

Meta University Eng Project Plan Template

Doggr

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GitHub Repository Link: <https://github.com/cartervanharen/Doggr>

Overview

Doggr is a social platform designed to facilitate connections between dog owners based on the personalities of their canine companions, with the goal of arranging playdates and fostering a sense of community among dog lovers.

- Category: Social Networking
- Story: Doggr is a social platform designed to connect dog owners based on the personalities of their dogs. Users can sign up and create a profile for their dog, including information about their dog's personality, breed, size, and interests. Doggr will then use this information to suggest playdates with other dogs in the area that have similar personalities and interests using an algorithm.
- Market: Doggr is a social platform designed exclusively for dog owners who want to socialize their dogs and connect with other dog lovers.
- Habit: The usage of Doggr will vary depending on each user. Doggr can be used multiple times a week to connect with dog owners, or be deleted after a user connects with the desired number of other dog owners.
- Scope: The initial scope of this app will include user profiles of dogs where other dog owners can connect with each other based on an algorithm.

Product Spec

User Stories

User 1: dog owner who is looking for doggie playdates.

- Who is the user? What's their name and where are they from?

Bob is the name, they are from San Francisco.

- What is their age and access/sophistication with technology? Do they mainly use a phone, computer, etc? How often might they access your site?

Bob is a millennial, he has a phone and is quite sophisticated with tech. He spends most of his free time on his phone and walking his dog. He can access Doggr from his phone.

- What is their motivation for using the app?

Bob noticed that his dog is lonely. Bob has no friends. Bob wants to meet friends that have dogs so that the dogs can play.

- What are potential pain points for this user?

Joining the app, and finding matches.

User 2: dog owner who is looking for doggie playdates.

Who is the user? What's their name and where are they from?

Sarah is the name, she is from New York City.

What is their age and access/sophistication with technology? Do they mainly use a phone, computer, etc? How often might they access your site?

Sarah is a Gen Z, she has a phone and is very familiar with tech. She spends most of her free time on her phone and walking her dog. She can access Doggr from her phone.

What is their motivation for using the app?

Sarah noticed that her dog is lonely. Sarah has no friends. Sarah wants to meet friends that have dogs so that the dogs can play.

What are potential pain points for this user?

Joining the app, and finding matches.

User Stories:

"As a dog owner, I want to create a profile for my dog, so that other dog owners can see information about my dog."

"As a dog owner, I want to swipe through profiles of nearby dogs, so that I can find potential playmates for my dog."

"As a dog owner, I want to message other dog owners directly through the app, so that we can coordinate a playdate."

"As a dog owner, I want to see reviews and ratings of other dog owners, so that I can make informed decisions about who to meet up with."

"As a dog owner, I want to mark my dog as unavailable for playdates when they are sick or injured, so that other owners know not to swipe right during those times."

"As a dog owner, I want to see a calendar of upcoming playdates within the app, so that I can easily keep track of my schedule."

"As a dog owner, I want to filter search results by dog size and breed, so that I can find suitable playmates for my dog."

"As a dog owner, I want to add multiple dogs to my profile, so that I can manage all of their playdates in one place."

"As a dog owner, I want to earn badges and achievements through using the app, so that I can showcase my dedication to my dog's social life."

"As a dog owner, I want to have a matchmaking algorithm that will pair me with compatible dogs."

Required

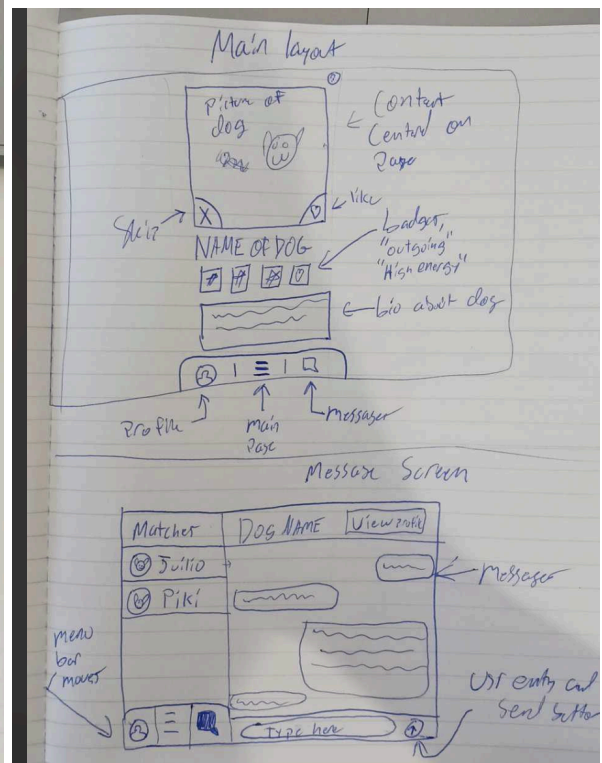
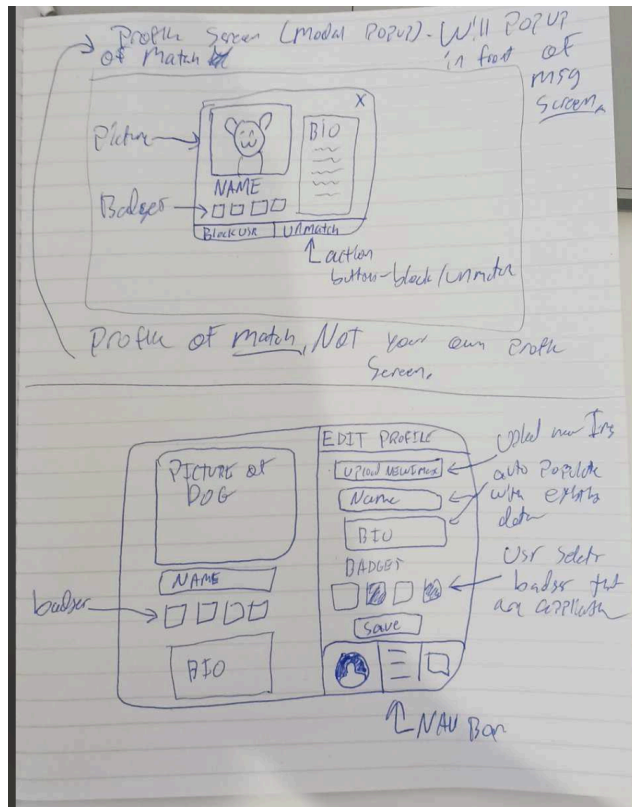
- Users can edit their profile
- Users see other users and like their profiles
- Users can message each other if they both like each other

