

Solent University

in Partnership with QA (QAHE)

Felix Tudorascu

id: 10103209

Module Title: Advanced Database Systems

Module Code: QH0541

Title and Cover Page

WEBSITE CRUD APP-FULLSTACK WEB APPLICATION

Git Repository click here>

<https://github.com/TudorascuFelixC>

View website : <https://websiteappfelix.herokuapp.com/>

For the best view of this website i will recomend 1920x1080 / 16:9 / 27 inch monitor.

Introduction

The use vehicle market is one of the most profitable businesses, especially when it has a website. The goal of this project is to build a complete stack online application for Felix Hypercars. From the backend system, this website will be able to create CRUD (Create, Read, Update, and Delete) operations with values taken from the user. In this app you can create your own user, read all your informatios, update your informations and delete your user.

Definition of CRUD Application

CRUD stands for create, **read**, update, and delete, and it is a computer programming acronym that refers to the four **functions** that are required to develop a persistent storage application.

Sumarize the project

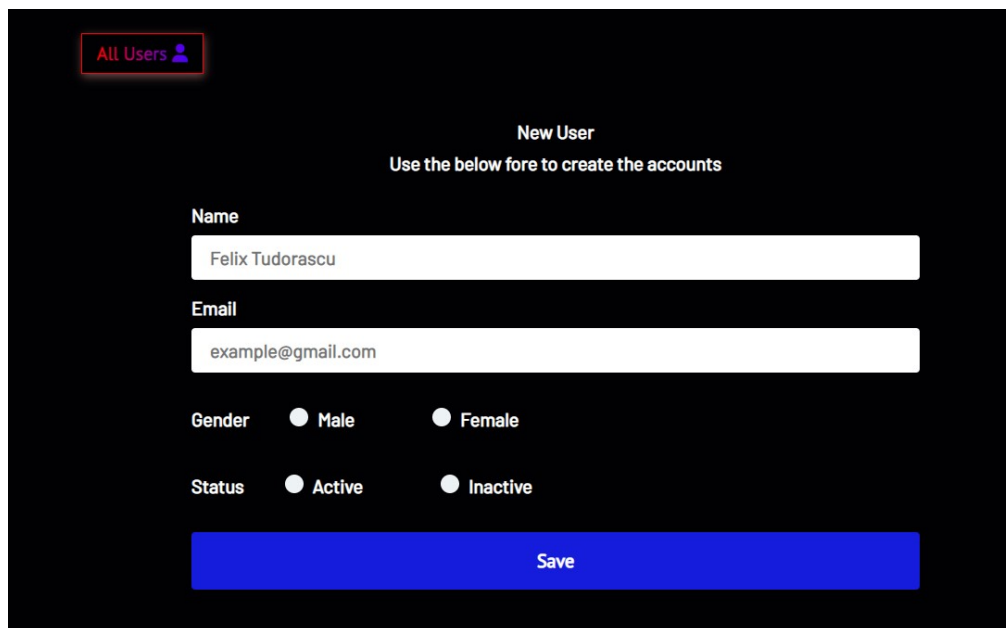
You can access the website just typing in your favorite browser <https://websiteappfelix.herokuapp.com/> and straight forward you gonna see the website interface. I tried to create a nice and simple website. On the top a created a responsive NAVBAR (Home / Our Products/ About Me/ Contact / Register/ Admin Panel) .All the buttons works perfect but are empty (#tag), is more for

