Team PCS (Potato Chip Scapegoat) (Team #5) Project Report

Team Members: Jackson Trust, Kate Pendavinji, Megan Kang, Ahmed Alali, Tyler

Apple

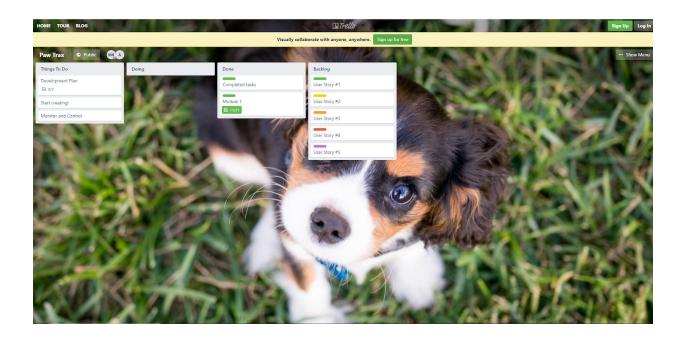
Application Name: Paw Trax



The Paw Trax app is a web application to help dog owners track their pets' health through activity and factors such as diet, weight, and training. Utilizing tools such as Xampp and MySql we created a database storing the age, weight, and progress of individual dogs. Our home page includes a carousel consisting of the option to log in if not already logged in, a sign up form if you don't already have an account, and a page to check your dogs' progress if you are signed up. Our activity page consists of charted data through the form of a graph showing how much time your dog spends outside and how much distance the dog traveled. Then we have the exercise page which isn't connected to the database, but is an informative resource for Paw Trax users based on their dogs age and size. Similarly, the training page helps users promote health through informative research and external links which are included within the page. Our explore page is a resource for users to access the dogs that are in the database, and when you add a dog this gets updated accordingly. The progress page is used to update your dogs' weight and calculate your dogs' average weight increase/decrease for the week based on the difference between the last two weight entries. Finally, we have a profile page where you can update your pets' progress, activity and add new pets if necessary! Each feature complements the other features providing for a functional, user friendly application design.

Project Tracker: Trello

https://trello.com/b/qQzWLfwS/paw-trax



## VCS:

https://github.com/CSCI-3308-CU-Boulder/Potato-Chip-Scapegoat

## Contributions:

Jackson's Contributions: My initial commits consisted mostly of creating an architecture plan and architecture diagrams. Then I created a test plan regarding the functionality of all of our pages. I also created scripts to insert data into our database for the actual application. I created our explore, home and profile page and worked extensively on getting our backend connected to our frontend. I made it so that all of our inputted data was translated properly into the functionality of our app and so that we can access it when running it. I also worked on uploading the application to heroku as well as figuring out how to make charts and graphs work with our project.

### Architecture Plan: Jackson

We will be using FlutterApache Cordova (hopefully) to build our project as a-mobile, cross-platform (type)web application. We will make use out of SQL (using PostgreSQL-or-, MariaDB, or MySQL) and the front-end languages (HTML/CSS/JS), as well as C++ initially, as we have the most combined experience with that, but we may end up using other languages like C#, Python, Node.js, or Java depending on our needs and bounds within our app development framework. Our database and SQL code will be responsible for storing and utilizing information from users and their accounts containing information about their dog and their other activities with that dog. The front-end languages will be used to present data to the user and interact with the application through an intuitive UI. The mid-tier languages like C++ and C# will be used to piece together everything, essentially being the branches of communication between the front and back ends. If need be, other tools like Python, Node.js, or even technologies like JSON, jQuery, and Angular will be used in the development of the mechanism to breach the gap between our data and UI.

#### Test Plans:

Progress page functionality

Requirement 1:Dogs related to the owners account are shown

Requirement 2:Update button links to a form

Requirement 3:Once the form is submitted the dogs age and weight are

updated and shown on the progress page **Testing:** The functionality will be tested by creating an account with multiple dogs, and filling out the update weight or age form and checking if the progress page is updated afterwards.

Home page/profile page and account creation

Requirements: The Home page will contain a link to a form to create an account, while at the same time we'll have a profile page that shows a user their own information based on their login information (and possibly their cookie if we get to that point). Through the profile page, a user will also be able to update their information and that should be sent through the system to the database.

**Testing:** This feature will be tested by monitoring the data and authentication of the user when a new profile is created, when a user updates their profile information, and when a user adds dogs (last portion may also be explored in progress page testing).

Explore page functionality

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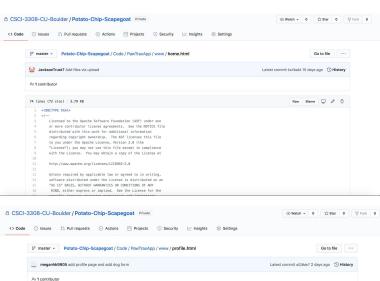
<!-- Bootstrap core CSS -->

**Requirements:** By accessing the page, you will be able to see all of the dogs as cards in the system (possibly ranked by location or # of times interacted with if feasible) and be able to see the cards such that they will be able to contact the owners of specific dogs.

