

Tesla Clone App CROSS PLATFORM APPLICATION

1. Overview

Tesla Clone app is a clone of the official Tesla WebApp. This app basically enables users to buy a Tesla car ranging from the 3 current options. The Tesla Website uses a modern design for UI and experience which is quite preferable in today's world which is full of clusters of unwanted designs.

Although you cannot literally buy the Tesla cars, this app is a great way to familiarize yourself with react native and its functionalities. The app is made through use of expo CLI and expo client apps for iOS and Android.

2. Goals

The main goal of this app for me was to get familiar with modern UI techniques and be fluent in Cross Platform App Development frameworks. And through use of components in react native, which comes quite handy if you don't want repetitive codes in your project.

3. Inspirations

I was going through the Tesla app and found the design to be very sleek and user friendly. And, I wanted to create something similar with a clean look and sleek finish. As a beginner in Cross Platform Development, I found that trying to recreate things that are already in the market is a great way to learn and familiarize with the frameworks. Although it looks quite simple, a little bit of knowledge and experience is required to make something look this good.

I couldn't add the custom order and existing inventories as tesla uses a feature that enables users to customize their cars and purchase the order.

4. User Interaction

The app directly takes you to the home screen, which consists of 3 scrollable lists, which is enabled by Snap to View setup. I have created several components within the react native framework which allowed me to create different items within a list without repetitive code.

Users can view 4 different models: Model S, Model 3, Model X, and Model Y respectively.

However, the scrolling is smoothened and made to fit the screen dimensions without showing any 2 cars at the same time.

The individual Product Pages enables users to have a fully immersed experience without any distractions.

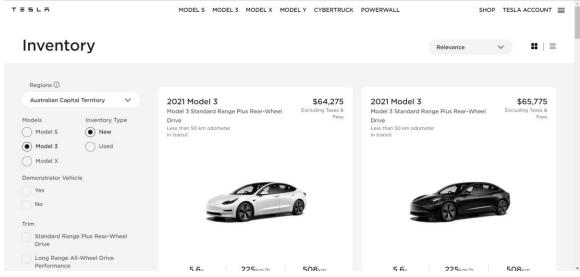
5. Milestones

- Initialize expo components, Javascript bundles
- Car Item component
 - Render the text(Model X, Model Y, etc.)
 - Render Background Image
- Creating separate Carltem component
- Button Component
 - Creating separate btn component
 - Receive props
 - Stylize the button based on received prop ('type')
- Finish carItem component
 - Use of buttons simultaneously with Carltem
 - Implement props
- Render scrollable list of CarItems
 - Use the dummy data
 - Render the flatList
 - Setup Snap to View
- Render the header of the app

6. Problems

I couldn't add the custom order interface as it was a bit complicated, and required rendering animations that was time consuming. It also featured the Scrollable list for features of the car. As you can see blow, Tesla have implemented a clean looking design here as well, full of information about the cars which is ideal user experience in my opinion. This could be implemented however, given more time was available.





7. Draft GUI Screens

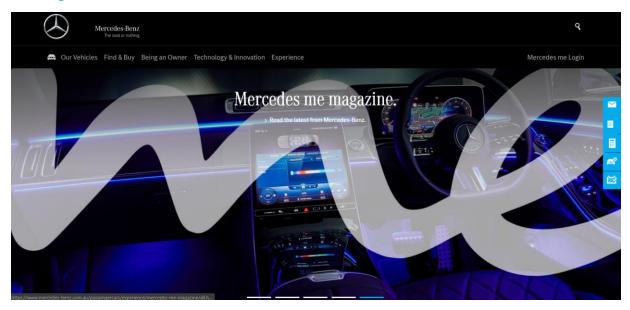




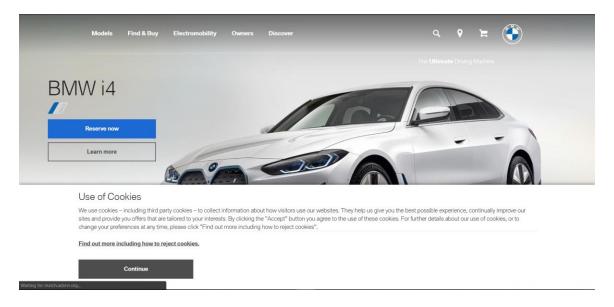




8. Inspirations



This is the official Mercedes-Benz website. As you can see, it is quite clustered and not as appealing as the Tesla website.



The BMW app also looks similar to that of Tesla, you can reserve test rides or order directly from the homepage. However, you can notice it is not quite minimal compared to Tesla's app.