design. The NAVBAR is followed by a Title of my CRUD Table. A slideshow of three cars is running automatic for a great view. After header part is followed by CRUD table, when you can create an user typing your Name, Email, check if you are a Male or Female and check if you are Active or Inactive user. Pressing Save Button your user is created automatically. After creation you can check the list of users with all informations, i created 2 Action buttons Edit and Delete. By clicking the Edit button, you can change all the information that a user has. Click Save button to save all the changes. If the user no longer exists, it can be deleted by pressing the Delete button. A pop-up will show and ask you if you are sure about your request. Down bellow more div's are created just for design and showing some cars with any kind of informations. A fake customer's review was created but this can be transformed into a proper review section. Next you can see a contact div was created with a Map of London City Center(my address) with some informations about me, name, telephone, email, github account and a photo of me. More DIV's of informations about cars was created by admin (felix.tudorascu). The footer ends with some Social Icons like Github, Facebook, Twitter, Instagram, LinkedIn, Pinterest and all this icons are responsive including links to my Social profiles (some of them are empty just for privacy reasons). Down bellow you can see my Signature and all rights are reserved.

What include the form ?

- Username
 - First and Last name
- Email
 - email required.
- Gender
 - Male / Female
- Status
 - Active / Inactive

In this fig. its showing how add user interface looks like.




The image shows a web interface for adding a new user. At the top left, there is a link labeled 'All Users' with a user icon. The main heading is 'New User', followed by the instruction 'Use the below fore to create the accounts'. The form consists of the following elements:












- Name:** A text input field containing 'Felix Tudorascu'.
- Email:** A text input field containing 'example@gmail.com'.
- Gender:** Two radio buttons, 'Male' and 'Female', both of which are currently unselected.
- Status:** Two radio buttons, 'Active' and 'Inactive', both of which are currently unselected.
- Save:** A large blue button at the bottom of the form.

In this figure add_user.ejs you can preview how the template and how the script was written.

```
views > add_user.ejs > ? > main#site-main > div.container
1 <!--include header-->
2 <%- include('include/_header') %>
3 <!--/include header-->
4
5 <!--Main site-->
6
7 <!--Button to navigate back to users-->
8 <main id="site-main">
9   <div class="container">
10     <div class="box-nav d-flex justify-between">
11       <a href="/" class="border-shadow">
12         <span class="text-gradient">All Users <i class="fa-solid fa-user"></i></span>
13       </a>
14     </div>
15 <!--Button ENDS HERE-->
16
17 <!--FORM TITLE WITH CENTERED TEXT-->
18 <div class="form-title text-center">
19   <h2 class="text-dark">New User</h2>
20   <span class="text-light">Use the below fore to create the accounts</span>
21 </div>
22 <!--FORM TITLE ENDS HERE-->
23
24 <!--Include user form-->
25 <%- include('include/_form') %>
26
27 </div>
28 </main>
29
30
31 <!--include foter-->
32 <%- include('include/_footer') %>
33 <!--/include footer-->
```

in this figure is just a preview of database. all the objects.

Create New User 

ID	Name	@Email	Gender	Status	Action
1	John Smith	john.smith@google.as.teh	Male	Active	 
2	claudia tudorascu	claudia.tudorascu@yahoo.com	Female	Active	 
3	Johnny Depp	johnny.depp@hollywood.aa	Male	Inactive	 
4	Fira Sorina	sorina.fira@yahoo.com	Female	Active	 
5	Don Corleone	mafia.cozza.nostra@italy.it	Male	Active	 
6	tetet	dadasda@tyaad..com	Male	Inactive	 

System overview

This project's basic overview is such that it has an architectural framework. >The CRUD Application project has both a front end and a back end. NodeJS, >MongoDB,

and Express make up the back end. The front end will be a PHP, CSS, HTML, and Javascript.

Tech

My crud application is using :

- [markdown-it] - Markdown parser done right. Fast and easy to extend.
- [php] - is a web-oriented general-purpose scripting language.
- [MongoDB] - MongoDB is a cross-platform document-oriented database application that is open source. MongoDB is a NoSQL database application that works with JSON-like documents and optional schemas. i used MongoDB to create and use my database.
- [node.js] - evented I/O for the backend
- [Express] - fast node.js network app framework
- [Github] - virtual host where all the repository are pushed. [Github](#)
- [HTML] - the most used thing in the world
- [CSS]

And of course Dillinger itself is open source with a [public repository][dill] on GitHub.

