Mobile App Development - hDog

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I. Introduction

In this document I will go over the procedure that was followed as part of developing an App for the course Desarrollo de Aplicaciones para Dispositivos Móviles from Universid Naconal de Colombia.

II. Value Proposal

Our product has two main targets. The first is the up and coming millennial that increasingly depends on subscriptions services and is becoming a serious force in the work environment leading to its decrease in free time to take care of their pet. For this segment our app through it's subscription method aims to give to this kind of people an stability that they obtain daily from the most streaming apps or other apps. Our second segment is the early adopter baby boomer, this customer is highly active in adopting new technologies and does it for the simplicity of it. For this type of customer the packages may not be so alluring because he doesn't compromise but for them we have the one time booking option

III. Framework

A. Initial Prototyping

The initial prototype for the application was designed using **Studio.** , a design tool developed by inVision that is widely used in design frameworks. I choose this application because I had taken an interest in its rapid prototyping features and its ability to produce interactive animation and the resemblance that the art boards feature has to a mobile phone screen.

B. App development

Teta.so is a cooperative app builder that allows users to build Flutter apps in an intuitive tree-style view. Currently, it's in its alpha stage since September 2021 but has a very good collection of tutorial videos on Youtube and some documentation on the most basic features.
During the course, I used Android Studio and programed in Java, but to address a project of this magnitude and due to the fact that I was by myself and sincerely a lack of time management led me to his compromise.
Compromises aside, I also chose **Teta** because it features a code export function so that when the "bones" of the application were built one could easily integrate more advanced functions by exporting and writing code in a more typical IDE. For the following code, the Visual Studio Code IDE was used with the Flutter SDK.

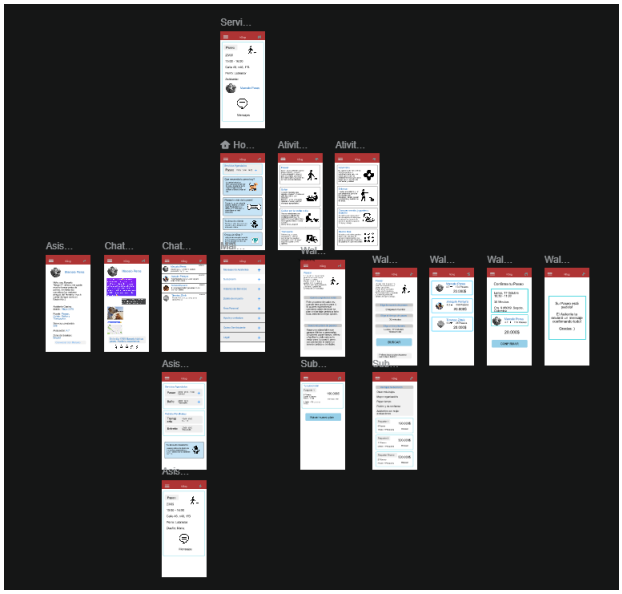

Fig. 1. Mockup created using inVision Studio

C. Database

For the database I choose to use **Supabase** has it is an Open Source database that provides Authentication and API's that can be easily integrated into our project. The pricing plan with no cost allows for 500 MB of database space and authentication for as much as 10,000 users.

IV. Prototypes

In the prototyping stage, the following features were present through the different artboards that were developed :

- Ability to book walks, baths, care and transportation for our pet
- The choice of the assistant for our desired service
- Subscription plan
- Chat with the booked assistants
- Visualization of the assistant's profile
- Visualization of booked services
- As an assistant, a designated area of the app in order to manage our booked services.

To achieve this we created 17 different artboards but they could be translated into about 10 different activities

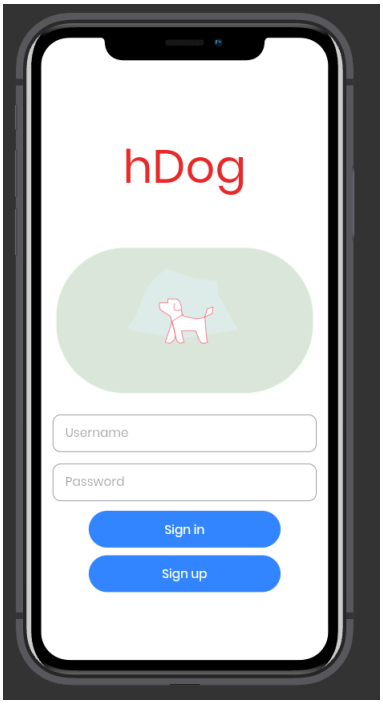

Fig. 2. Login screen created using Teta

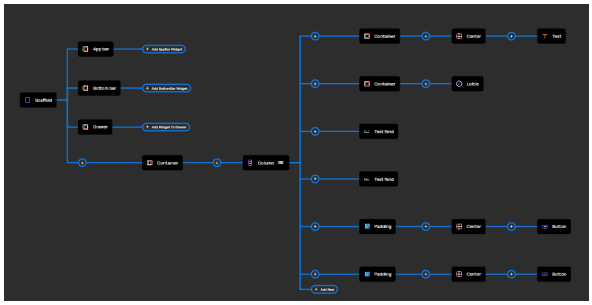

Fig. 3. Tree logic behind Teta development

V. Development

Unfortunately due to the fact that Teta is still in its inception I was unable do download the code and therefore was only able to the what the platform permited me. Integration with Supabase was one of the advertised features but it is not working properly at the moment. The final product can be seen as a testing path for future implementation when the source code is available for download. In the pictures bellow we an see an example of tree shaped developing environment :

The tree logic is does not present a steep learning curve like most of programming languages do. It is intuitive and the explanatory videos present on Youtube that have been released weekly show the full potential of this framework.

Acknowledgment

Although I don't consider that this final work is up to the expected, I would like to thank the Professor for it's way of teaching that challenged me each week to build an app and has certainly led me to develop a passion for mobile Apps.