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CarEncyclopedia

Description

Find all the parts make up your vehicle and return you an expert in auto parts. The application indicates to the user which are the parts that make up your vehicle without having to perform extensive searches on the web or ask someone expert.

Intended User

Any user interested in knowing the parts of a vehicle can make use of the application.

Features

The main app features are:

- Show detailed car information.
- Saves user information
- Login with google plus
- Manage user data
- Use google analytics

User Interface Mocks

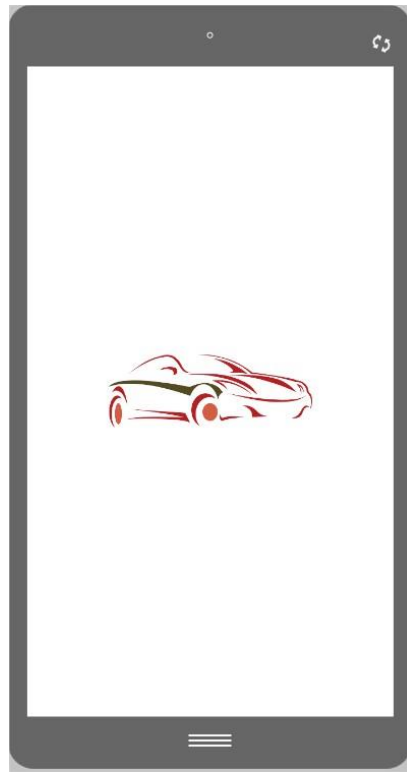


Figure 1. The Welcome Screen

This screen is showed when the application starts and if the user is logged, the application executes a background task for load the user information.

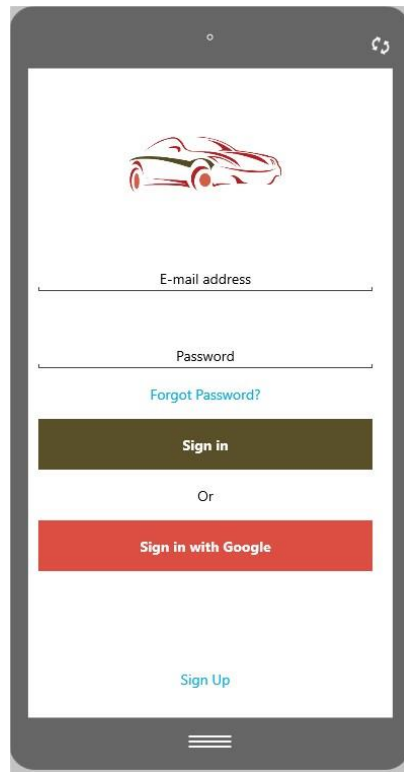
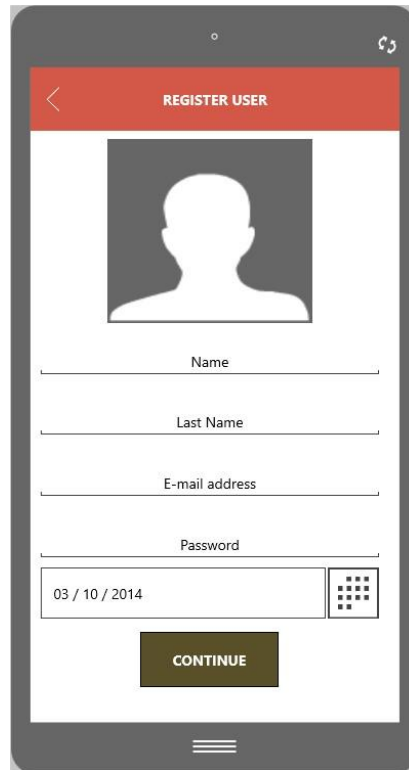


Figure 2.Login Screen

The login screen is showed if the user has not logged to the application or the user has closed session.