Instalation

This project requires [Node.js](#) v10+ to run.

- i used the last version v18.3.0

Install the packages/dependencies and start the server.

```
cd project-crud-solent-2022
```

```
npm init
```

```
*package.json was created
```

Lets install the external modules

```
npm i express - im using this to rapidly develop the node application
```

```
npm morgan - is helping us to log a message every time when we make a request
```

```
npm nodemon - allow us to restart the reserver automatically when we make changes in the project
```

```
npm ejs - is the template engine i am using for this project and allow us to create dynamic html
```

```
npm body-parser - is amodule and allows us to serialize the data and access the form data using body property
```

npm dotenv - allow you to separate the secret from your [source](#) code

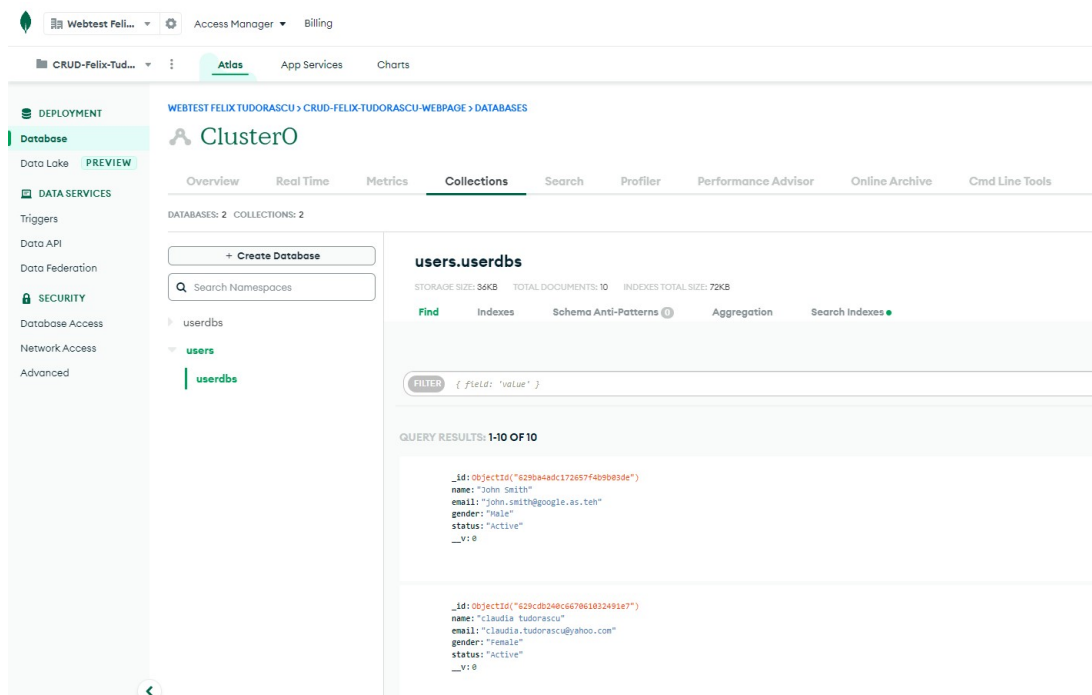
npm mongoose - using this module we are going to connect this project with MongoDB database

npm axios - is a library and makes easy to make a request **in** express application