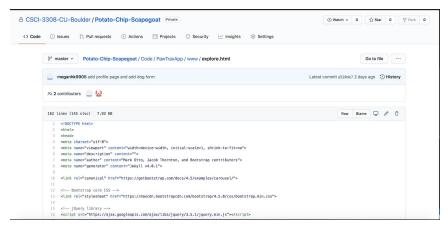
**Testing:** The testing for this feature will be documented through noting the data that's being collected and passed through our application, which we'll be able to see through various console.log statements and dynamic HTML updating.

Jackson: Created scripts to insert data into the database and was the secondary person designing the database. Also facilitated the formatting and writing of the milestone document. GitHub commit code: f5b896f915312422e0ac039b69a8cda0c8b74458

Jackson: Worked on establishing the cordova and database infrastructure and software installations for the team. Also worked on writing project challenges for the milestone write-up. Commit code here: 7ebb9fab4fe1a320b2e4237ea38ac5c28e0804f3



Raw Blame 🖫 / 🛈



Megan's Contribution: My first few milestones consisted of curating a development method and sorting the requirements of the project. Then I moved on to create our server.js file and added endpoints to the routes for the applications calls. I then went on to implement the activity page as well as the exercise page. The activity page monitors dogs activity while the exercise page serves as an informative page. I also worked on connecting our frontend to our backend, but mostly stuck to implementing the front end and getting all of our pages to be uniform.

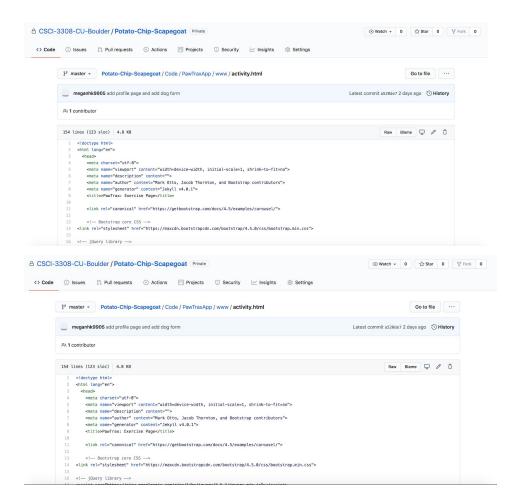
## Development Method:

Our team will be using the iterative(Agile) software development methodology. We will start by planning the general scope of the project, then start the iterative process of planning, launching and monitoring. Customer contribution is important for our project development so we will continuously provide a working program and collect customer feedback to modify our app. We will be using Trello for our project board—to keep track of the tasks that need to be completed and list customer feedback on our backlog.

## Requirements: Megan

Megan was the primary person working on this part of the project, and so the document detailing the requirements for the project is in the repository in the path Milestones/Megan's Contribution.pdf.

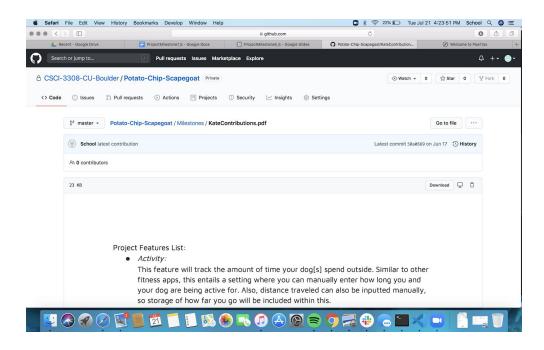
Megan: Created a server.js file and added get requests to add all endpoints for the routes the application intends to call. It is still a work in progress and will further be edited to implement in apache cordova for the next milestone. Commit code: ce3899defc6398378e3351ac58e3e45bf172bbe2

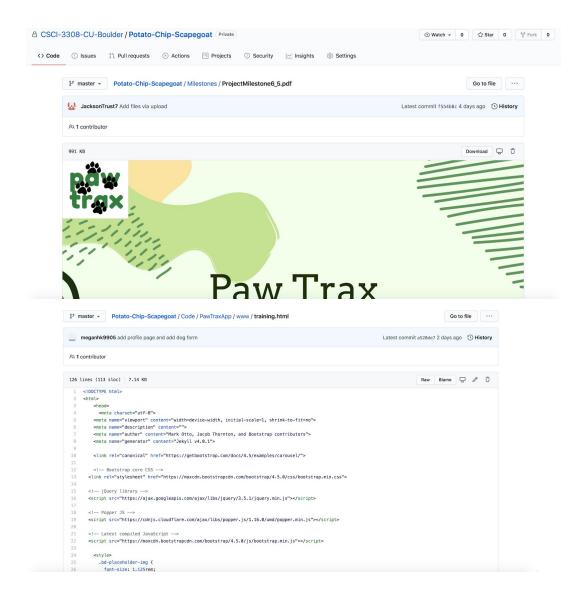


Kate's Contributions: With the initial few milestones I worked on creating a project features list and a description of basically all of the different features and tabs we have on our website and their functionionality. Then as for actual project implementation I developed a training html page which links people to helpful ways to train their dog in order for them to remain healthy. I also put together our powerpoint for our final presentation! I will also be one of the main contributors for this lab report.

