application.
- As a user, I want to be able to LOGIN my profile, to access my account.
- As a user, I want to be able to EDIT MY PROFILE if there are changes in my personal information.
- As a user, I want to be able to CREATE A PROFILE for my dogs to save their dogs' information.
- As a user, I want to be able to LOOK AT DIFFERENT SERVICES/ FEATURES offered in the application on the home screen, after I login.

User Stories

- As a user, I want to be able to choose the DOG WALKING service so, my dog could be walked by a dog walker.
    - As a user, I want to be able to SELECT DOG WALKING SERVICE, I would like to SEE A LIST OF DOG WALKERS IN the area, along with the PRICE and their REVIEWS to get confidence to leave my dog with them.
    - As a user, I would like to MESSAGE THE DOG WALKER about the time updates when my dog needs to walked and also check in during the walk.
- As a user, I want to use to ADOPT A DOG service to choose a dog to adopt.
    - As a user, I want to SEARCH FOR A SPECIFIC BREED to look for adoption.
    - As a user, i would want to GET ALERTS for specific breeds that I am interested in adopting, as soon as they are posted on the application.
    - As a user, i would like to LOOK AT THE PRICE of the dog, I am planning to adopt.
    - As a user, I would like to LOOK AT THE LOCATION of the dog, when the dog is ready for adoption.
    - As a user, I would like to SEND A MESSAGE to the person, who put up the post for adoption about more details.

User Stories

- As a user, I want to be able to choose the SCHEDULE VET APPOINTMENT service to schedule an appointment for a dog.
  - As a user, I want to be able to LOOK AT THE VETS NEARBY for easy commute.
  - As a user, I would like to look at the AVAILABLE APPOINTMENTS for the vet.
  - As a user, I would like to LOOK AT THE REVIEWS of the vets for confidence in the vet.
  - As a user, I would like to BOOK AN APPOINTMENT for the vet.
- As a user, I want to use to CHOOSE A DOG BOARDING service so I can leave my dog there when I travel.
  - As a user, I want to LOOK AT NEARBY DOG BOARDING FACILITIES, people are willing to take care of my dogs, and dog kennels.
  - As a user, I would like to LOOK AT THE RATING OF THE DOG BOARDING FACILITIES, people who are willing to take care of my dogs, and dog kennels.
  - As a user, I would like to MESSAGE THE DOG BOARDING SERVICE providers about more information.
  - As a user, I would like to LOOK AT THE COST PER DAY of the dog, for the dog boarding.

User Stories

- As a user, I want to be able to CHOOSE TO FIND NEARBY DOG SERVICES.
  - As a user, I would like to LOOK FOR DOG SUPPLIES STORES near me.
  - As a user, I would like to LOOK FOR DOG GROOMING SERVICES near me.

- As a user, I want to be able to LOGOUT of the application.

Ashley (Works Full-Time)

Personal Background

- ★ 30 years old
- ★ Married with no kids
- ★ Owns two dogs named Milo and Snooky

Challenges

Neither her or her husband has time during the day to take care of their dogs

They both don't have time to walk them, feed them etc.

She also doesn't have time to groom them.

Lifestyle

- ★ Works full-time along with her husband
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Lifestyle

- ★ Is at home all day since his retirement
- ★ Has to use a wheelchair when moving around the house

How We Can Help

- ★ We can help him find someone to walk his dogs for him
- ★ We can help him schedule a vet appointment and remind him about the appointment.

Julie (New City)

Personal Background

28 years old

Just moved to California from Arizona for work

Owns one dog named Stewie

Lifestyle

She goes to the gym after work most days

She enjoys going to new places and experiencing new things

Challenges

Wants to adopt a dog

Doesn’t know where to adopt a dog from in California

Wants to take Stewie for a dog meetup but doesn’t know where to take him

How we can help

We can help find her a good animal shelter close by her so she can adopt a dog

We can help her find a dog meetup close to her

George (Father)

Personal Background

45 Years Old

Lives with his wife and 3 kids

Used to own a dog and would love to own another one

Lifestyle

George is a family man and when he is not at work, he is bonding with his family.

He lives a very optimistic and active lifestyle with his family.

Challenges

His dog Spot recently had to be put down.

His family loves dogs and wish to own another one in the time of grieving for their late dog.

How we can help

We can help George and his family find a new dog from nearby breeders, adoptions centers, pounds. Dogs that may remind him of Spot

Tom (High-School Student)

Personal Background

17 years old

Lives at home with his parents and younger brother

Is in his senior year of high-school

Lifestyle

Has soccer practice everyday after school

Challenges

Loves dogs but doesn't have the time or the money to own one himself

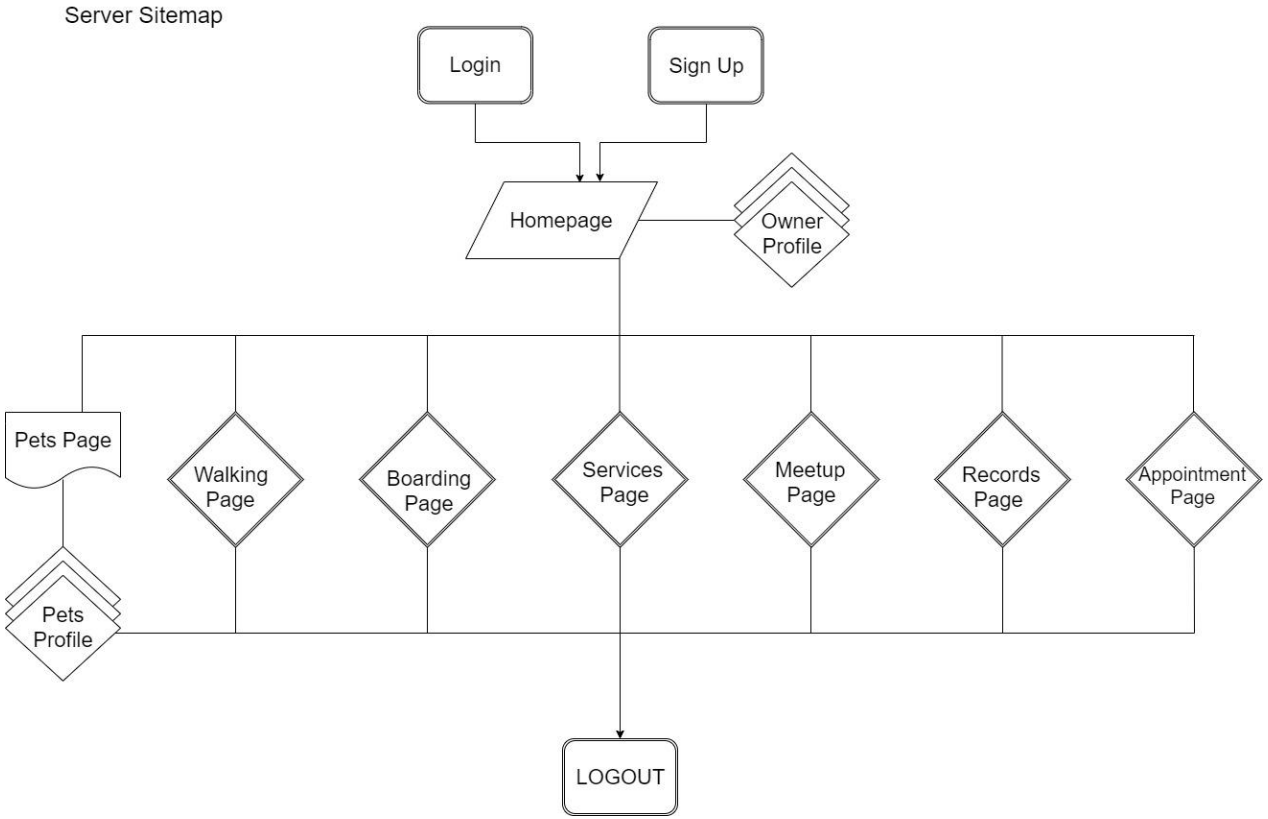
Parents don't want any pets

How we can help

He is now able to take care of other people's dogs

He will also be getting paid for it

SERVER SITEMAP



Users after logging in logs on the home page and then their pets page which would eventually lead them to **any desired feature** page.

No particular map to reach to feature pages and finally, the user can exit the application (the logout page).

Wireframes


Your Pets
Dog Walking
Dog Boarding
Dog Services
Dog Meetup
Dog Records
Log Out
Your One Stop for Puppers, Doggos, and Good Bois
First Last
Edit Profile
Services Happening Near You
Dog Boarder Needed
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla quam velit, vulputate eu pharetra nec, mattis ac neque. Duis vulputate commodo lectus, ac blandit elit tincidunt id. Sed rhoncus, tortor sed eleifend tristique, tortor mauris molestie elit, et lacinia ipsum quam nec dui. Quisque nec mauris sit amet elit iaculis pretium sit amet quis magna. Aenean velit odio, elementum in
Dog Meetup in Long Beach
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Home
Your Pets
Dog Walking
Dog Boarding
Dog Services
Dog Meetup
Dog Records
POOCH

Wireframes


Your Pets
Dog Walking
Dog Boarding
Dog Services
Dog Meetup
Dog Records
Log Out
Pets
Lucky Border Collie
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla quam velit, vulputate eu pharetra nec, mattis ac neque. Duis vulputate
Photos of Lucky
Add a Pet
Home
Your Pets
Dog Walking
Dog Boarding
Dog Services
Dog Meetup
Dog Records
POOCH

Your Pets | Dog Walking | Dog Boarding | Dog Services | Dog Meetup | Dog Records

Log Out

Add Pet

Add Pet Photos

Dog

Cat

Name

Weight (lb)

Age

Sex

Breed

Description

Care Instructions

Veterinary Information Add Records

Cancel Save

Extended Profile

Microchip

Spayed / Neutered

Gets along w/ children

Gets along w/ dogs

Gets along w/ cats

House Trained

Your Pets | Dog Walking | Dog Boarding | Dog Services | Dog Meetup | Dog Records

Log Out

Dog Walking

When do you need a walker?

