

Web engeeniring project

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Index

- Database Model and Structure
- User Auth
- Back end
- Front end(Interface)
- How it works

For these project I chose the option of the streets of Braga, in this report I will go through some of the specs of the project and how did I manage to make it

Database Model and Structure

The database was made using mongo DB and is divided in three models:

- Users
- Streets
- Houses

The user model, which is used in order to create the mongoose auth has the following features:

- email: String with the email of the user
- password: String with the password of the user
- name: String with the name of the user
- type: String with the type of user, can be either Normal or Moderator

The Streets model is used to describe each street of braga, and has the following features:

- id: String with the Id of the street
- nome: String with the name of the street
- figura: List of objects, which represents the images of the street, each object is composed of:
 - imagem: name of the image.
 - legenda: legend of the image, describing it
- comments: List of objects, that represents the comments of the street, each comment has the following structure:
 - text: text of the comment
 - data: dates, years or period of time highlighted of the comment
 - lugar: place(s) highlighted of the comment
 - entidade: entity(ies) highlighted of the comment
- listaCasas: List of objects, that represents the house list of the street, each house of the list has the following structure:
 - id: id of the house

- numero: number of the house

This list is used to connect the streets and house models

The Houses model is used to represent each house of each street of the dataset, it has the following features:

- id: String with the id of the house
- numero: Int with the number of the house
- enfiteuta: String with the leaseholder of the house
- foro: String with the forum of the house
- rua: String with the id of the street where the house belongs to
- desc: List of objects, that represents the comments of the house, each comment has the following structure:
 - text: text of the comment
 - data: dates, years or period of time highlighted of the comment
 - lugar: place(s) highlighted of the comment
 - entidade: entity(ies) highlighted of the comment

User Auth

For the user authentication I used passport-local mongoose, in order to save the user records in a mongoose db, the structure of the auth module is the same one we used in class.

Back end

In the back end all the operations regarding the streets and houses model are taken care of, the back end is divided in:

- Model: Where the two mongoose model are defined
- Controller: Where the operations of finding, updating, deleting and added are defined for each model
- Index: Where each controller operation previously defined is associated to a url, and where the data obtained is previously prepared, so the controller does not have to do it.

Thanks to the back end the following operations are supported:

- get streets: We can fetch 6 streets at a time to then show them on the web
- search street: We can search a street by name
- filter streets: We can filter streets by the highlighted terms on their comments
- get street: Search a street using its id
- add street: Add a new street to the database
- get a house of a street
- get a comment of a street
- add a comment
- add a house
- delete a comment
- delete a comment of a house
- add a photo
- add a comment to a house
- update a comment

- update a house
- update a comment of a house

Front end(Interface)

In the interface is located all the views for the actions are found, also we have an index for both the users administration and streets administration, in the user we can login and register, and in the streets we can perform operations such as adding a street, adding a photo to a street, adding/deleting/updating a comment and adding/deleting/updating a house to a street, when performing an operation the data is fetched from the request, modified and sent to the back end. Here are some pictures of how the front end of the application looks like:

- User auth index:

The screenshot shows a web interface titled "Auth for Streets project". Below the title is a "Content Area" containing four links: "Login", "Register", "Logout", and "Only auth users". The page is generated by "mercurio verde hopson".

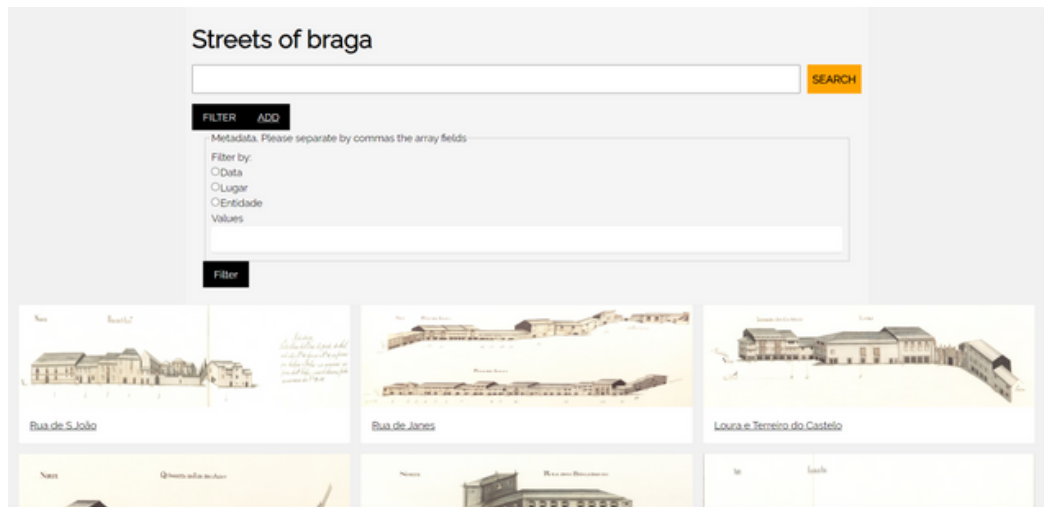
- User Log in form:

The screenshot shows a web interface titled "Login Form". It contains a "Credentials:" section with two input fields: "Username" (with the value "prueba@email.com") and "Password" (with a masked value "----"). Below the input fields is a "Send" button. The page is generated by "Node.js auth demo".

