WORK BREAKDOWN SCHEDULE

This Work Breakdown Schedule (WBS) contains the list of tasks the developers will do within a time period. The tasks will be divided into several phases and each phase includes the task/s that need to be done and a subtask if needed. It also includes the amount of time being allotted in order to finish them.

- **1. Initial Stage** this phase includes the conceptualization of the application before it faces the development phase.
- **1.1. Preparation** this task is all about the conceptualization of the app that the developers want to build and asking for approval before proceeding to other tasks. Overall, this task needs an allotted time of two (2) weeks.
- 1.1.1. Brainstorm Concepts for an Application one (1) week allotted time
 - **1.1.2.** Initial Project Proposal three (3) days allotted time
 - 1.1.3. Presentation of Initial Project Proposal one (1) day allotted time
- **2. Structure Phase** this includes the graphical representation of different aspects of the application, either in technical terms or the overall vision of how the application will look once the development stage is done (e.g. UI layout).
- **2.1. Process** this task includes graphical representations that aim to help in understanding and analyzing the system of the application clearly. The allotted time for this task will accumulate to a total of 10 hours.
 - 2.1.1. Flowchart three (3) hours allotted time
 - 2.1.2 Unified Modeling Language (UML) five (5) hours allotted time
- **2.2. Design** this includes the visual representations that could help in envisioning how the application will look as well as the visual identity of both the app and the company, and a proposed design on the overall aesthetic of the app. This part will have a total of four (4) days as its allotted time.
 - 2.2.1. UI Layout Design three (3) days allotted time
 - 2.2.2. Application Logo one (1) day allotted time
 - **2.2.3. Company Logo** one (1) hour allotted time
- **2.3. Progress** this task includes all the documentation and tools needed which helps in tracking the progress of the team and to have an overall plan on how the making of the application will look. A total of three (3) days have been allotted to this.
 - 2.3.1. Work Breakdown Schedule (WBS) two (2) days allotted time
 - 2.3.2. Gantt Chart two (2) days allotted time
 - **2.3.3. GitHub Repository** 15 minutes allotted time
 - 2.3.4. Trello Workspace 30 minutes allotted time
- **2.4. Documentation -** this contains project's basis, directing decision-making, defining duties, and offering a clear grasp of the project's objective and aims.

2.4.1. Initial Project Charter - one (1) day

- **3. Pre-Development Stage** includes the research needed before proceeding to the actual development stage. It can be about the various programming tools to be used or other important matters that are also core to the application.
- **3.1. Research** this covers the various resources needed for the developers to be familiar with what they're about to dive into the development of the program. A total of 15 hours has been allotted to this label.
 - 3.1.1. Research basic knowledge of programming tools to be used five (5) hours allotted time
 - 3.1.2. Research about references related to coding of the applicationeight (6) hours allotted time
 - 3.1.3. Research different ways how to monetize an application two (2) hours allotted time
 - 3.1.4. Research ways to test an application before launching two (2) hours allotted time
- **3.2. Connect for Partnership** as this application focuses on adopting pets, the developers will connect to various partners and ask permission to be a part of the project as collaborators. There will be a total of five three (3) days, six (6) hours, and 30 minutes allotted for this part.
 - 3.2.1. Searching for possible shelters within Metro Manila to collaborate with three (3) days allotted time
 - **3.2.2. Construct Request Letter for possible collaboration** 30 minutes allotted time
 - 3.2.3. Contact the chosen shelters
 - 3.2.4. Gather data for animals that are up for adoption
- **4. Development Stage -** includes all the features of the mobile application from Frontend to Backend and their integration. This also could be a guide for every development milestone. Here, the developers proceed to the iterative process of coding, testing, and revising. This will be allotted the most time compared to all the stages which is ideally one (1) and a half month minimum.
- **4.1.** Log In this will be the access point of a user to the application and its features. The users need to be identified with their basic data from their accounts for a convincing and secure transaction. Overall, the Login page will require a total time allotment of 11 hours.
 - **4.1.1. Input Validation Code** one (1) hour allotted time
 - **4.1.2. Reset Password (Frontend)** one hour (1) and 30 minutes allotted time
 - 4.1.3. Location Permission Request (Frontend)
 - **4.1.4. Email in Database Look Up** one (1) hour allotted time