S M T W Th F S

12:00PM

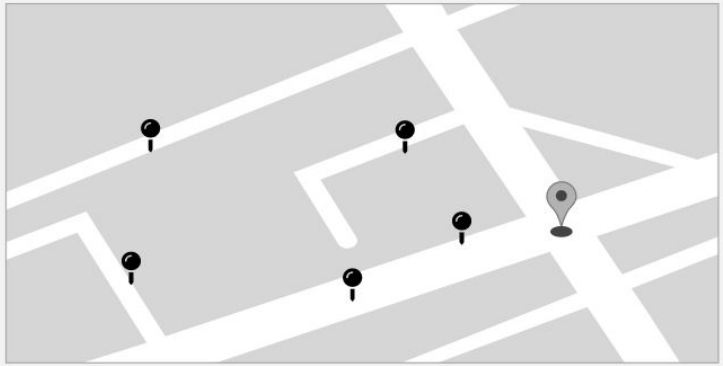
Location

Select your location

Choose your Dog

Lucky

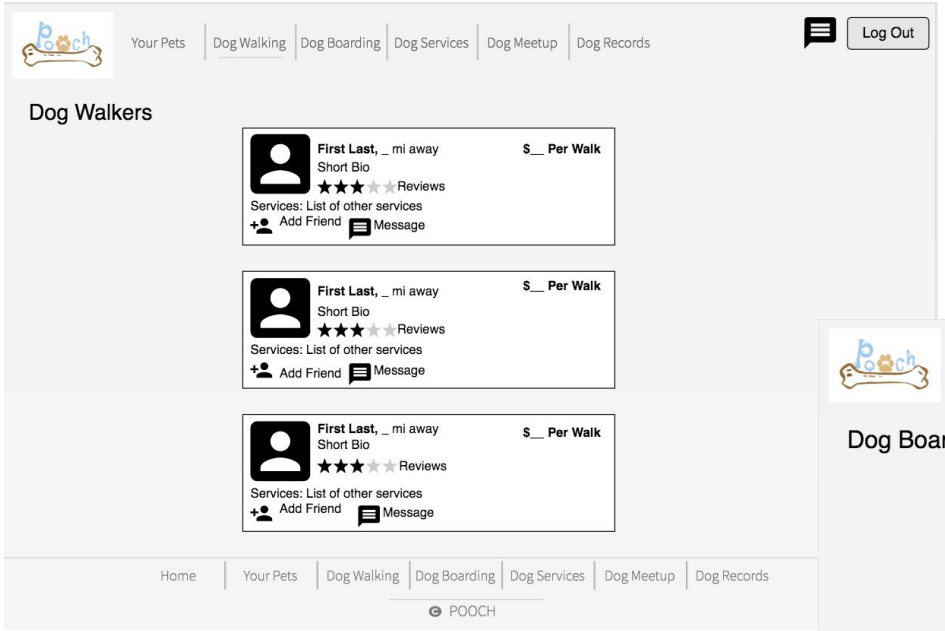
Dog Walkers Near You



Search

Search

Add Filter


Your Pets
Dog Walking
Dog Boarding
Dog Services
Dog Meetup
Dog Records
Log Out
Dog Walkers
First Last, _ mi away
Short Bio
Reviews
$__ Per Walk
Services: List of other services
Add Friend
Message
First Last, _ mi away
Short Bio
Reviews
$__ Per Walk
Services: List of other services
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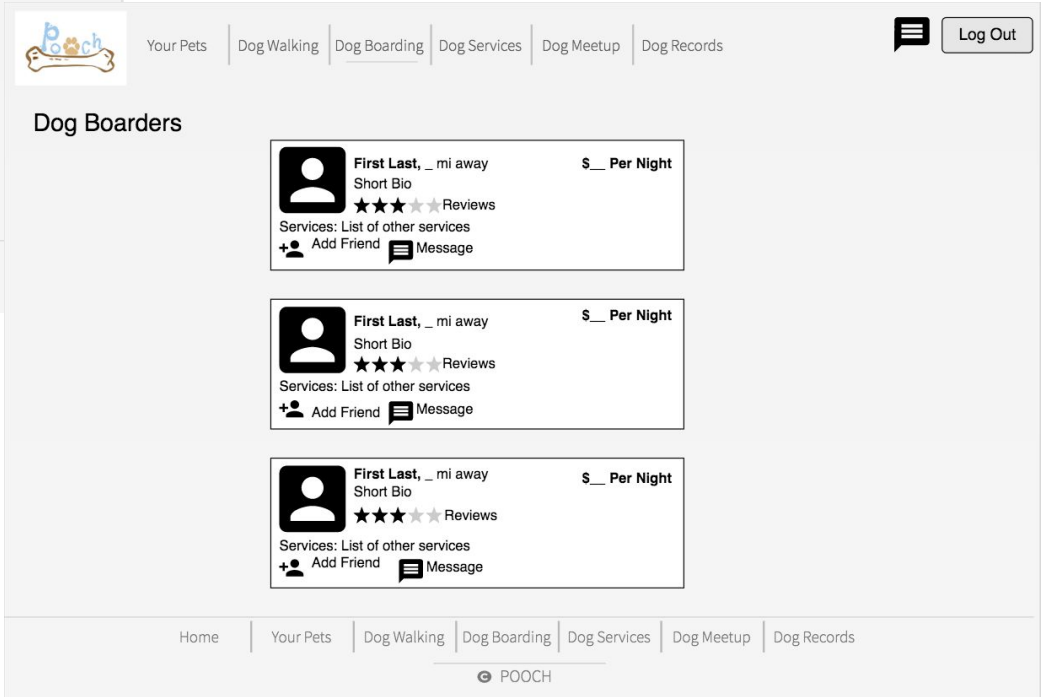
POOCH


Your Pets
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Add Friend
Message
Home
Your Pets
Dog Walking
Dog Boarding
Dog Services
Dog Meetup
Dog Records
POOCH

Pooch

Your Pets | Dog Walking | Dog Boarding | Dog Services | Dog Meetup | Dog Records

Log Out

Dog Boarding

When do you need a Boarder?