Database Design

MongoDB

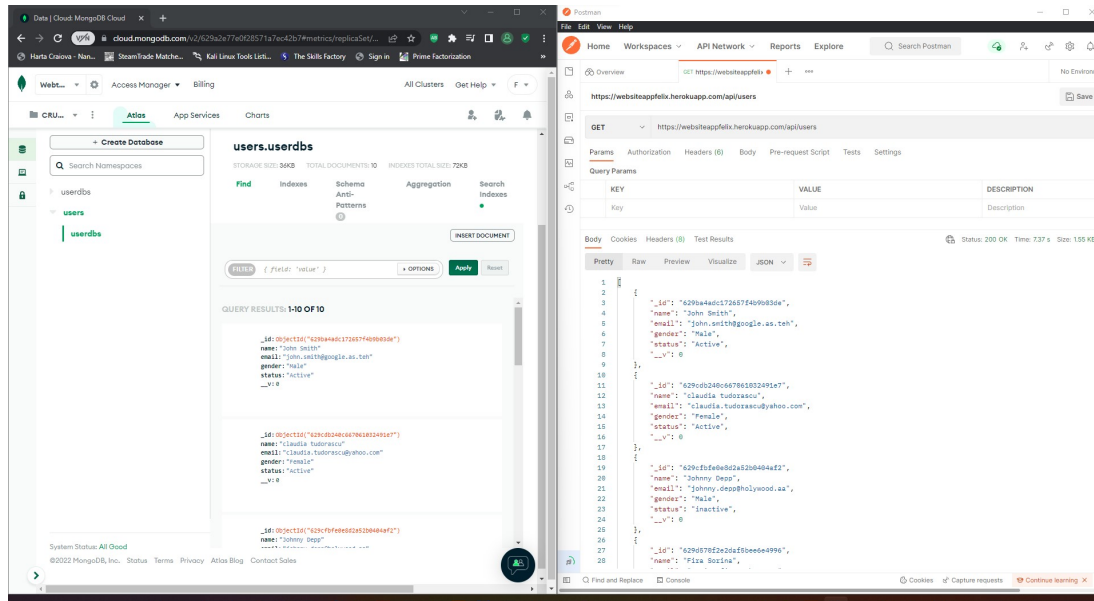
MongoDB is a document database that stores data in a JSON-like format. MongoDB features a versatile data format that allows you to store unstructured data, as well as complete indexing and replication support through rich and straightforward APIs.



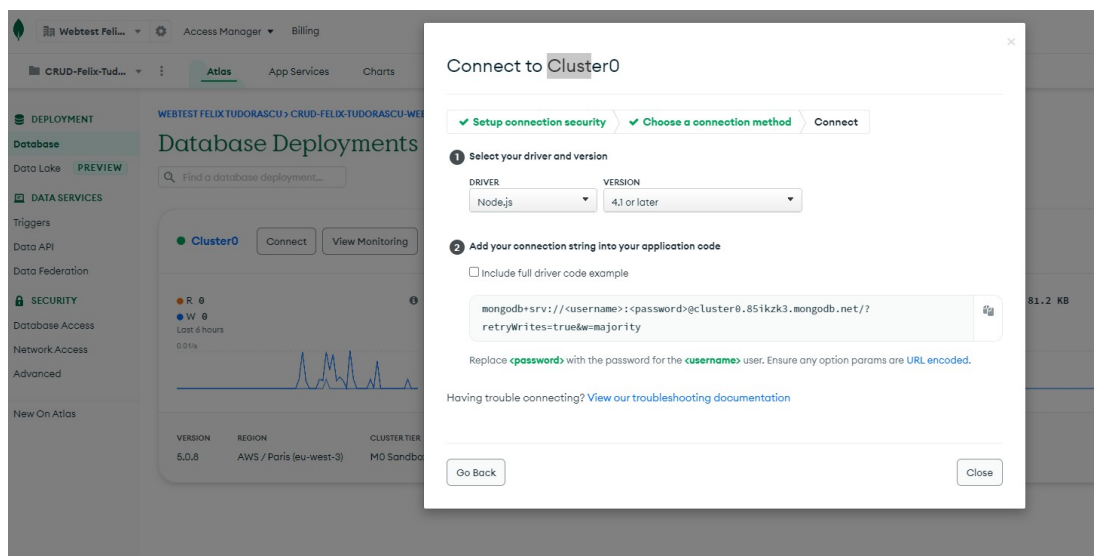
Postman

Developers may use Postman to design, create, test, and iterate their APIs. In this figure you can see how can GET data from Database using POSTMAN.

