

Interação Pessoa-Máquina

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Engine4u

Stage 4: Functional Prototype



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URL and Starting Up

The following is the URL to the Engine4u platform:

<https://tomas1t0.github.io/Engine4You/>

To start up it's only needed to click on the link and a window for the website will prompt on your pre-defined browser. No software requirements besides that having a working browser are needed.

Briefing

ENGINE4U aims to help you find the best car for you, know more information about any car model, and compare the specifications of your favorite models.

We chose to build this website because we are aware that typically information is very dispersed and unorganized across the internet and, especially for novice drivers, it can get overwhelming when trying to find the car that will better suit their needs. For enthusiasts, our website will also allow several operations for them to better find the desired information. We are looking forward to making the website easily accessible for people of all ages and backgrounds.

In these tests, we are trying to understand if our solution is designed in a way that can help the type of users previously described, achieve without a lot of effort.

Scenarios

João, who is 26 years old, is interested in VOLVO EX30 which he saw on the street right next to the bus stop where he catches the bus every day to his new job. In order to find it, he uses our website to look for it and get a detailed description of that same model.

António, who is 58 years old, is not so confident his favorite models, VOLVO EX30 and TESLA MODEL 3 LR, have that many differences. To understand how different the models are, he uses our website to see the images from both models and their information.

Rodrigo, who is 21 years old, has been saving money to buy his first car, now that he passed the exam to get his driver's license. Although is very excited, he is still struggling to find a car that will perform on his needs while staying on budget. To find the best solution, he uses our website, by indicating that he is looking for a hybrid model, preferably a Suzuki, with 5 seats, and not more expensive than 50.000€.

Project Development

The following is the URL to the project's development website:

https://brunodavides.github.io/ipm_group/

The current state of the prototype follows, in its majority, the looks of the paper prototype, even though it does not include a cohesive color scheme, custom fonts and unique graphic design.

Concerning its functionality, the prototype is behaving as the real system without any backend implementation, i.e., all the information is static and pre-included in the prototype using a Json file so it can be tested as intended. For this stage, the prototype allows to perform the tasks and scenarios previously presented but it is also possible to perform some other tasks. However, some problems were founding with the routing defined between pages so, therefore, it is normal if a reload crashes (in that case enter the website again, please). It's also implemented a 3D model but, unfortunately, while deploying there was an issue that the group was not able to fix in time (don't click on 3D hub to not crash the website)¹.

To develop the prototype, React+Vite.js was used. So the user can have a 3D model of the car desired, Tree.js and Gsap were used.

Platform Description

At the homepage the user can search for models or view the information concerning each of the presented models in the carousel.

In the *List of Cars* page, the user can look at basic information of all models available in the website and perform the presented actions for each one of them.

In *Comparator*, it is possible to see similarities and differences between the models chosen to compare, before-hand.

In each model's page, the information is displayed, and that model can be added to the comparator list.

¹ The 3D model is operational when running locally. You can try it for yourself by cloning the repository's master branch and after installing the node.js and npm, running the following commands:
npm install
npm run dev