Select your Dates

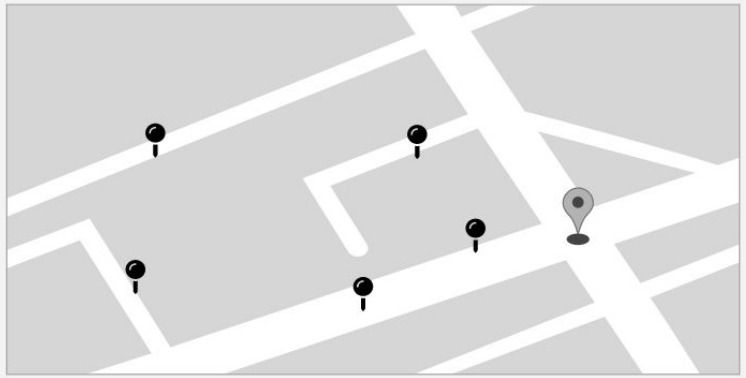
Location

Select your location

Choose your Dog

Lucky

Dog Boarders Near You



Search

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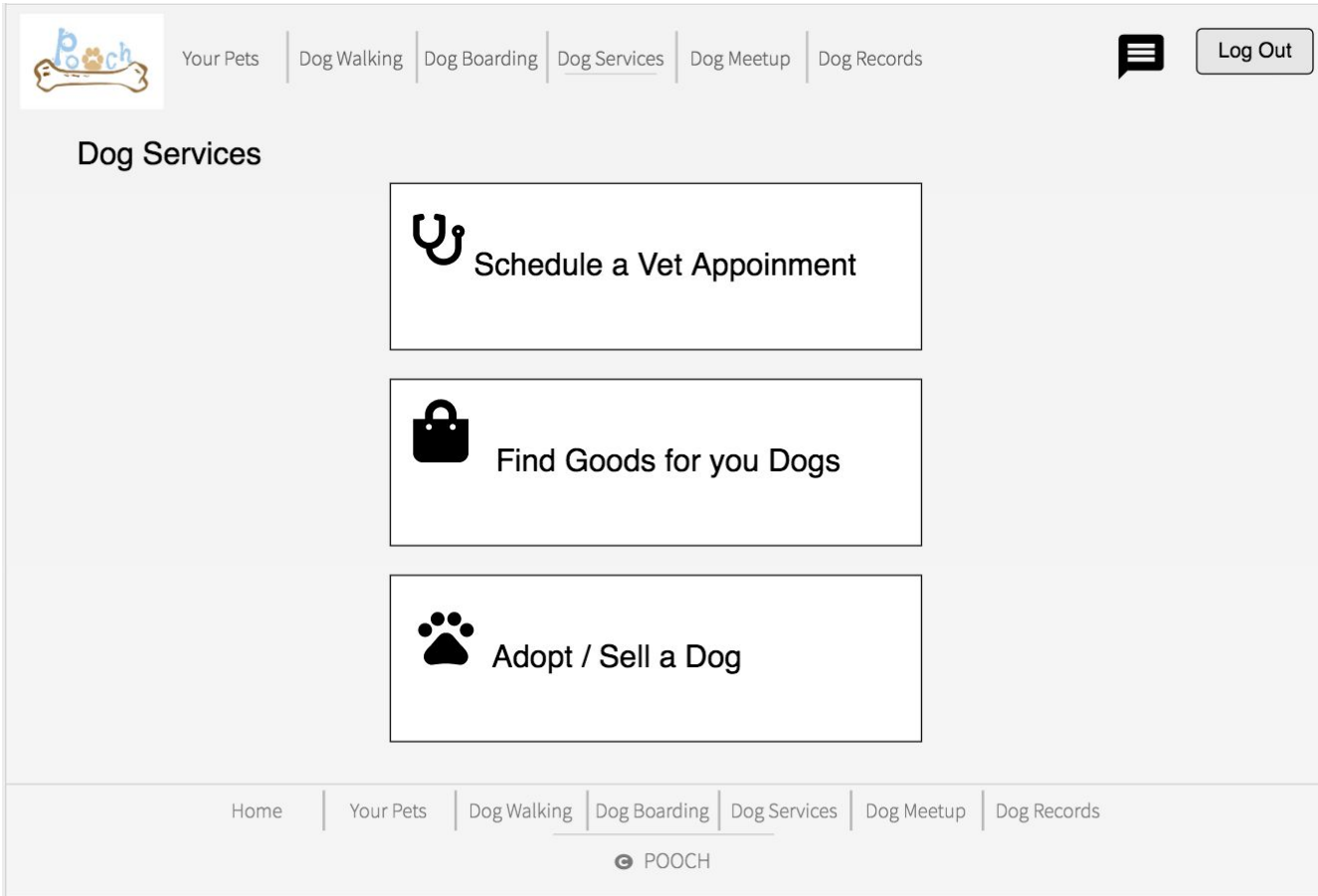
Add Filter


Pooch
Your Pets
Dog Walking
Dog Boarding
Dog Services
Dog Meetup
Dog Records
Log Out
Dog Services
Schedule a Vet Appoinment
Find Goods for you Dogs
Adopt / Sell a Dog
Home
Your Pets
Dog Walking
Dog Boarding
Dog Services
Dog Meetup
Dog Records
POOCH

Interfaces

1. User Interface (UI)
    a. Design emphasis on anticipating what users might need to do and ensuring that the interface elements or features that are easy to access, understand, and utilize. UI connect concepts from visual design, interaction design, and information architecture.
2. Admin Interface
    a. Back end that is responsible for storing and manipulating data. Once logged in, authors can use the admin interface to set up and develop a project, manage its structure and content, install extensions, and perform other tasks.
3. External API
    a. Application programming interface, is a way to programmatically interact with a separate software component or resources. We are using Google API for Sign In page.

Non Functional Requirements

1. **Portability:** It needs to be able to move from OS to OS without any problems.
2. **Integrity:** Privacy of information, such as name, email etc should be kept private.
3. **Availability:** the system shall present a user with a notification informing them that the system is unavailable.
4. **Usability:** The new product shall be easy to use by adult members (age 18 to 80) of the public.
5. **Reliability:** Reliability depends upon how accurate the features of the applications work.
6. **Maintainability:** The system will not be down for maintenance more than once in a 24-hour period.

Performance Requirements

- The product is based on the **web** and has to run from a **web server.**
- The product shall take **initial load time** and depending on the internet connection and depending on the number of users active on the software.
- **The major performance depend upon the hardware and the system** the application is working on.
- The **performance** may also vary depending on how long it takes to **return a query from the full database**.
- The data entered through the application should be **more secure and even the connection to the database should be secure**.

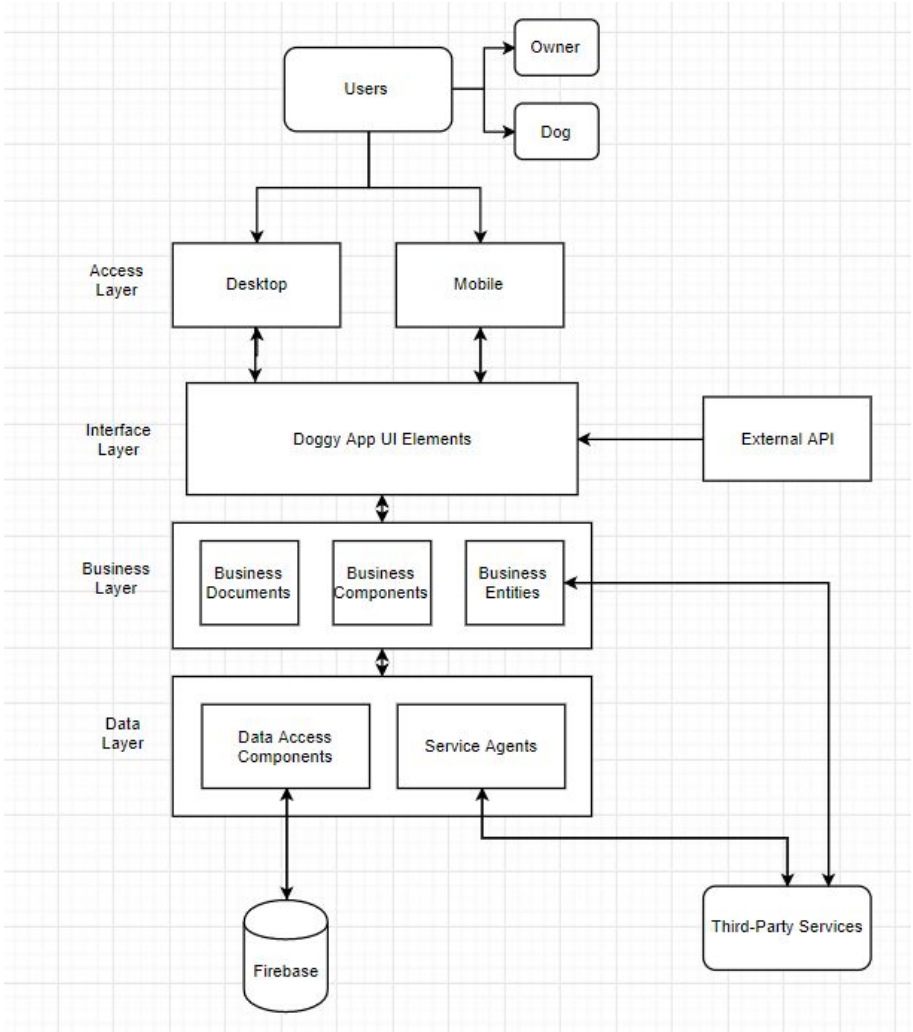
Future Iterations

- The mobile application version of the web application, which is not just mobile friendly, but can also be downloaded from the app store on the devices.
- An extra add on could also be the enable GPS service from the device, which helps to locate your device's location, instead of the user manually writing his location (city or zip code).
- Tracking system which allows you to keep track of your dog's location.
- Log and monitor use choices to better improve Machine Learning outputs.

System Component Diagram

LAYERED Architecture approach
4-layer architecture:

1. The access layer
2. The interface layer
3. The business layer
4. The data layer



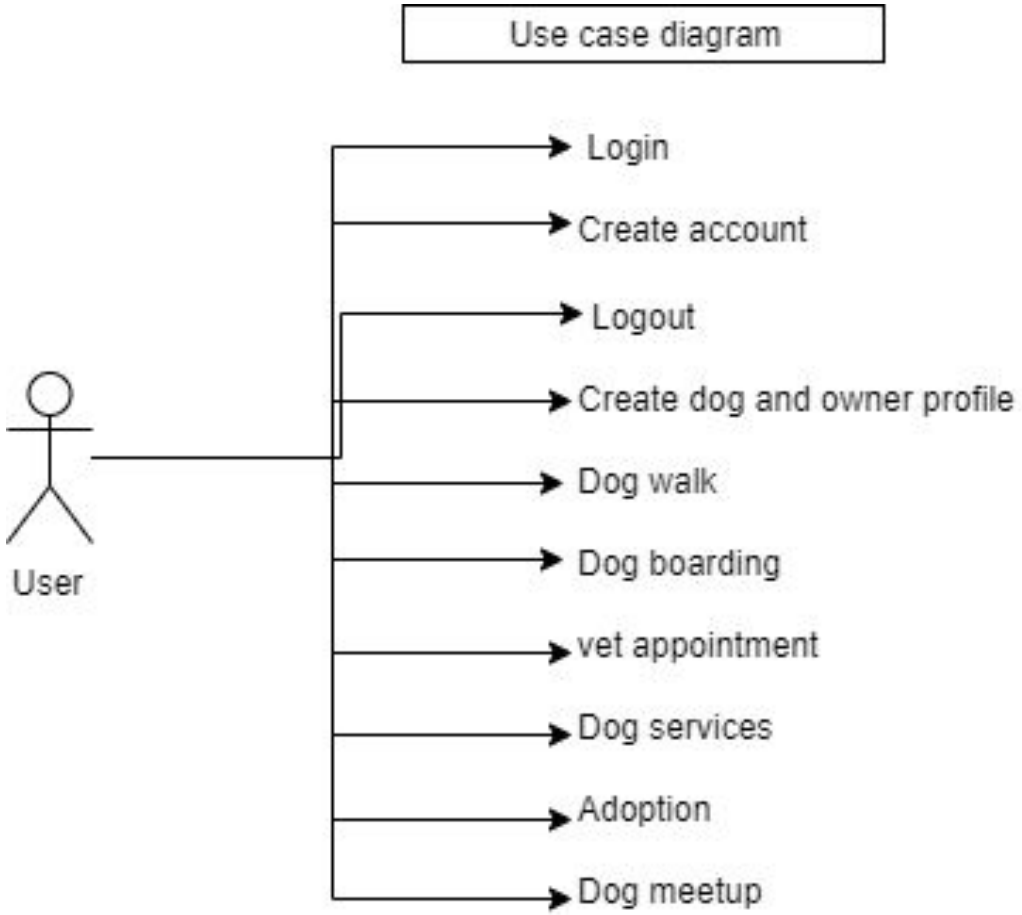
Quality and Quantity Standards

- Layered architecture, so different teams can work on different layers.
- Advantages of layered architecture:
  - Re usage of lower level layers.
  - Layers make standardization easier.
  - Each layer has its own function.
  - Changes made to one layer, does not affect other layers.
  - Addition or modification of functions and modules easier.
- Layered integrated with client-server type of architecture.
  - Divide tasks into smaller units, so services requested can be handled faster.
  - Splitting tasks into smaller threads to faster process a request.

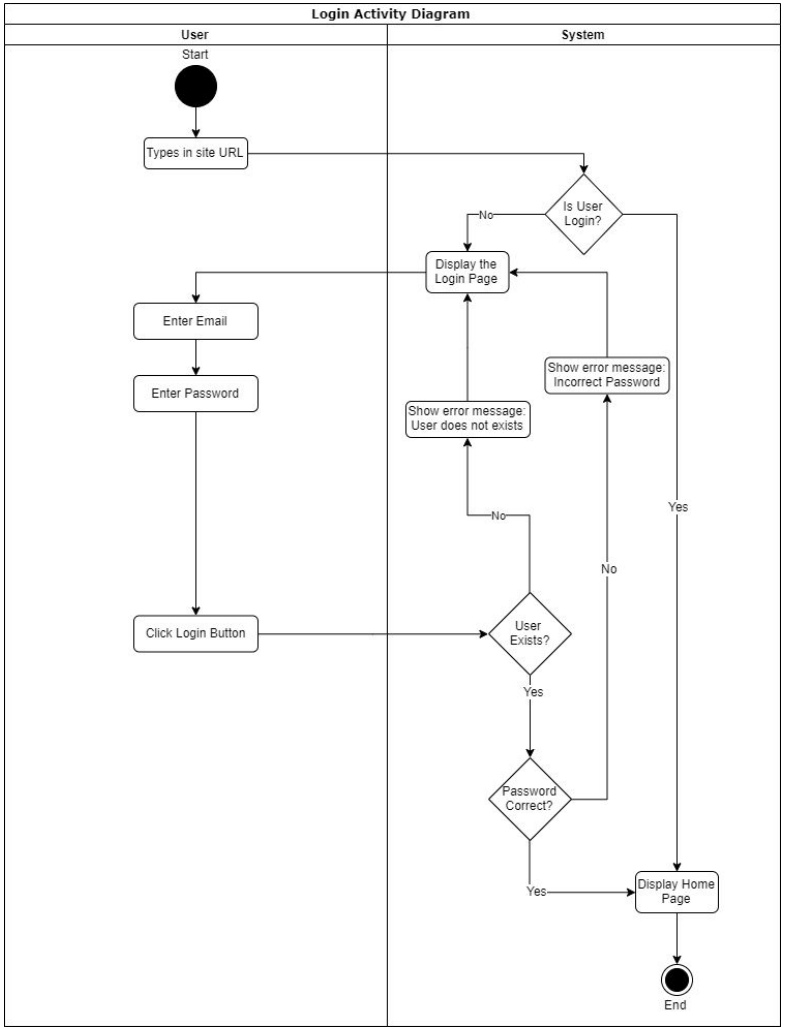
Analysis Diagrams

1. Use case diagram
2. Activity diagrams
3. Sequence diagram
4. Data flow diagram

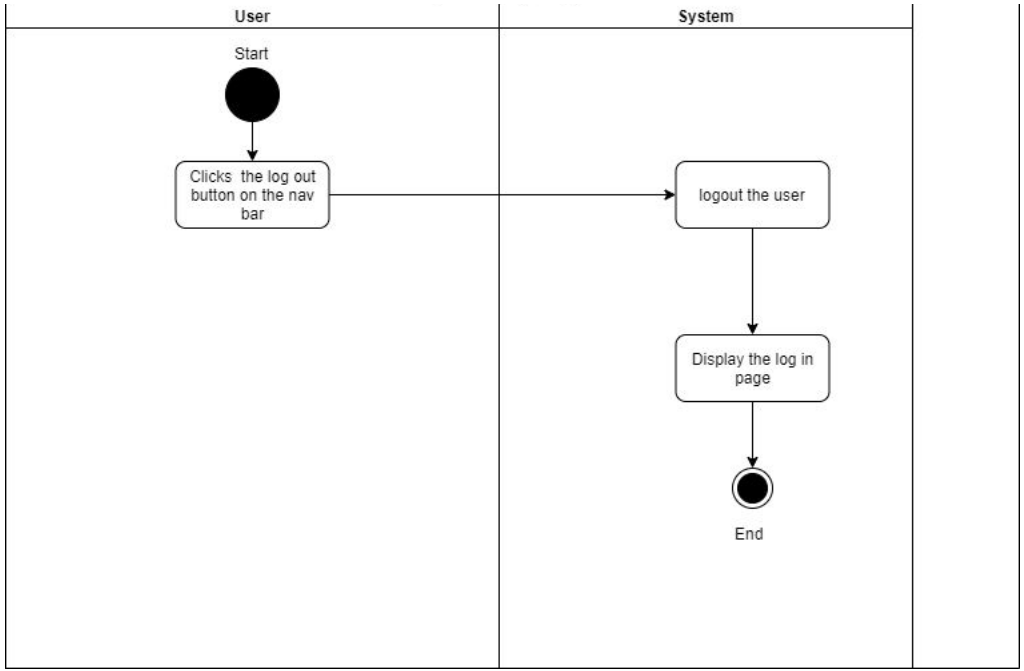
Use Case Diagram



Activity Diagram:



Activity Diagram(Contd):



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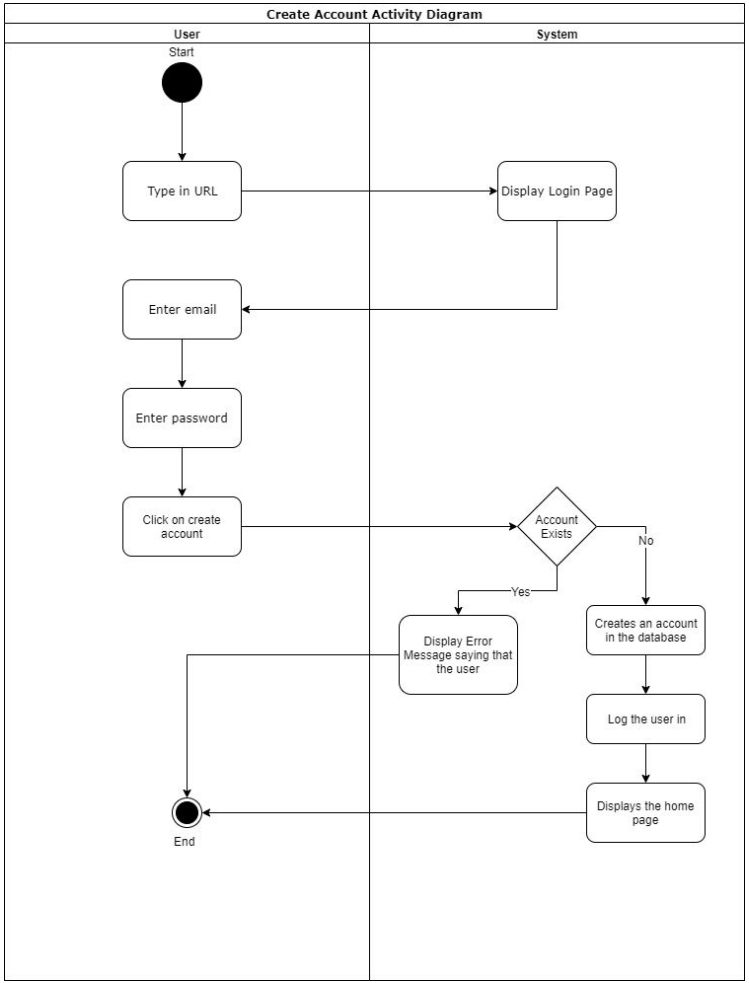