<https://websiteappfelix.herokuapp.com/api/users>



After i checked evething is working perfect, i created a link to connect my Cluster0 in my application env. (confi.env) Replace with the password for the user.



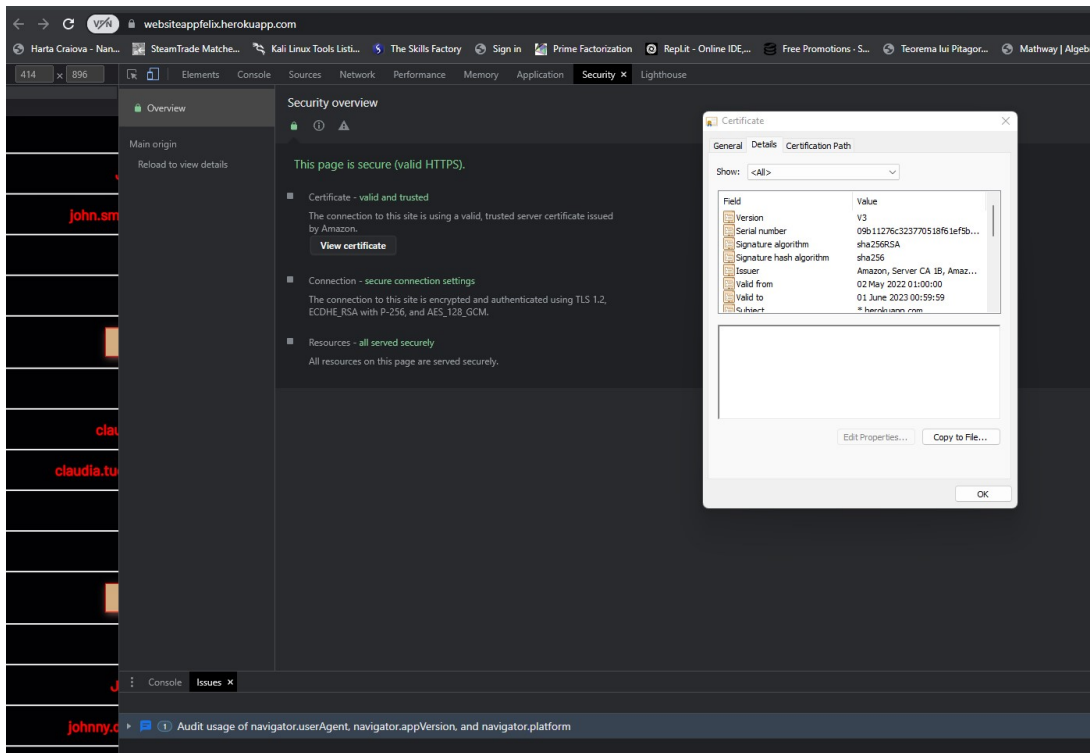
Security and Scalability of my website

Secure Hypertext Transfer Protocol is a Hypertext Transfer Protocol extension. It is often used on the Internet and is utilised for secure communication across a computer network. The Transport Layer Security (TLS) or Secure Sockets Layer (SSL)

protocol is used to encrypt communication in HTTPS.