A mobile application interface for user registration. The screen has a dark grey header with a back arrow on the left and a refresh icon on the right. Below the header is a red bar with the text "REGISTER USER" and a back arrow. The main content area is white and contains a grey silhouette of a person's head and shoulders. Below the silhouette are four text input fields labeled "Name", "Last Name", "E-mail address", and "Password". Below these fields is a date input field showing "03 / 10 / 2014" and a small grid of dots. At the bottom of the form is a dark green button labeled "CONTINUE". The screen is framed by a dark grey border with a hamburger menu icon at the bottom center.

REGISTER USER

Name

Last Name

E-mail address

Password

03 / 10 / 2014

CONTINUE

Figure 3. Register user

This screen let set and save the user information.

A mobile application interface for registering vehicle information. The screen has a dark grey header with a back arrow on the left and a refresh icon on the right. Below the header is a red bar with the text "REGISTER VEHICLE". The main content area is white and contains five input fields: "Make", "Model", a year selector (currently showing "2008"), a transmission selector (currently showing "Automatic"), and "Engine". At the bottom of the form is a dark green button labeled "FINISH". The entire screen is framed by a dark grey border representing the phone's bezel.

REGISTER VEHICLE

Make

Model

2008

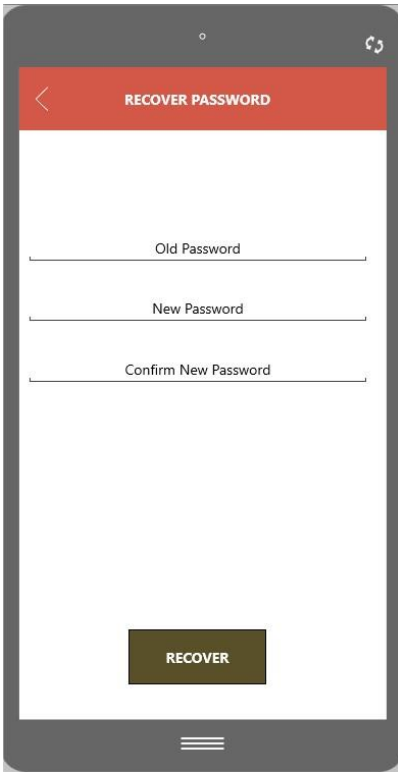
Automatic

Engine

FINISH

Figure 4. Vehicle information

This screen let set and save the car information related to the user.



The image shows a mobile application interface for password recovery. At the top, there is a dark grey header bar with a small white circle in the center and a refresh icon in the top right corner. Below the header is a red navigation bar with a white back arrow on the left and the text "RECOVER PASSWORD" in white capital letters. The main content area is white and contains three text input fields, each with a label above it: "Old Password", "New Password", and "Confirm New Password". The labels are in a small, grey font. At the bottom of the form is a dark green button with the word "RECOVER" in white capital letters. The entire screen is framed by a dark grey border, and there is a hamburger menu icon at the bottom center.

Figure 5. Recover password

This screen let to the user recover the password.

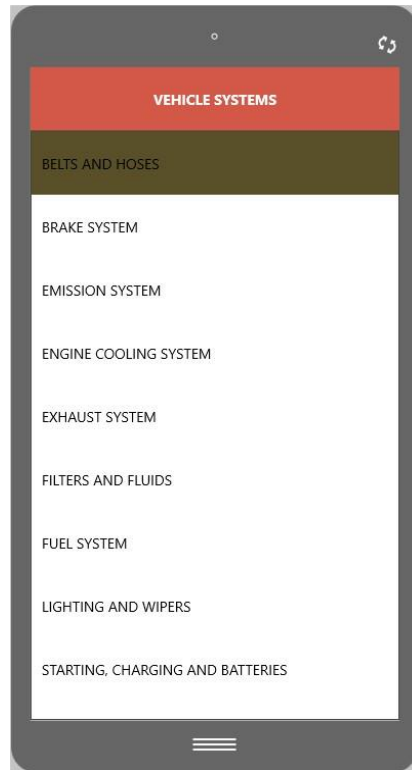


Figure 6. Vehicle systems

This screen shows the different vehicle systems that the user vehicle has.