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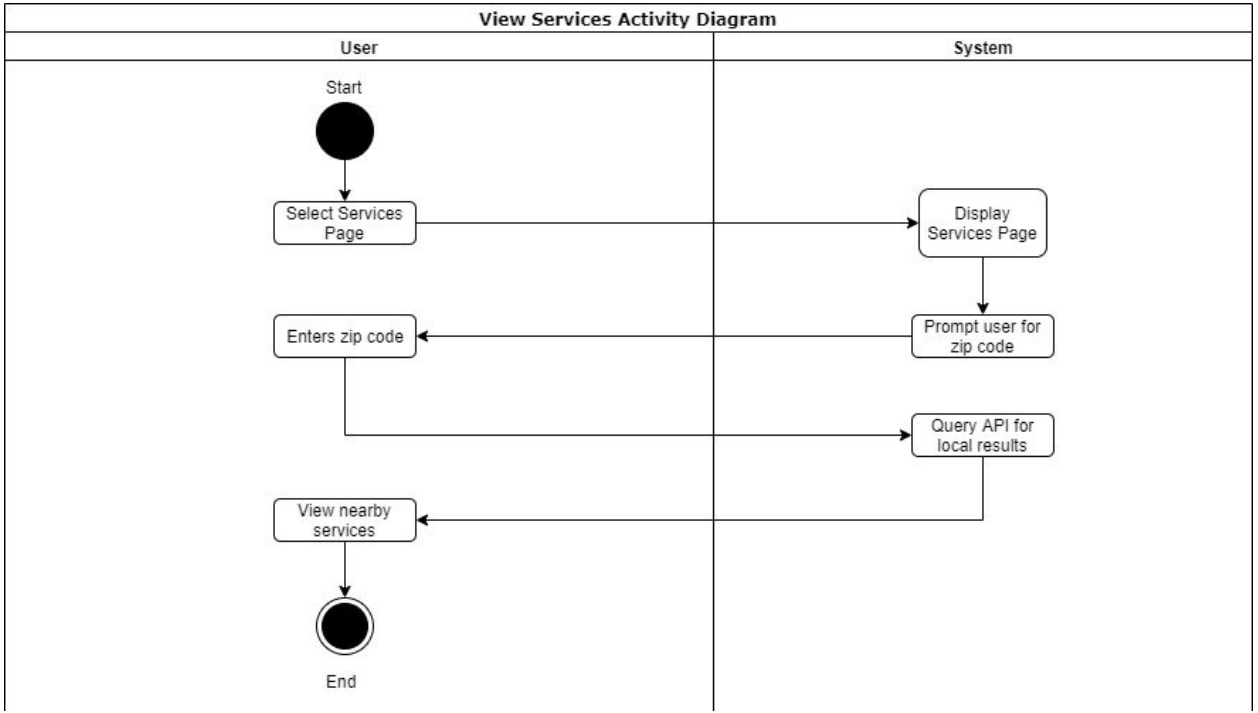

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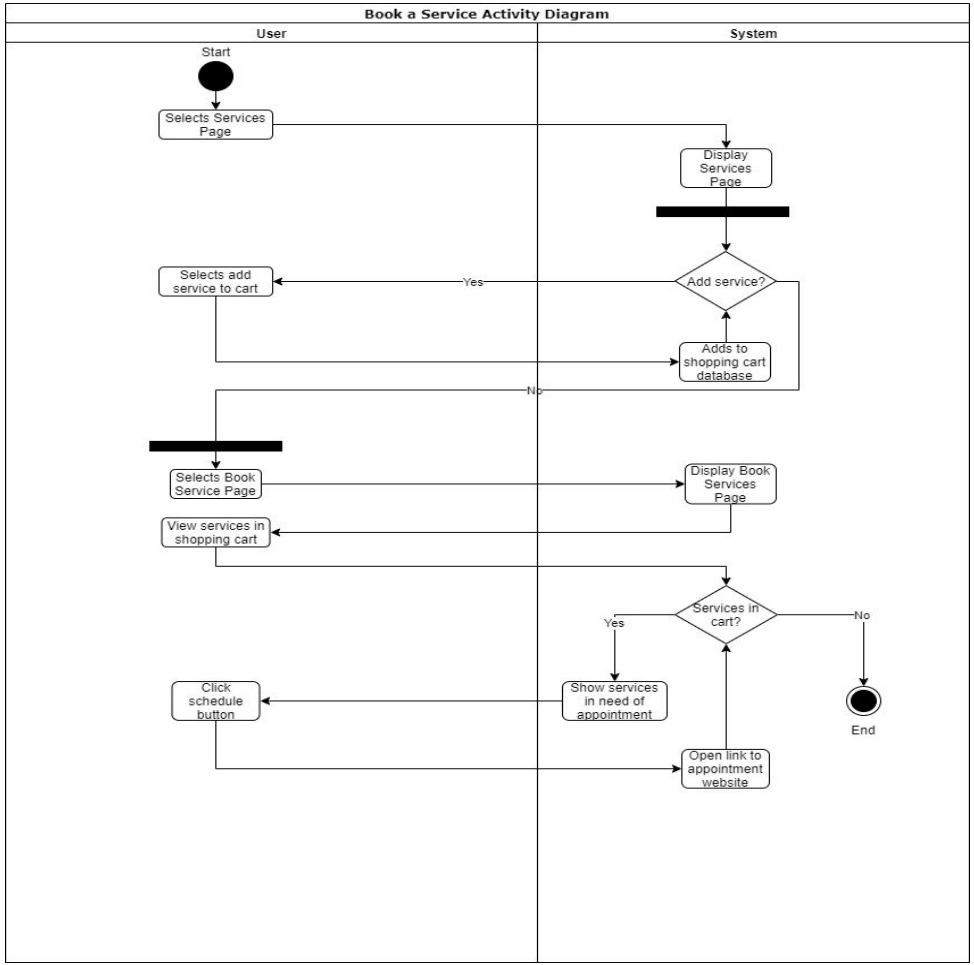

