

Functional Requirements:

1.
 - a. Title: Give exercise options based on user input
 - b. Description: The basic flow will start by the user inputting their dog's size, weight, age and breed. The owner may also be able to choose what kind of exercise plan they want for their dog. Depending on the information processed, the app will output matching exercises for their dog.
 - c. Actors and interfaces: Dog owner
 - d. Initial Status and Preconditions: The program must be ready to receive input from the user.
 - e. Step 1: When the user opens the app, the user will see the homepage of the app.
Step 2: The homepage will have a section where the user is able to input information about their dog
Step 3: When the user enters the information, the program will provide the user with various information about exercise routines for their dog.
 - f. Post Condition: The system will provide a page of information the user can look through and offer options other than exercise routines that the user can look for their dog.
2.
 - a. Title: Looking for information using tabs
 - b. Description: The user must be able to look for different types of data about dogs without having to input any information about their dog.
 - c. Actors and interfaces: Dog owner
 - d. Initial Status and Preconditions: The home page must have various tabs that are categorized and lead to different information.
 - e. Step 1: When the user opens the app, the user will see the homepage of the app which provides different tabs that are categorized.
Step 2: Depending on which tab the user chooses, the app will process the selection and move the user to a different page.
 - f. Post Condition: The program will provide a set of information based on the user's choice and will allow the user to go back to the home page, go back to the previous page or look at different tabs.
3.
 - a. Title: Looking for information using search feature
 - b. Description: The user must be able to search anything in the search bar and will be provided with information that most closely matches the user input.
 - c. Actors and interfaces: Dog owner
 - d. Initial Status and Preconditions: The home page must provide a search bar on the top of the page for the user to click on and use.
 - e. Step 1: When the user opens the app, the user will see the homepage and a search bar.
Step 2: The user will be able to click on the search bar and input what they would like to find.

Step 3: Once the user presses the enter key or clicks on search, the app will redirect the user to a set of possible information that most closely matches the user input.

Step 4: When the user clicks on one of the provided outputs, the program will redirect the user again to the selected information page.

- f. Post Condition: The program will be either at the page of the output that the user has chosen or the program will be at the page with the matching outputs where the user can search again if they do not see what they were looking for.
- g. Alternative Cases: If the app cannot find any results that match the user's input the app will notify the user that there were no matching results.

NonFunctional Requirements:

1.

- a. Title: Usability: Intuitiveness
- b. Description: The user must be able to learn and understand the buttons and should be able to find all services that are provided by the app.
- c. Actors and interfaces: Dog owner
- d. Initial Status and Preconditions: The home page must show most of the functionalities of the app the user can choose from and they must be easily understandable.
- e. Step 1: When the user starts the app, the user will be able to see most of the services that the app provides.
Step 2: All the functionalities will have titles or descriptions about what they can do for the user.
Step 3: The user will be redirected based on what was chosen from the home page.
- f. Post Condition: The program will be either at the redirected page or remain at the home page.

2.

- a. Title: Performance
- b. Description: The user should not have to wait for more than 5 minutes for the system to conduct whatever the user wants it to do.
- c. Actors: Dog owner
- d. Initial Status and Preconditions: The app should be in a stable state at the initial page the user is stationed at.
- e. Step 1: When the user chooses an action to conduct, the app will start the loading process.
Step 2: The user should be redirected in less than 5 minutes.
- f. Post Condition: The program will be at the redirected page that the user chose.
- g. Alternative cases: If the user chooses a different option while the page is loading, the runtime will increase slightly.

3.

- a. Title: Availability

- b. Description: The app's functionalities should be available more than 90% of the time. During maintenance hours, only the features that are going through changes should be effected and others shall remain available to the user.
- c. Actors: Dog owner, Administrators
- d. Initial Status and Preconditions: The app should be up and running while the user keeps the application open.
- e. Step 1: When the user uses the app during non maintenance hours, the app should run normally without errors.
Step 2: If it is during maintenance hours, the app should run the features that are not undergoing maintenance normally and the ones that are should not be available.
- f. Post condition: The program will be functioning properly.