- 4.1.5. Password in Database Matching Email Look Up one (1) hour allotted time
- 4.1.6. Google Account Utilization 40 minutes allotted time
- 4.1.7. Reset Password (Backend)
- 4.1.8. Location Permission Request (Backend)
- **4.1.9. Integration of Frontend and Backend of the Application** one (1) hour allotted time
- **4.2. Reset Password -** this is intended for users to be more comfortable accessing or regaining access to their accounts on the application.
 - 4.2.1. Email Code Validation (Frontend)
 - 4.2.2. Password Requirement Notice
 - 4.2.3. Password Matching (Frontend)
 - 4.2.4. Automated Email Code
 - 4.2.5. Email Code Validation (Backend)
 - 4.2.6. Password Strength Test
 - 4.2.7. Password Matching (Backend)
 - 4.2.8. Integration of Frontend and Backend of the Application
- **4.3. Sign Up -** this is to enable users to create an account and experience this mobile application's offered features.
 - **4.3.1. Input Validation Notice -** one (1) hour allotted time
 - **4.3.2. Password Requirement Notice -** one (1) hour and 30 minutes allotted time
 - 4.3.3. Password Matching (Frontend) one (1) hour allotted time
 - 4.3.4. Terms and Conditions (Frontend) one (1) hour allotted time
 - 4.3.5. Email Validation 40 minutes allotted time
 - 4.3.6. Password Strength Test two (2) hours allotted time
 - **4.3.7. Password Matching (Backend) -** one (1) hour and 30 minutes allotted time
 - 4.3.8. Google Account Utilization two (2) hours allotted time
 - 4.3.9. Terms and Conditions (Backend)
 - **4.3.10. Integration of Frontend and Backend of the Application -** two (2) hours allotted time
- **4.4. Home/Feed Page** this portion of the application is where the user will be able to see the animals up for adoption.
 - **4.4.1. Profile Button -** one (1) hour and 30 minutes allotted time
 - 4.4.2. Chat Room Button
 - 4.4.3. Swiping Left
 - 4.4.4. Swiping Right
 - **4.4.5. Pet Adoption Profile Cards -** three (3) hours and 30 minutes allotted time

- **4.4.6. Brief Animal Data Display -** three (3) hours allotted time
- 4.4.7. Nearby Location Matching
- **4.4.8. Integration of Frontend and Backend of the Application -** one (1) hour allotted time
- **4.5. Profile Page -** this is where the basic information of the user can be seen including certain activities in the application such as bookmarked animal profiles, and/or animal adoption profile card/s made.
 - **4.5.1. Home/Feed Button -** one (1) hour allotted time
 - **4.5.2. Settings Button -** one (1) hour allotted time
 - 4.5.3. Basic Data Display one (1) hour and 30 minutes allotted time
- 4.5.4. Bookmarked Animal Profile Button
 - 4.5.5. Action Confirmation 40 minutes allotted time
 - 4.5.6. Animal Adoption Profile Creation two (2) hours allotted time
 - 4.5.7. Delete Animal Adoption Profile one (1) hour allotted time
 - 4.5.8. Edit Animal Adoption Profile
 - 4.5.9. Integration of Frontend and Backend of the Application -asdf
- **4.6. Pet Adoption Profiles -** this portion will show up if the user swiped left on the animal profile card on the home/feed page. This includes all the information collected regarding the animal. The user will have the option to bookmark or inquire about the animal needing home.
 - 4.6.1. Complete Animal Data Display one (1) hour allotted time
 - 4.6.2. Bookmark Function (Frontend)
 - 4.6.3. Message Button
 - 4.6.4. Remove Animal Adoption Profile Bookmark (Frontend)
 - 4.6.5. Remove Animal Adoption Profile Bookmark (Backend)
 - 4.6.4. Bookmark Function (Backend)
 - **4.6.5. Integration of Frontend and Backend of the Application -** one (1) hour allotted time
- **4.7. Animal Adoption Profile Creation -** this will allow a user to create a profile for animal/s that need to be adopted.
 - **4.7.1. Camera and Photos Access Permission -** 40 minutes allotted time
 - **4.7.2. Action Confirmation -** one (1) hour allotted time
 - 4.7.3. Pictures Upload Function one (1) hour allotted time
 - **4.7.4. Data Input Function (Breed, Medical Conditions, etc.) -** one (1) hour allotted time
 - 4.7.5. Location Database
 - **4.7.6.** Integration of Frontend and Backend of the Application 40 minutes allotted time