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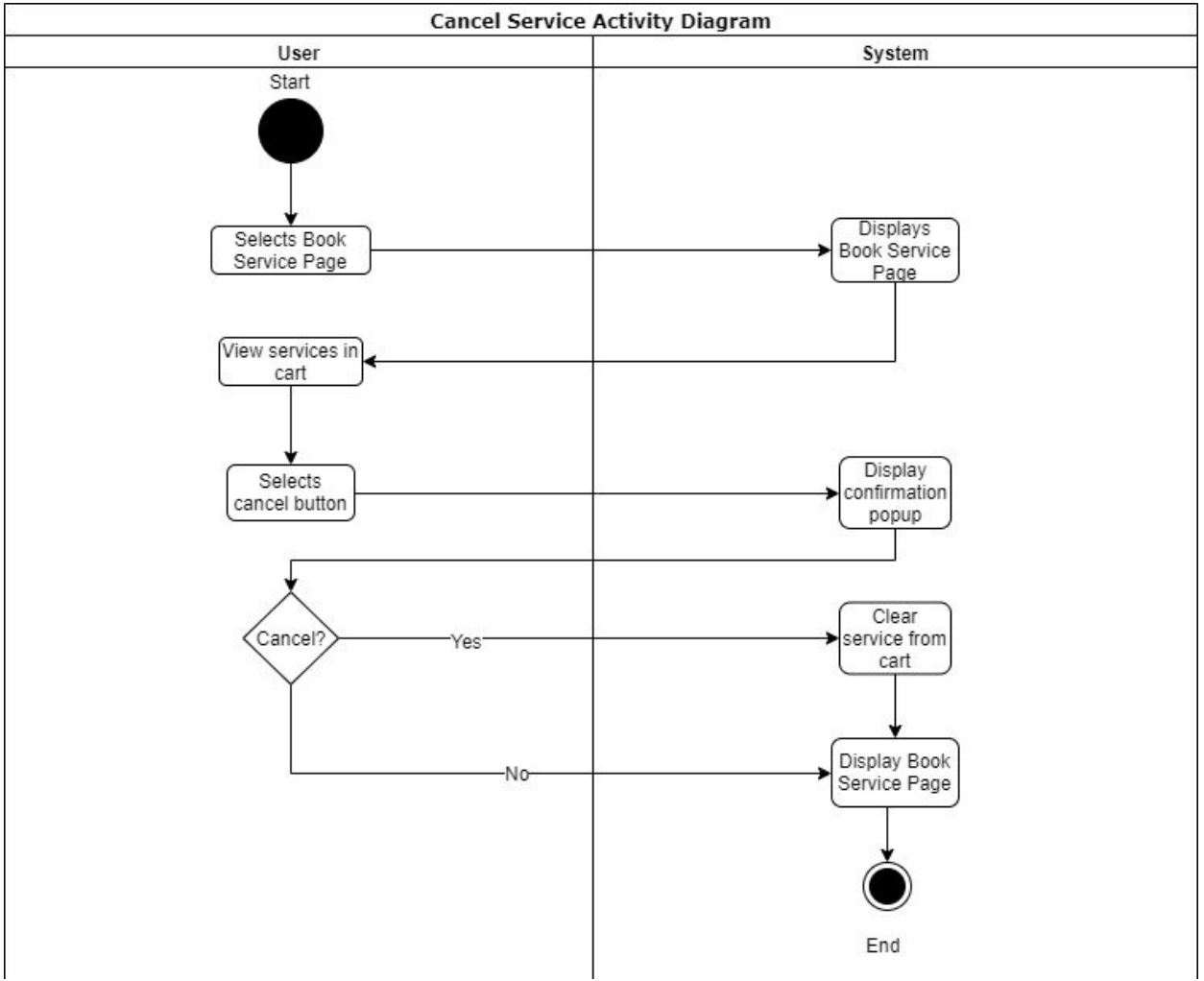
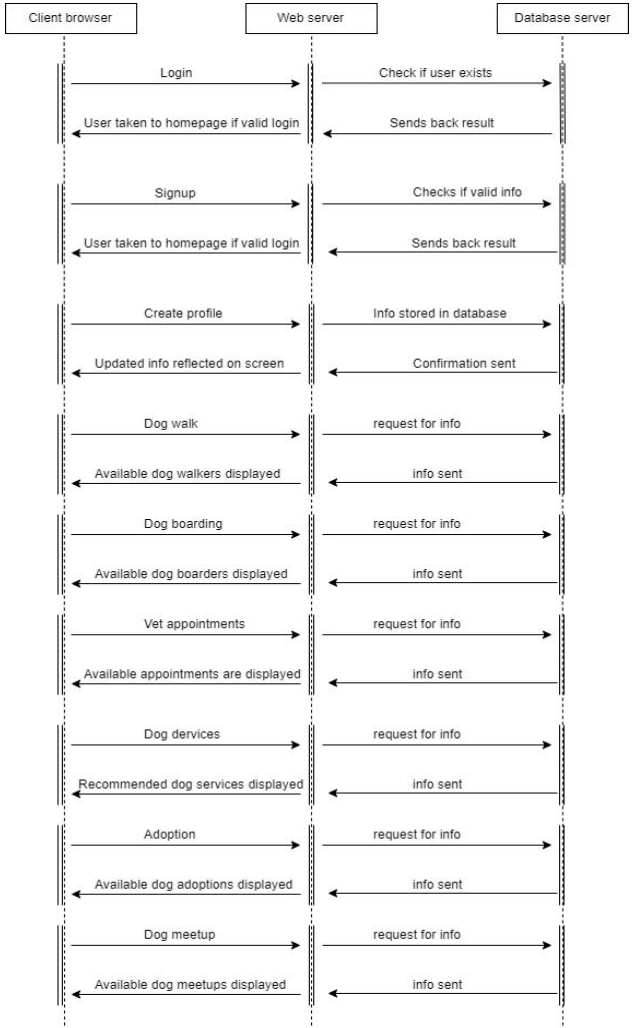
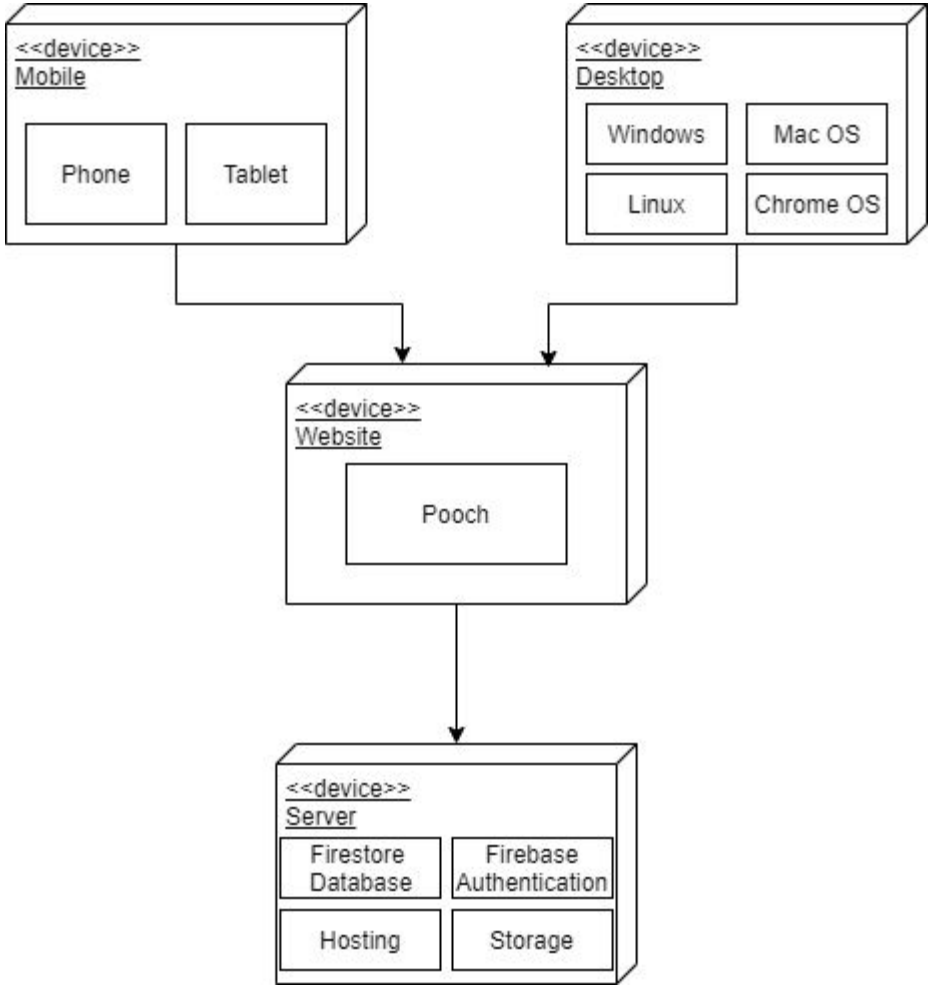


Sequence Diagram:



Data Flow Diagram:



Object and Method identification

Object:	Implementation:
User	Dog Owners, Dogs
Website	Pooch Web App
Database	Firebase

Object and Method identification(contd)

Method:	Implementation:
User Story #1	Sign in with social media
User Story #2	Sign in
User Story #3	Sign up/Add profile
User Story #4	Visit home page
User Story #5	Logout
User Story #6	Navigate through pages
User Story #7	View services
User Story #8	Search services
User Story #9	Book services
User Story #10	Cancel services

Design Patterns

Server-client architecture:

-We are using firebase which uses server-client architecture.

-Good to model a set of services where clients can request them.

- Scalability and monetization is an advantage.

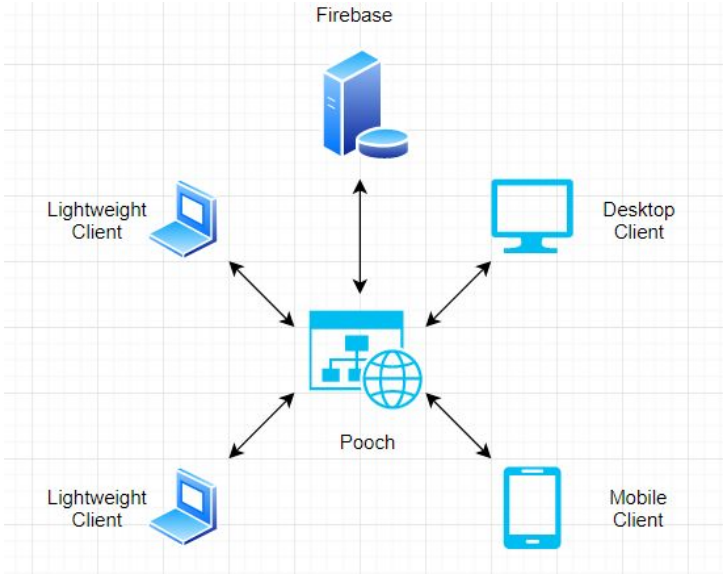
- Centralized server, permissions to all network resources can be granted by a smaller number of support staff configuring those permissions in the server.

- Fail safe system: application never goes offline due to server failure.

Alternative: Layered architecture:

-It makes standardization easy.

-changes can be made easily within layer without affecting other layers.



Tradeoff analysis:

Decision:	Benefit:	Cost:
Use Firebase for backend of the application	Hosting and authentication external to application. Less work for developers. Better security.	No control over hosting or ownership. Must trust Google to protect user data.
Create web app instead of android application (more work) or desktop application (less work)	Accessible from any device	Not accessible without the internet. May not be formatted correctly for all mobile devices.
Link to services instead of charging customers on services' behalf	Increased scalability. Faster distribution.	Loss of potential profits by taking a cut of revenue directly

API choices:

-Google API for signup and login for every user.

-This API would also be used to find nearby dog grooming and dog walking services.