Paw Trax is an application which utilizes data collected on different dog breeds in order to promote active, healthy dogs. Users can enter their dog breed, age, and weight to get a veterinary-approved recommendation on their dogs activity. Users can also input their dog's activity such as going to the park for one hour, a mile long walk, etc. Along with inputting the data manually, you can also track your walking distances through GPS and have cut out, labeled routes to choose from. We will also implement features for the overall health of the dog, so if physical activity goals are met they can get treat, food, or enrichment toy recommendations as well.

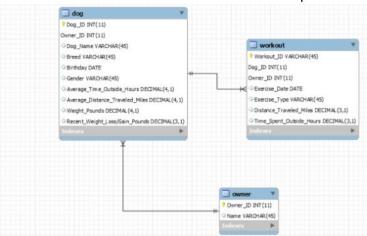
There will be a social aspect of the app as well. You can connect with your contacts and keep up with your friends' dogs' and have the possibility to meet up and socialize your dogs. On top of this there may be an explore feature where you try to find other dogs outside of your circle who you may socialize your dog with. This explore feature could also offer an opportunity for people to walk other people's dogs who are occupied. Since there will be access to your information, there will be privacy settings included in order to provide the ability to be selective on who sees your daily routes and activities. We can also include a selection of dog parks in entered zip codes.

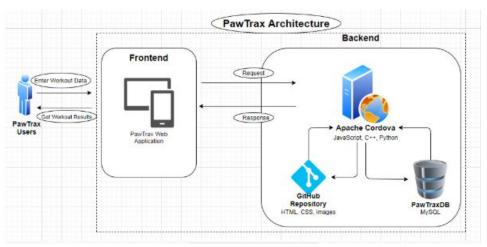


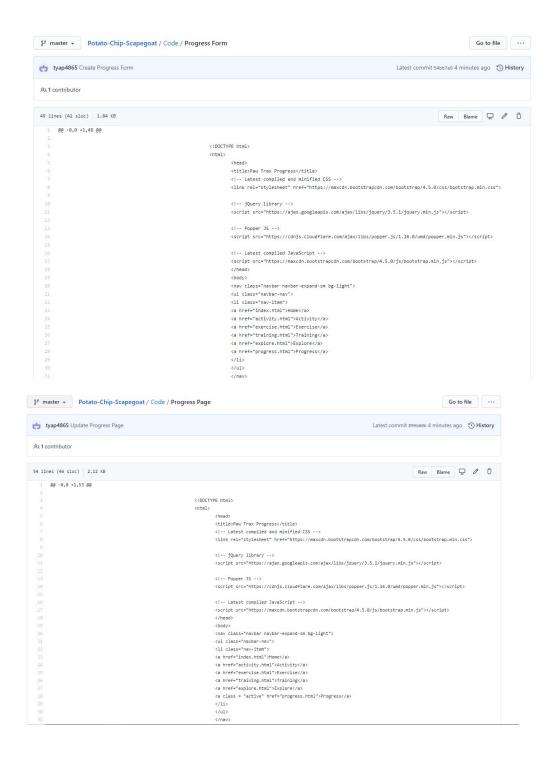


Tyler's Contributions: My contributions to the group include creating the logo, name, and the concept of creating a workout app for dogs. I also made a use case diagram and worked on the database design by making a relational diagram and organizing the entities and attributes in 3rd normal form. Along with this relational diagram I used MySQL to generate the DDL scripts for the database. In addition to that I created the architecture diagram showing the front end and back end of the application. I assisted in making the testing plans for the website as well. On the website I worked on the Progress feature by creating a Progress page that shows the cards of the owner's dogs and a progress form where the owner can update their dog's weight.

Owner	Dog	Workout
OwnerID	OwnerID	DogID
Name	DogID	WorkoutID
Profile Picture	Pet Name	Excercise date
	Breed	Exercise type
	Birthday	Distance traveled
	Gender	Time spent outside
	Avg time spent outside	
	Avg walking distance	
	Weight	
	Recent weight loss/gain	







Ahmed's Contributions: I Worked on the project plan using Trello; the app was not that useful with tracking the project. I was responsible for the activity feature which tracks the dog's outside time, I couldn't get to work due to the short time. Megan and Jackson completed the activity page and got it working.

Deployment: <a href="http://pawtrax.herokuapp.com/">http://pawtrax.herokuapp.com/</a>

- Project Milestone 7 document titled as Project Milestone7\_5.pdf Be sure to:
- Tag your repo with "Final Submission" (make sure to push your tag to your repo)
- Include a README in your repository:
  - Describe repo organization/structure
  - Describe how to build/run/test/etc code
  - If using a Continuous Integration system, provide a link to the CI status page

# Create a single PDF for the team

- This project milestone 7 submission should be a PDF named ProjectMilestone7\_[TeamNumber] included in your github repository by midnight on the due date.
- Submit a link to the repository on Canvas