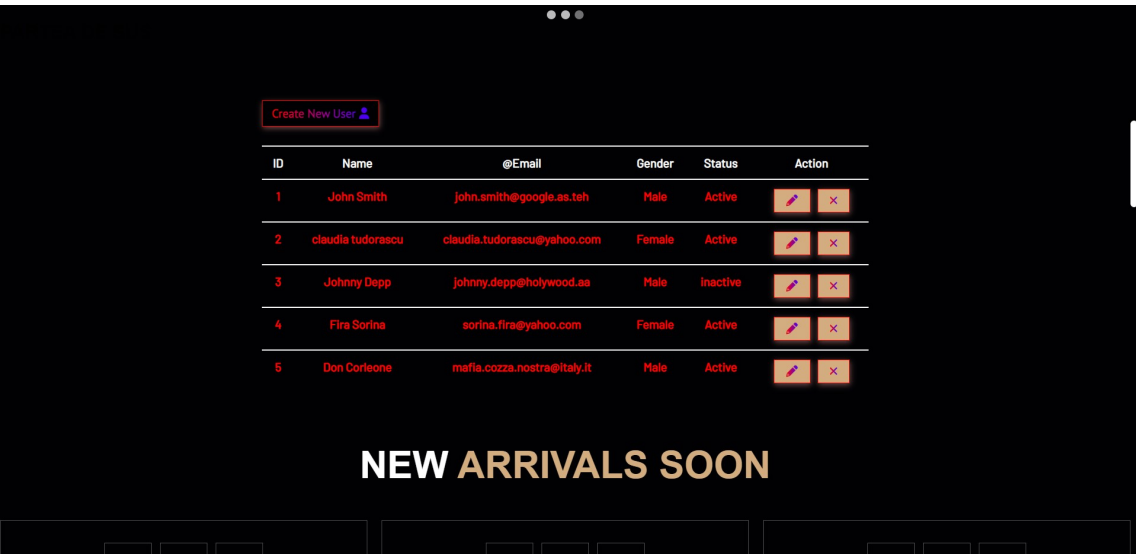
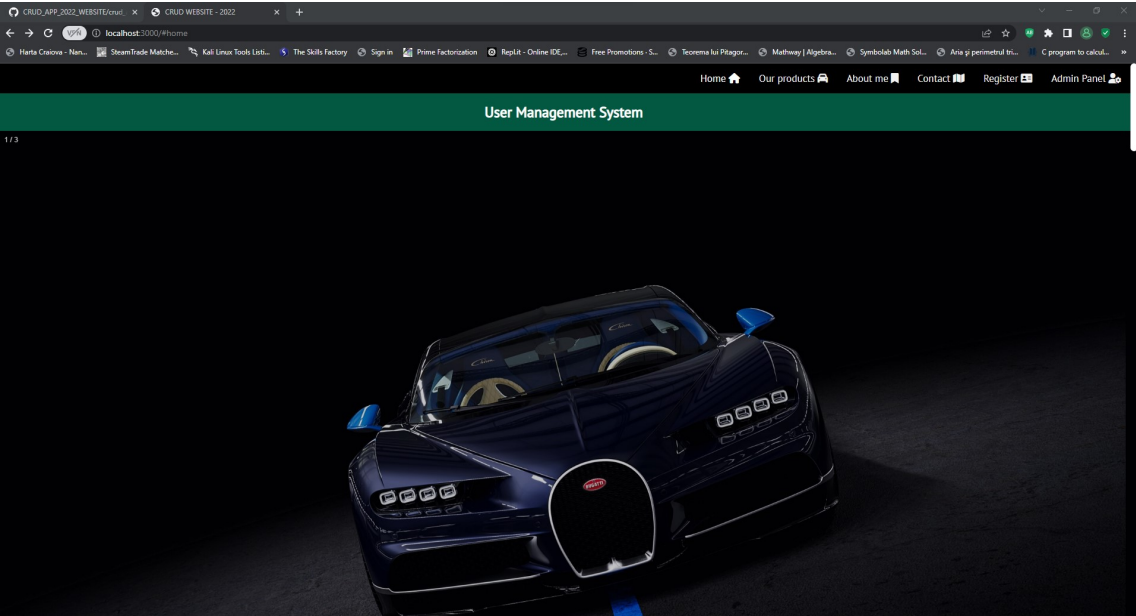
The connection to this site is using a valid, trusted server certificate issued by Amazon. The connection is encrypted and authenticated using TLS 1.2, ECDHE_RSA with P256, and AES_128_GCM.