- **4.8. Settings** this portion enables a user to modify account information including their profile data, account access, and deletion or logging out of their account.
- **4.8.1 Profile Tab** this tab enables a user to modify basic user information namely the user's name and profile picture.
 - **4.8.1.1. Edit User Name Display -** 40 minutes allotted time
 - **4.8.1.2. Camera and Photos Access Permission -** 40 minutes allotted time
 - 4.8.1.3. Actions Confirmation
 - **4.8.1.4. Profile Picture Setup/Upload Feature -** one (1) hour allotted time
 - **4.8.1.5.** Integration of Frontend and Backend of the Application one (1) hour allotted time
- **4.8.2. Account Tab** this tab allows users to take action regarding their account such as account deletion or logging out.
 - 4.8.2.1. Actions Confirmation 40 minutes allotted time
 - 4.8.2.2. Delete Account
 - **4.8.2.3. Log Out Account -** one (1) hour and 30 minutes allotted time
 - 4.8.2.4. Integration of Frontend and Backend of the Application
- **4.8.3. Security and Privacy -** this tab enables modifying a user accessing information for their account such as email and password.
 - 4.8.3.1. Email in Database Look Up
 - 4.8.3.2. Password in Database Matching Email Look Up
 - 4.8.3.3. Password Strength Test
 - 4.8.3.4. Password Matching
 - 4.8.3.5. Password Requirement Notice
 - 4.8.3.6. Automated Email Code
 - 4.8.3.7. Email Code Validation
 - 4.8.3.8. Reset Password Feature
 - 4.8.3.9. Actions Confirmation
 - 4.8.3.5. Integration of Frontend and Backend of the Application
- **4.9. Messages Page -** this portion showcases the in-app chat feature as a whole. To elaborate, this includes the retention of messages and connecting to other users.
 - 4.9.1. Read Message Display
 - 4.9.2. Unread Message Display
 - 4.9.3. Message Date and Time Stamp (Frontend)
 - 4.9.3. Venue for Different Users to Connect Real-time
 - 4.9.4. Database for Messages in Chat

- 4.9.5. Message Date and Time Stamp (Backend)
- 4.9.5. Integration of the Frontend and Backend of the Application
- **5. Quality Assurance -** this phase covers the preparation of the mobile application for release which involves a lot of testing to ensure the functioning and its capability to offer the promised services to users.
- **5.1. Debugging** this task includes the numerous running of codes per feature and immediate identification of bugs and errors for proactive solving so the application runs efficiently and appropriately.
 - **5.1.1. Storing User Data on the Database -** 40 minutes allotted time
 - **5.1.2.** Accessing User Data from the Database one (1) hour and 30 minutes allotted time
 - 5.1.3. Reset Password Feature
 - 5.1.4. Database Input Validations 40 minutes allotted time
 - 5.1.5. Adding Animal Data on the Database two (2) hours allotted time
 - **5.1.6. Displaying Animal Data from the Database -** 40 minutes allotted time
 - 5.1.7. Swiping Pet Card Profiles
 - 5.1.8. Implementing GPS for User and Animal Matching
 - **5.1.9. Messaging Other User Accounts**
 - 5.1.10. Retaining Conversation Data
 - 5.1.11. Bookmarking Pet Profiles
 - 5.1.12. Unbookmarking Pet Profiles
 - **5.1.13. Modifiable User Data in Settings -** one (1) hour and 30 minutes allotted time
 - **5.1.14. Test Cases -** one (1) hour and 30 minutes allotted time
- **5.2. Testing/Dry Run** this task elaborates on the different types of testing to make the mobile application ready for user. This envelopes the user perspective and other possible scenarios the user might experience to make sure that the application runs accordingly.
 - **5.2.1. Functional Testing -** three (3) hours allotted time
 - **5.2.2. UI Testing -** one (1) hour allotted time
 - 5.2.3. Installation Testing 40 minutes allotted time
 - **5.2.4. Security Testing -** two (2) hours allotted time
 - 5.2.5. Field Testing one (1) hour and 30 minutes allotted time
 - **5.2.6.** Interrupt Testing one (1) hour allotted time
- **6. Monetization -** this portion includes the process of monetizing the mobile application through ads.
 - 6.1. Preparation
 - 6.1.1. Decide Ad Formats
 - 6.1.2. Research and Decide Ad Network

- 6.1.3. Integrate Ad Network's SDK
- 6.1.4. Create Ad Placements
- 6.1.5. Configure Ad Settings
- 6.1.6. Test and Optimize
- 6.1.7. Monitor Earnings
- **7. Launching and Maintenance** this phase covers the launching of the mobile application for users to be able to access and benefit from its services and support its vision. Additionally, here also comes the maintenance of the application to ensure that it provides quality service and is functional which lives off its objective.
- **7.1. Launching -** this task envelopes the promotion so the target users will be aware of this application and its release for them to use. A total of one (1) week will be solely allotted to this task.
 - 7.1.1. Promotion
 - 7.1.2. Publish App on Google Play Store
- **7.2. Application Maintenance** this task includes the basic maintenance check-up of the application so it remains beneficial and operational. The maintenance section of this document doesn't necessarily require a specific time allotment but will have an interval time in between each respective task to surely maintain the quality of the application.
 - **7.2.1. Monitor Performance** every day
 - **7.2.2. Fix Bugs** every 30 days (one month)
 - 7.2.3. Improve Data Security every 15 days