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Car Maintenance

Description

Car Maintenance app is to manage your car maintenance services and the related costs. You can enter the service and the periodicity then update the mileage counter from your car reading and it will organise it for you

Intended User

Cars Owners and Cars drivers

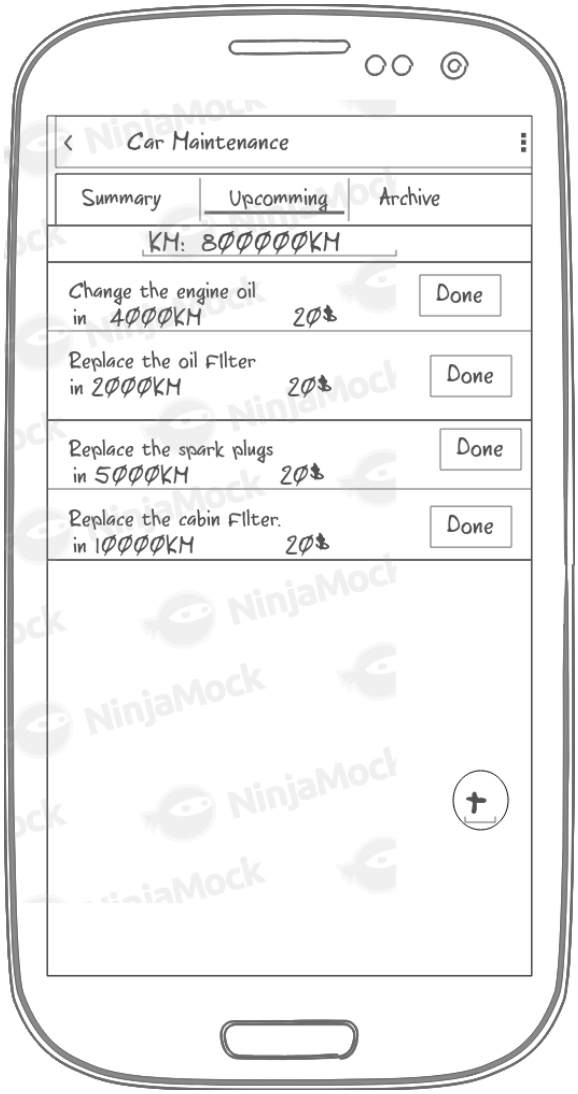
Features

- Reminder for maintenance activities
- Store the data
- flexibility to change the service details

User Interface Mocks

Screen 1

Where we can view the upcoming services



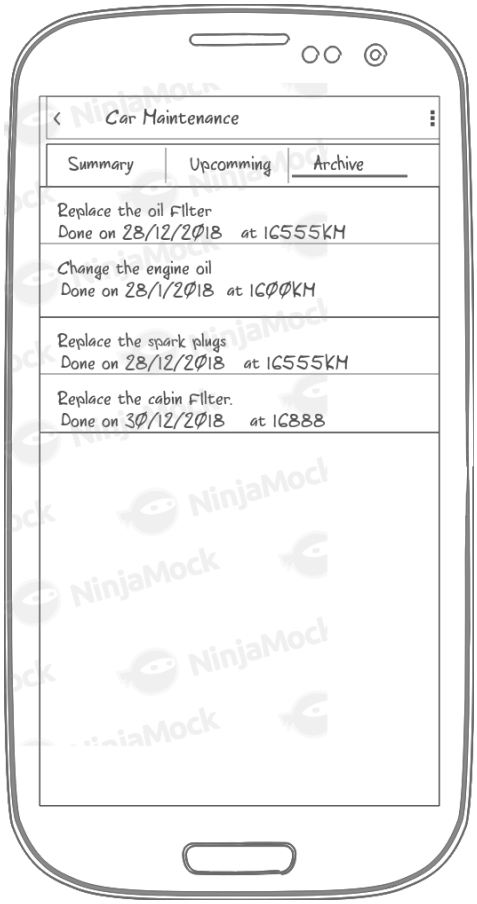
Screen 2

A fragment where we can update or enter a new service


Change the engine oil.
Periodicity
10000KM
Price
30 USD
last time
0
Save
Discard
Delete

Screen 3

Where you can find the details of the finished ones



Screen 4

A widget to view most near services due

Key Consideration

1- The app will be written solely in JAVA
2- build tools : The CompileSDK version will be 28 in Android Studio 3.1.2
3. com.android.tools.build:gradle:3.3.1
4- gradle : gradle-4.10.1-all
5- The App refer all the hardcoded strings from the strings.xml file.
The app enables RTL layout switching to support accessibility on RTL supported languages.

How will your app handle data persistence?

- I am going to use firebase realtime database for storing data.
- The summary page will contain a button to load and image from url using AsyncTask this will enable the developer to give the user different photos every while

Describe any edge or corner cases in the UX.

- If the user losts connection he can access the data locally
- If the user returned from the update/add service fragment without pressing save or discard the changes will be discarded
- If the user enters wrong type,. for example enters text for the price value, and a toast will appear to inform him to enter correct values.

Describe any libraries you'll be using and share your reasoning for including them.

Firebase-ui-auth to make a login screen at app start up

- 'com.firebaseui:firebase-ui-auth:4.3.1'

Describe how you will implement Google Play Services or other external services.

Firebase database will be used to persist the data on the cloud

-Connect the app to Firebase

-Add the Realtime Database to the app

Firebase authentication will be used to know the identity of the user:

-Set up sign-in methods

-Use FirebaseUI to perform the sign-in flow

Next Steps: Required Tasks

Task 1: Project Setup

- Create a project at Firebase Console
- Add firebase to the project
    - classpath 'com.google.gms:google-services:4.2.0'
- Add firebase realtime database
    - 'com.google.firebase:firebase-database:16.0.5'
- Add firebase Authentication
    - 'com.google.firebase:firebase-auth:16.1.0'

Task 2: Create the database

- Create a class for the Service Model
-

Task 3: Implement UI for Each Activity and Fragment

- Create the MainActivity Ui
- Create Fragment for Upcoming services
- Create Fragment for the summary
- Create Fragment for the archive
- Create Fragment for Adding/update Service

Task 4 :Configure the Authentication

- Create the login page
- Configure the sign out button

Task 5 : Create the widget

- Use Android Studio to create the widget
- Update the widget to update the data correctly