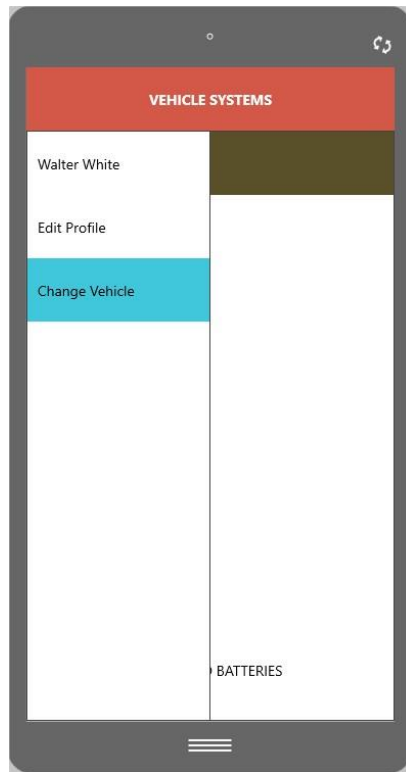


Figure 7. Navigation drawer

This screen shows the account options.

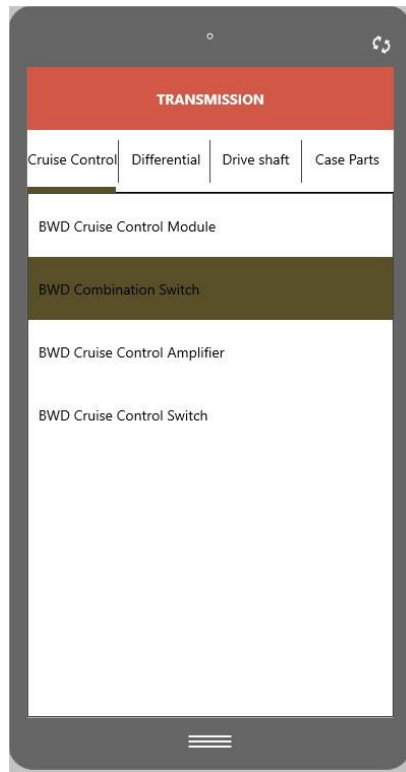


Figure 8. Categories

In this screen each vehicle system selected by the user is sorted by the different auto parts categories related.

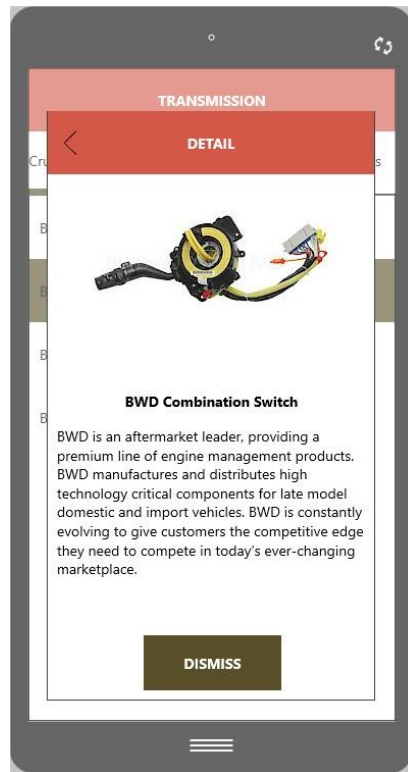


Figure 9. Auto part detail

In this screen it shows the auto part detail.

