Installation and Instructions

Animal Adoption Matching App

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1. Installation

In order to start the backend and install dependencies, Node.js (Node) needs to be installed on the user's computer. After Node is installed, utilizing Node Package Manager (npm) command-line tools will aid in installing different packages and managing their dependencies.

1.1 To install node on the user's system, follow the instructions on the [Node website](#).
1. As this project is still in development, this mobile application will be locally viewed.

1.2 The following steps are provided to install the backend of this project, locally:
1. Open a code editor (e.g., VS Code)
2. In the terminal, clone the backend by entering the following:
   git clone https://github.com/teresanguyen503/AAMServerSide.git
3. Install the dependencies with the following command-line:
   npm install

1.3 The following steps are provided to install the frontend of this project, locally:
1. Open a code editor, a new window that is separate from the backend
   a. In the terminal, clone the frontend by entering the following:
      git clone https://github.com/teresanguyen503/AnimalAdoptionMatching.git
2. Install the dependencies with the following command-line:
   npm install

1.4 As Animal Adoption Matching App is a React Native mobile application, Expo can be used to preview and debug the application. Expo is used as a production-grade framework. Expo provides multiple ways to view React Native code within minutes.

1.4.1 Expo Go is a sandbox that enables developers to quickly experiment with building native iOS and Android apps. It is the fastest way to get started. Expo Go can be downloaded from the App Store for iOS users or the Google Play Store for Android users. Once downloaded, the user is able to create and log in to their account.

1.4.2 Alternatively, users can use an Android Emulator and an iOS Simulator to view and test their React Native Expo code. While these are great options, the Expo Go app was primarily used for this project. For

instructions on how to set up an Android Emulator, follow the [Android Expo Documentation](#). For instructions on how to set up an iOS Simulator, follow the [iOS Expo Documentation](#).

1.4.3 Expo allows users to view React Native code on the web. This project, however, heavily relies on dependencies that are accessible to only mobile applications. It is not recommended to use the web version to view this project.

2. Starting the App

After system setup and environments have been established, first start up the backend.

2.1 Open the terminal of the code editor that git cloned the backend repository (refer to 1.2). The user is to ensure the change in directory to the root of the project by entering in the following command-line:

cd AAMServerSide

At the root of the project, type in the following command-line:

node app.js

Upon success, the terminal should return:

Server is listening at http://localhost:3000
MongoDB Connected: ac-vckircw-shard-00-00.4iopv3c.mongodb.net

Once the backend is ready, the frontend can start communicating with the server.

2.2 Open the terminal of the code editor that git cloned the frontend repository (refer to section [1.3](#)). The user is to ensure the change in directory to the root of the project by entering in the following command-line:

cd AnimalAdoptionMatching

You will also need to set the baseURL to your IP address for the app to work. Go to api > client.js and change baseURL from 'http://{someIPAddress}:3000' to `http://{yourIPAddress}:3000`.

To get your IP address:

Windows users:
Go to your Command Prompt and type "ipconfig /all" and then press Enter. Scroll to the bottom to IPv4 Address to see your local IP address.

<u>Mac users (macOS Big Sur v11.5.2 – other versions may differ slightly)</u>:
Open the Apple menu and click System Preferences. Click on the Network icon, and within the Wifi tab, click "Advanced…". Under the TCP/IP tab, the IPv4 Address is displayed.

*Note that if Expo Go is being used, ensure that the wifi connection is the same for both computer and phone.
At the root of the project, type in the following command-line:
npm start

Upon success, the terminal should return a QR code. Scan the QR code with the Expo Go app (Android) or the Camera app (iOS). The Camera app will direct to the Expo Go app, once scanned. If users are using an Android Emulator or an iOS Simulator, press *a* or *i* in the terminal, respectively. Directions will also be displayed in the terminal under the QR code.

While the project is still in development, it is entirely possible for the application to not go as expected and/or the user may want to restart the app. In this case, reloading the app may be required.

2.3 Pressing *r* in the terminal will rebundle the application. If the Expo Go app is in use, the user can shake the phone from side to side, which will prompt an option to *Reload*.