Cloud Decisions:

-All user data is stored in the cloud

-All service information and vendor contact information is stored in the cloud

Security Decisions:

-Fire Authentication will handle the security for user accounts

-User data is stored on and secured by Google servers

-Concerns the risk of sharing state among different components

Logs/Monitoring Devices:

-Machine learning better machine

-The design should be simple as possible

-Security should not make worse the user experience

External Server Application

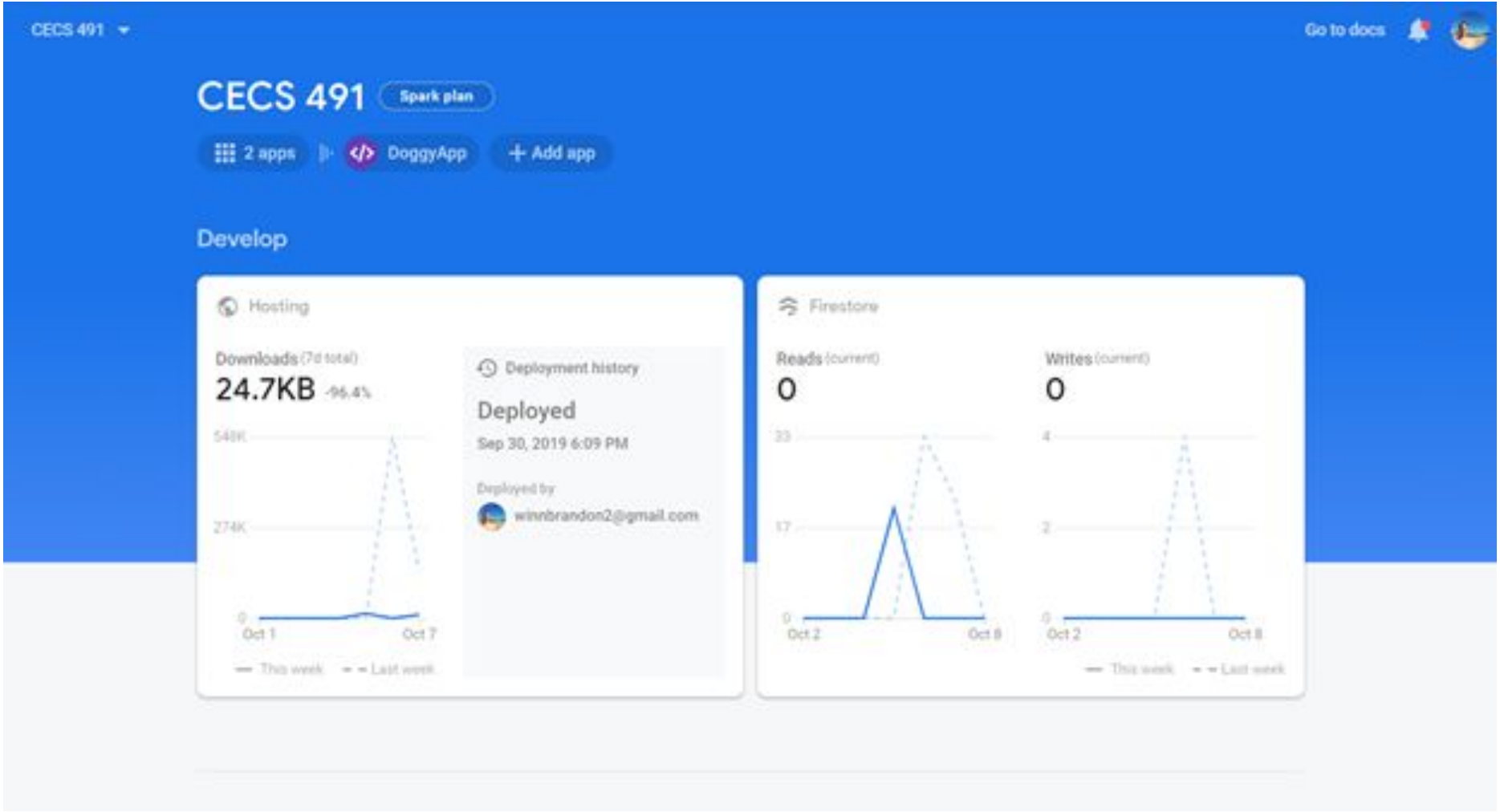
-A real time database and website hosting service, owned by Google, to simplify the backend for web developers. By using Firebase, developers can focus on the UI and application logic, without having to worry about implementing their own security or database rules.

What is the goal of Firebase' interface design?

-The interface of Firebase allows tight integration between the users' data, the developers application, and other Google services.

What capabilities does Firebase have?

-Firebase simplifies the login process by enabling developers to easily implement social media sign in functionality.
- The database aspect allows for the creation of collection, tables, and documents in a NoSQL server.
-The Fire store cloud storage access allows developers to store limited files in the cloud that are relevant for their application. This can entirely mitigate the need for users to download anything locally for the web app to run properly.
-Hosting by Firebase means developers of small applications do not have to pay for website hosting.
-The functions section will not be used for this application but allows quick access to customizable Firebase cloud console functions.
-Finally, the machine learning kit grants developers access to many Google machine learning tools.


CECS 491
Go to docs
CECS 491
Spark plan
2 apps
DoggyApp
Add app
Develop
Hosting
Downloads (7d total)
24.7KB -96.4%
548K
274K
0
Oct 1
Oct 7
This week
Last week
Deployment history
Deployed
Sep 30, 2019 6:09 PM
Deployed by
winnbrandon2@gmail.com
Firestore
Reads (current)
0
33
17
0
Oct 2
Oct 8
Writes (current)
0
4
2
0
Oct 2
Oct 8
This week
Last week

Capabilities:

- Our server would be capable to provide facilities for both web applications and mobile website viewing. This gives us multiple server environments to run our application on.

- All the components must be able to perform in the same environment as their web servers, and their main job would be to support the building up of dynamic pages well.

- It should be capable of handling load balancing well enough so that we as developers can help and focus on the business aspect of the application better.

- The administrative code would be able to properly deploy, manage all the layered components of the application.

React makes it easier for the application to have a front-end framework while still running on a back end system.

Interface design

-The layout of the UI in the first release is based on the wireframe mockups from the Product Requirement Document which take into consideration three factors.

a) The web app must present a clean, professional look. No unnecessary clutter is allowed.

b) There must be a convergence between desktop and mobile design. This prevents the need to double the UI workload for the developers and prevents user frustration when switching from a feature-rich desktop experience to a trimmed-down and potentially feature-lacking mobile version.

C) No feature should be more than three clicks away. The application should maximize routing, so all pages are easily accessible. New users should be easily able to find what they are looking for. This will reduce the learning curve and could help boost user retention.

Machine Learning

-Pooch will use **Google's Cloud Vision API** to derive information from the images our users upload to the site. This will allow the integration of several security features which would otherwise not be possible for a small project.

a) Cloud Vision will ensure the profile pictures of owners are people and the profile pictures of dogs are actually dogs. This will reduce instances of troll accounts.
b) The API will help identify inappropriate content.
c) Duplicate photos could be detected to catch fake users stealing the profile pictures of other users.

This Cloud Vision API mainly works with the neural networks Machine learning model.

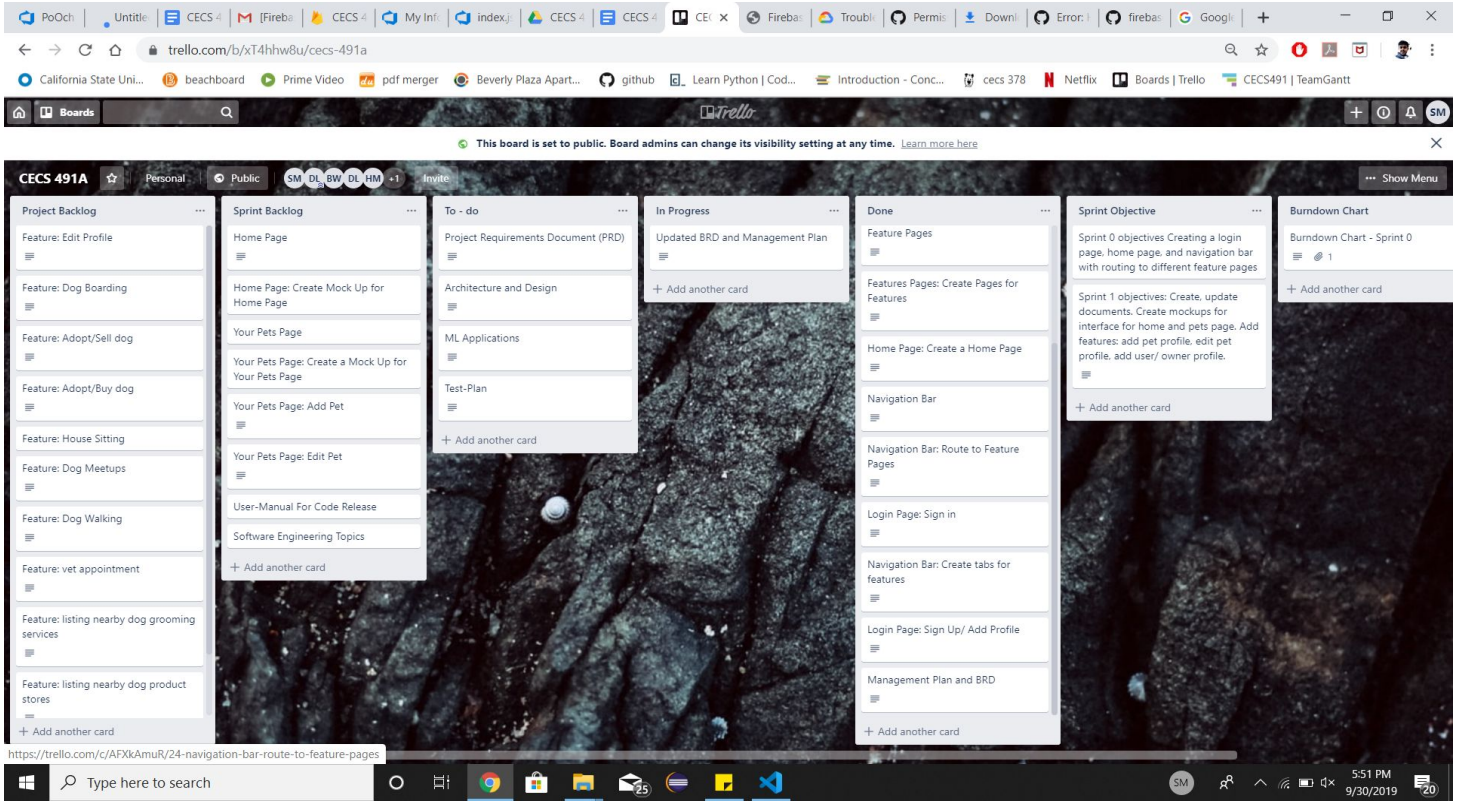
Neural networks are a set of algorithms, modeled loosely after the human brain, that are designed to recognize patterns. They interpret sensory data through a kind of machine perception, labeling or clustering raw input. The patterns they recognize are numerical, contained in vectors, into which all real-world data, be it images, sound, text or time series, must be translated.