- Users can block other users they have matched with
- Users can change filters to see certain profiles based on certain criteria such as location.
- An ML algorithm (based on profiles that the user has liked already and who they have been liked by) will show other user profiles based on what Doggr predicts to be the best match.
- Dummy profiles will need to be created for demonstration purposes.

Optional

- Users can upload videos in addition to photos.
- Users can send video clips in Doggr chat.
- Users can do live audio calls on Doggr
- Users can do live video calls on Doggr
- Users can pay for a premium version that allows them to be more selective with the users they see.
- The matchmaking algorithm uses AI to analyze the description of the dog.
- The matchmaking algorithm uses AI to analyze the photos of the dog.

Screen Archetypes



Data Model

I will need a few tables in my database. I need one for the user, which will include, users name, dogs name, email, address, various metrics about their dog, password. Then will have a table dedicated to the relation status, so this table will include multiple users and their relationship, matched, blocked, etc. I also need a table to record existing matches to ensure a user doesn't see any repeats and so the matchmaking algorithm can learn from. I also need a table dedicated to messaging.

Server Endpoints

Post- Post user profile info- users name, dogs name, email, address, various metrics about their dog, password

Post- Post user actions - likes/blocks/matches from users.

Get- Get info of the next user shown.

Navigation

Project Requirements

[Based on the [Project Guide](#), describe how your project is going to be fulfilling each of the base project requirements.]

Technical Challenges.

Technical Challenge #1 - [Name/Small Description]

What

Matchmaking algorithm that uses some sort of machine learning to suggest users to other users.

How

I'm going to explore different ML models to match different users up. This could be accomplished by creating scores for each user for different categories, for example energy level, if the profile suggests that the dog is very high energy, they may be a 7/10 on an arbitrary scale I create. I can look at a given user's liked profiles, and create a linear regression model that will suggest their targeted dog energy level that is most desired. I could also use neural networks to suggest users however this will require additional research.

Technical Challenge #2

What

A messaging section of Doggr where users who matched can message in real time. 15 messages will be loaded and then a user can load

How

I'm going to have a database table dedicated to just messages. When you open the chat, it will do a get request and the backend will look for the 15 most recent messages between the 2 users in the chat and send them. When a user sends a chat, 4 fields will be sent, timestamp, from user, to user, message.

Database Integration

I will use Postgres as that is what I have learned from codepath.

External APIs

Google maps api to determine what users can be shown due to location target radius.

Email api that allows me to verify a user's email during signup.

Potential:

AI that can analyze text and images to provide additional details about a profile.

Authentication

Users will be forced to verify their email at signup, after signup a user can then sign in to Doggr with their email and a password. I will use cookies to show specific content to users across the website regardless of if they refresh or navigate.

Visuals and Interactions

- Interesting Cursor Interaction - Like or Pass button will show interesting animation upon hover.
- UI Component with Custom Visual Styling - When a user likes another user, a cool animation will happen.
- Loading State - New potential matches will be loaded in real time.

Timeline

Project execution will start in Week 4 of MU. Based on the previously defined requirements, user stories and technical challenges, use the following table to scope out and plan a timeline for deliverables over Week 4 - 9. You can be as detailed as you need, ranging from simply mentioning the user stories, or dividing them into sub-tasks.

You are free to modify the table, add / remove rows or columns, whatever fits your style! The important thing here is that you focus and prioritize certain aspects of your project so you don't get behind and are ready to deliver the MVP - remember your required features should be code complete before the end of Week 8, including both technical challenges!

We also encourage you to leverage project tracking tools such as GitHub Issues or Meta's internal Tasks / GSD tooling to keep manage individual units of work.

MU Week	Project Week	Focus	User Stories
4	1	Get UI setup as well as setup the database for this project. Build the log in features. Also figure out how/where to host images.	User can sign in and create profile Dummy profiles will need to be created for demonstration purposes.
5	2	Work on populating profiles in the matchmaking screen. Implement some sort of basic matchmaking algorithm. Add google maps api to find distance between users	<ul style="list-style-type: none">- Users can view other users.- Users can block other users they have matched with- Add filters
6	3	Research and implement ML matchmaking algorithm	<ul style="list-style-type: none">- An ML algorithm (based on profiles that the user has liked already and who they have been liked by) will show other user profiles based on what Doggr predicts to be the best match.
7	4	finish matchmaking algorithm	<ul style="list-style-type: none">● Users can view other users.

8	5	Add messaging feature	<ul style="list-style-type: none">• Users can message each other if they both like each other
9	6	Upload project to hosting service / stretch features	.
10	7	For this week, we have a bunch of extra activities prepared to give you a quick dive of what it is to work at Meta. You will find activities around using internal tools and frameworks, and even committing code to our internal repositories.	/