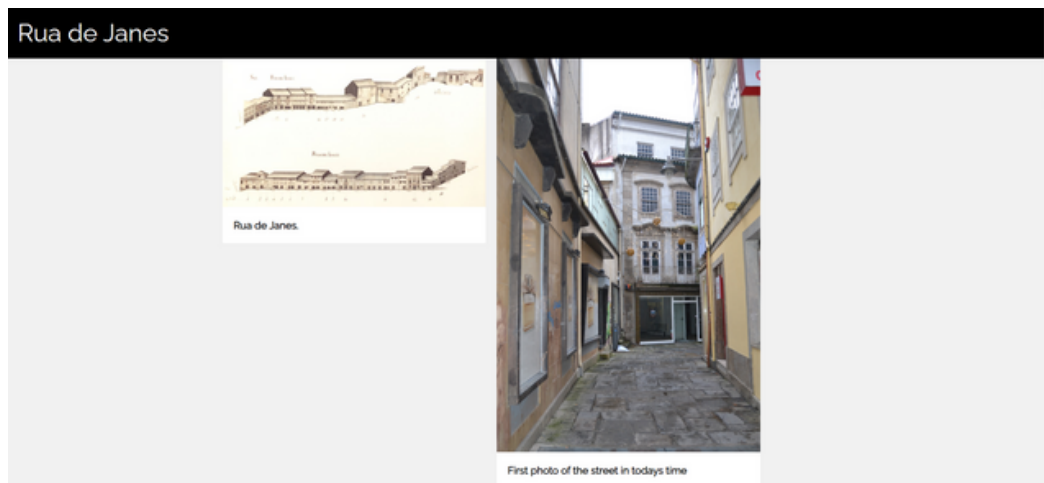
- User Register form:

The screenshot shows a web interface titled "Register Form". It contains a "Credentials:" section with three input fields: "e-mail" (with the value "prueba@email.com"), "Password" (with a masked value "----"), and "Name". Below the input fields are two radio buttons: "Normal" and "Moderator". Below the radio buttons is a "Send" button. The page is generated by "Node.js auth demo".

- Main window:



- View street(Normal user doesnt have the options to update nor delete elements):



Comments

Pequena e tortuosa rua que ligava a igreja de S. João do Souto à Porta de Souto. Aparece também com os nomes de Jano e Janoas.

[Update](#) [Delete](#)

Lugar

[Igreja de S. João do Souto](#)

[Porta de Souto](#)

[Jano](#)

[Janoas](#)

Data

Entidade

Aberta na Idade Média, esta artéria deverá ter perdido grande parte da sua importância quando D. Diogo de Sousa deu efectiva funcionalidade à porta de S. João.

[Update](#) [Delete](#)

Lugar

[Porta de S. João](#)

House list

1	Update	Delete
2	Update	Delete
4	Update	Delete
5	Update	Delete
6	Update	Delete

- View House(Normal user doesnt have the options to update nor delete elements):

House

Numero 1

Entidade Miguel da Silva Cação, pasteleiro

Foro 240 reis e 2 galinhas

Comment

Os prazos nº 2 e 3 encontram-se unidos desde 1669

[Update Comment](#) [Delete Comment](#)

Lugar

Data

1669

Entidade

- Add Street:

Add Rute

Metadata

Id

Nome

Old Image to represent the street

[Seleccionar archivo](#) | Nenhum arquivo selec.

Description

[Add](#)

Generated by Mercurio Verde Hopson

- Add House:

Add house to rute r8

Metadata

Numero

Enfiteuta

Foro

Add

- Add Comment:

Add comment to rute r7

Metadata, Please separate by commas the array fields

Text

Data(s)

Lugar(es)

Entidade(s)

Add

Generated by Mercurio Verde Hopson

How it works

To run the application first the back end has to be initialized, going to the folder where is located and running npm start, then the same has to be done with the interface app, in here both the auth and the interface parts are implemented. From a user point of view, he is first introduced to the user page, where he can either login or registered, once logged in he will find the main page, where a search bar, to find streets by their name, is found, also a filter form, that can be hid pressing the filter button, a add button, and six streets, presented by a picture and their name.

If the user decides to press the filter button, only streets that have the dates, places or entities highlighted in their comments will be shown, if he decides to press the add button he would be redirected to the add street form where he has to introduce the name and an image of the street, if he clicks on to a street, he will see all the pictures of the street(4 max), the comments and a list of the houses, if the user is a moderator he will be able to add pictures, modify or delete comments/houses, if it is a normal user he would only be able to add comments and houses. if he clicks on adding a comment or house he would be redirected to the addComment/house view, if he clicks on the house number, he would view all the house characteristics and comments being able to add a new comment and update or delete comments if it is a moderator.