Sprint Goal

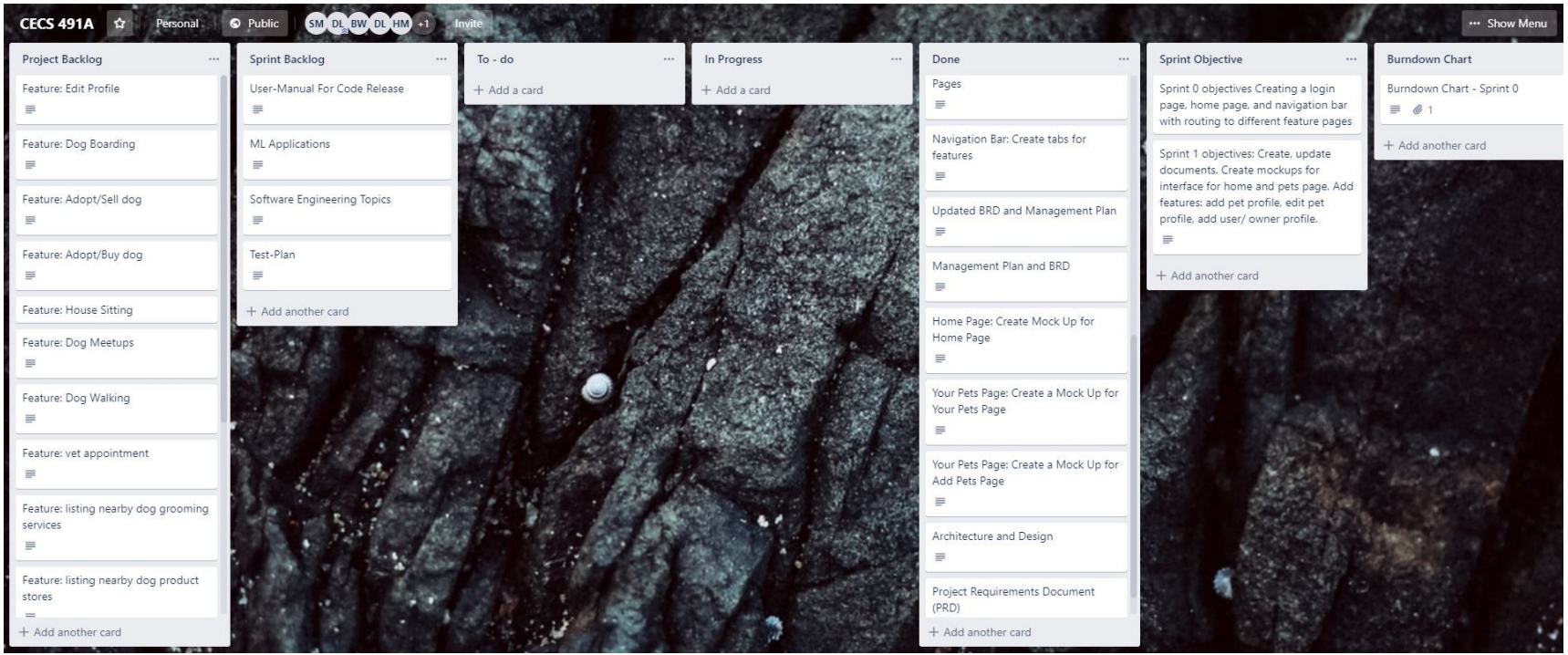
★ Primary objective of this sprint was to work on Product Requirements Document, Create a design and architecture document, Update business requirement documents, management plan.

★ Next objective was to create mockups for homepage, pets page and even feature pages.

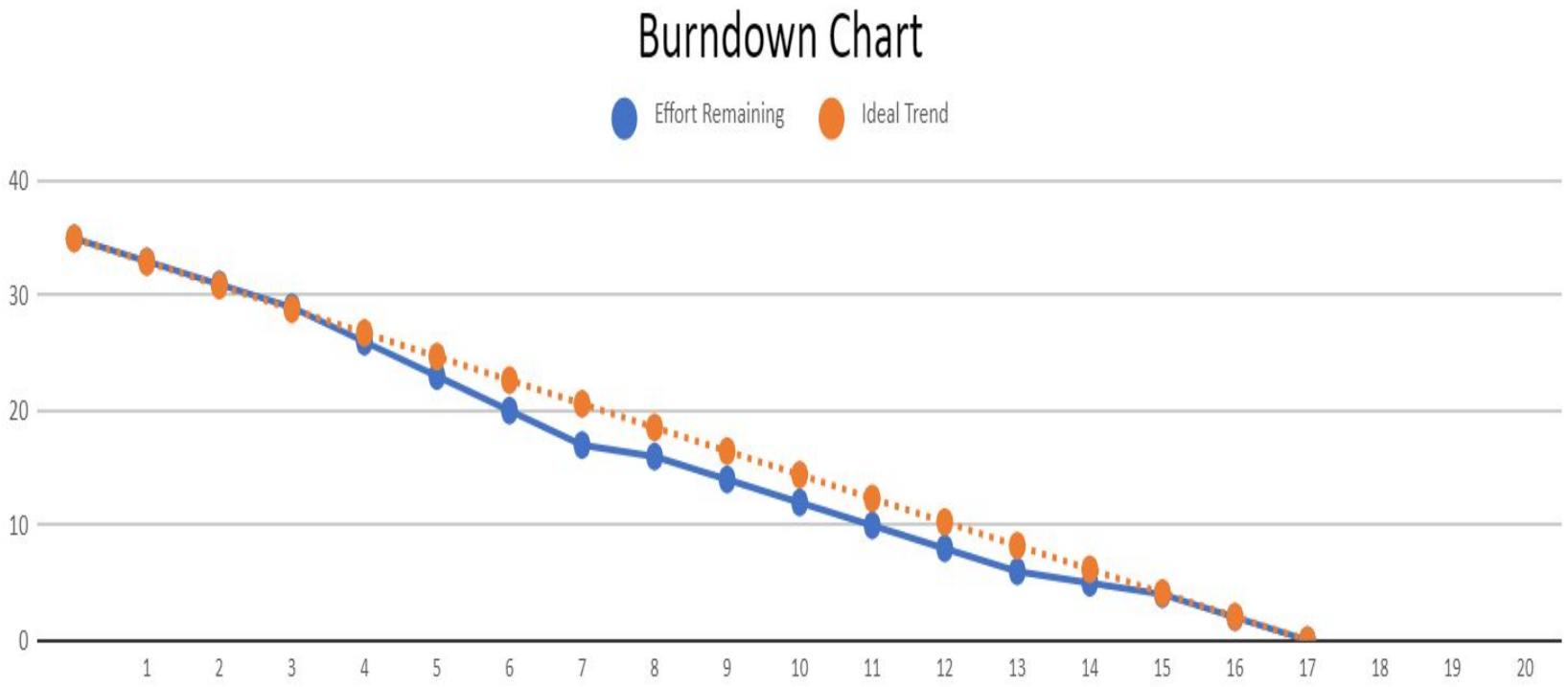
Sprint Board - Trello (Before)



Sprint Board - Trello (After)



BURNDOWN CHART



Project tracking matrix

Project Pooch

Project Start Date 09/30/2019

Project Manager Shashi Kumar Kadari Mallikarjuna

Project End Date 09/30/2019

Task	Task Type	Task Status	Est SLOC	Actual SLOC
Project requirement document	Documentation	Done	Nil	Nil
Architecture design	Documentation	Done	Nil	Nil
Activity diagram	Documentation	Done	Nil	Nil
Tradeoff analysis	Documentation	Done	Nil	Nil
Updated BRD	Documentation	Done	Nil	Nil
Updated management plan	Documentation	Done	Nil	Nil

Priority	Assigned To	Assigned Date	Deadline	Estimated Hrs	Start Date
High	All	09/30/2019	10/6/2019	30	10/1/2019
High	All	09/30/2019	10/10/2019	30	10/6/2019
High	All	09/30/2019	10/13/2019	5	10/10/2019
High	All	09/30/2019	10/15/2019	10	10/13/2019
High	All	09/30/2019	10/16/2019	10	10/15/2019
Medium	All	09/30/2019	10/16/2019	5	10/16/2019

Total Hours Spent 90

Project Progress 100.00%

Sprint Retrospective

Did we meet our sprint goal?

Yes, we finished all the tasks that was planned for this sprint on time.

Sprint Velocity(current)

- ★ 35 points were planned in this sprint.
- ★ We were able to complete 35 points on time.
- ★ Commitment per person every week = 5 hours.
- ★ Team commitment per sprint= 90 hours.

Sprint Velocity(Next Sprint)

Planning on completing 35 points in the next sprint.

How did the burndown chart look?

The burndown chart looked linear. We finished the tasks in right pace.

What worked well in the sprint?

The right amount of tasks were assigned in this sprint which could be completed in the given timeframe.

What could be improved?

More code release for next sprint.
Better understanding of machine learning models and its implementations.