Conclusion and Reflection

In conclusion, this project was not as easy as I thought, but I worked with pleasure. I encountered a lot of problems and errors, but as a conscientious student I tried to do as much research as possible on google, youtube and other sources. I hope that this project meets all the required criteria and brings me a suitable grade. All the code of this site can be found on my [Github](#).

Bellow is showing a short preview working on my Localhost:3000











Bugatti-Chiron-Deep-Blue-for-sale

★★★★★

£999999 ~~£999999~~









Bugatti-Chiron-Deep-Blue-for-sale

★★★★★

£423421 ~~£2343223~~






McLaren 720LP


★★★★★

£1.599.999 ~~£1.3000.~~

CUSTOMER'S REVIEW




Lorem ipsum dolor sit amet consectetur adipisicing elit. Animi nulla sit libero nemo fuga sequi nobis? Necessitatibus aut laborum, nisi quas eaque laudantium consequuntur iste ex aliquam minus vel? Nemo.




Michael Donovan

★★★★★




Lorem ipsum dolor sit amet consectetur adipisicing elit. Animi nulla sit libero nemo fuga sequi nobis? Necessitatibus aut laborum, nisi quas eaque laudantium consequuntur iste ex aliquam minus vel? Nemo.




Jessica Albah

★★★



Lorem ipsum dolor sit amet consectetur adipisicing elit. Animi nulla sit libero nemo fuga sequi nobis? Necessitatibus aut laborum, nisi quas eaque laudantium consequuntur iste ex aliquam minus vel? Nemo.

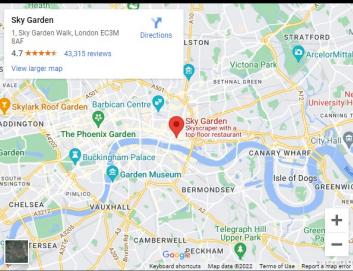


Richard Morrison

★★★★★

CONTACT ME

CONTACT ME




Name: Felix Tudorascu

tel: +44 7307 * ****

Adress : London UK

email: tudorascu.felix@yahoo.com

github account: <https://github.com/TudorascuFelixC>



INFORMARTIONS ABOUT OUR CARS

INFORMARTIONS ABOUT OUR CARS



Most brutal car in the world

by felix.tudorascu / 21st may, 2022

Automobiles Ettore Bugatti was a German then French manufacturer of high-performance automobiles. The company was founded in 1909 in the then-German city of Molsheim, Alsace, by the Italian-born industrial designer Ettore Bugatti.



Most known italian brand since 1940

by felix.tudorascu / 21st may, 2022

Ferrari S.p.A. is an Italian luxury sports car manufacturer based in Maranello, Italy. Founded by Enzo Ferrari in 1939 from the Alfa Romeo



Highs Enough power to light up a small city;

by felix.tudorascu / 21st may, 2022

Koenigsegg Automotive AB is a Swedish manufacturer of high-performance sports cars, based in Ångelholm, Skåne County, Sweden..

Most brutal car in the world

by felix.tudorascu / 21st may, 2022

Automobiles Ettore Bugatti was a German then French manufacturer of high-performance automobiles. The company was founded in 1909 in the then-German city of Molsheim, Alsace, by the Italian-born industrial designer Ettore Bugatti.

[read more](#)

Most known italian brand since 1940

by felix.tudorascu / 21st may, 2022

Ferrari S.p.A. is an Italian luxury sports car manufacturer based in Maranello, Italy. Founded by Enzo Ferrari in 1939 from the Alfa Romeo racing division as Auto Avio Costruzioni, the company built its first car in 1940, and produced its first Ferrari-badged car in 1947

[read more](#)

Highs Enough power to light up a small city;

by felix.tudorascu / 21st may, 2022

Koenigsegg Automotive AB is a Swedish manufacturer of high-performance sports cars, based in Ångelholm, Skåne County, Sweden..

[read more](#)



Created by Felix Tudorascu © | all rights reserved