3. Perspective When Not Logged In
Upon launching the app, the Home page is initially displayed.

3.1 Users are able to have a preview of one of the latest news articles and a preview of two animals available for adoption.

3.2 Tap the "View All News" and "View All Pets" buttons. An alert appears to prompt the user to create an account or log in, in order to proceed further in viewing.

3.3 If the user does not have an existing account, the "Sign Up" button allows users to provide the necessary details to successfully register for an account. There are two types of accounts that can be created: admin or public.

3.3.1 Users who are part of an organization and wish to utilize the mobile application as a platform to help animals get adopted should sign up as an admin account.

3.3.2 Users who wish to utilize the mobile application to look for animals to adopt into their home should sign up as a public account.

3.4 After the user signs up for an account, the login screen will be displayed to enter in user credentials to access the full features of the app. If the user already has an existing account, then the user can directly follow the "Sign In" button on the Home Page. When logging in, in the email section you may have to click close to the person icon to start typing.

4. User is Logged In

Whether the user is logged in as an admin or public account, the layout of the application remains the same. The key difference between the type of accounts is within the Account tab. The application is separated into three main tabs: News Feed, Home, and Account.

4.1 The News Feed provides news articles and PR blurbs that were created from an admin account. 10 articles are loaded at a time and are refreshed on every render.

4.2 The Home page remains mostly the same when the user is not logged in (refer to 3.1). The difference is that users are now able to tap "View All News" and "View All Pets" and be redirected to their respective screens. The Sign Up and Sign In buttons no longer appear, since the user is already logged in.

4.3 The Account tab displays the user's email at the top of the screen and the logout implementation at the bottom of the screen. The navigation links in between are what sets the Admin and Public accounts apart.

4.3.1 Admin accounts (refer to 3.3.1) have navigation links that are able to direct the user to view *All Animals, Search, Add Animals,* and *Add News.*

4.3.1.1 When viewing all animals, the user is able to view each animal profile one at a time. Each profile displays the animal's name, image, date available, description, disposition, species, and breed (if applicable). If the user is wanting to look for a specific animal and knows the animal's name, the search bar will find the

animal. The admin is able to update the availability status of the animal with four availability buttons shown below the animal's profile: *Available, Pending, Adopted,* and *Not Available.* There is a delete button present for admin user's to use when applicable.

4.3.1.2 Being able to refine and apply filters when searching for an animal in the database can enable the admin to efficiently search and find specific animals, whether for their own needs or to respond to specific criteria requested by others. This feature allows the admin to filter by Animal Type, Breed, Date Available, and Disposition. The Reset button allows users to conveniently restart their search.

4.3.1.3 Adding animals to the adoption list is crucial to an organization to bring awareness to potential adopters. The admin user needs to fill out a form in order to add a new animal, with fields including: name, date available, description, species, breed, image, and disposition.

4.3.1.4 Adding news articles and PR blurbs helps rescue organizations promote awareness for their animals and provide community engagement. The admin user needs to fill out a form in order to add a news article, with fields including: news title, article byline, and article text, with an optional image. Published news articles will populate to the News Feed, making it visible to all users.

4.3.2 Public accounts (refer to 3.3.2) have navigation links that are able to direct the user to view *All Animals, Search,* and set *Email Preferences.*

4.3.2.1 When viewing all animals, the user is able to view each animal profile one at a time. Each profile displays the animal's name, image, date available, description, disposition, species, and breed (if applicable). If the user is wanting to look for a specific animal and knows the animal's name, the search bar will find the animal. The user is able to Pass or Liked an animal. Passing the animal allows the user to continue on with the next animal profile, while liking the animal leaves the "Liked" button highlighted to remind users to go back to the animal's profile for later.

4.3.2.2 Being able to refine and apply filters when searching for an animal in the database can enable the user to efficiently search and find specific animals, such as finding an animal that best suits the user's home or lifestyle. This feature allows the user to filter by Animal Type, Breed, Date Available, and Disposition. The Reset button allows users to conveniently restart their search.

4.3.2.3 Public users can customize their email preferences by selecting the frequency and types of emails they wish to receive. *Please note that this feature is currently for demonstration purposes only and does not yet connect to the backend, as the app is still under development.*