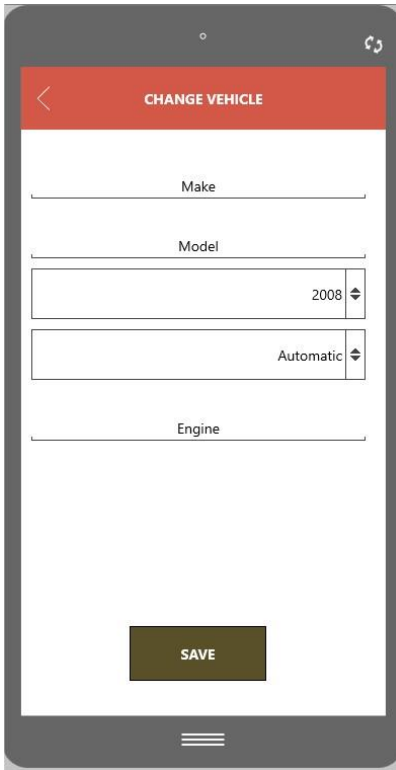


Figure 10. Change vehicle

This screen let to the user change the default vehicle for search the auto parts related to itself.

Key Considerations

How will your app handle data persistence?

The application will use a content provider for manage local information.

Describe any corner cases in the UX.

The application will use the material design specification for all views and the different animations.

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

LIBRARY	USE DESCRIPTION
compile 'com.android.support:appcompat-v7:X.X.X'	Support with AppCompatActivity
compile 'com.android.support:design:X.X.X'	Support material design specification
compile 'com.android.support:cardview-v7:X.X.X'	Support card views
compile 'com.android.support:percent:X.X.X'	Views build with percent layout
compile 'com.squareup:otto:X.X.X'	Bus event provider
compile 'de.hdodenhof:circleimageview:X.X.X'	Show circle images
compile 'com.squareup.retrofit2:retrofit:X.X.X'	HTTP client for Android
compile 'com.squareup.retrofit2:converter-gson:X.X.X'	HTTP client converter for Android

compile 'com.squareup.picasso:picasso:X.X.X'	Image downloading and caching library for Android
com.google.android.gms:play-services-ads:9.2.1	Google ads
com.google.android.gms:play-services-plus:9.2.1	Google plus login
com.google.android.gms:play-services-auth:9.2.1	Google plus authorization

Describe how you will implement Google Play Services.

Google play that will be used in the application services are as follows:

1. Google ads to acquire some money with advertising. These notices will be displayed in the main views of the application.
2. Access to the application by making use of google plus to facilitate the user registration process.
3. Google analytics for measure the application use. In the app will add different events related with the user interaction with it.

Next Steps: Required Tasks

Task 1: Project Setup

- Create new android project
- Create a new GCM Project
- Create A Project On Google Developers Console
- Define the application packages according to this standard.

<https://github.com/futurice/android-best-practices>

- Configure libraries
- Configure the android flavors

Task 2: Upload Project to Github

- Create a new github project
- Configure .gitignore
- Share the source code project and push into the github repository.

Task 3: Implement UI for Each Activity and Fragment

- Build UI for Splash activity
- Build UI for Account activity
- Build UI for Sign in fragment
- Build UI for register user fragment
- Build UI for recover password fragment
- Build UI for main activity
- Build UI for navigation drawer

- Build UI for Profile Activity
- Build UI for vehicle systems fragment
- Build UI for categories fragment
- Build UI for auto part detail fragment
- Build UI for change vehicle fragment

Task 4: Implement the content provider

- Design the E/R database diagram for local storage
- Build the main content provider classes

Task 5: Implement the backend logic for build the rest services

- Design the E/R database diagram to storage the vehicle information.
- Connect the GCM project with MySQL or PostgreSQL database.
- Read the database information.
- Build the rest signatures
- Publish the project

Task 6: Implement the retrofit use

- Configure the rest signatures with retrofit
- Build the business models
- Save the responses in the SQLite database

Task 7: Implement the manage local information

- Build the logic for read user and card information with the content provider
- Build the logic for write user and card information with the content provider

Task 8: Add google ads in main screens app

- Configure google ads in the application.

Task 9: Add google plus login

- Enable Google+ API
- Add credentials
- Set App key and client ID
- Configure the created project in google developer console
- Configure android project

Task 10: Add google analytics

- Creating Google Analytics Property
- Define the main application events to register
- Configure android project
- Add the code lines for register the events