

FlatFinder Server Side (Node)

Introduction

Application Name: Rest API Server of FlatFinder

Case Study

The customer base has expanded. Although the site is operational, it suffers from slow performance. Additionally, the server lacks flexibility and scalability. To address these issues, there is a need to link the client to a server built with Node.js.

Developers will collaborate closely, in pairs, with one focusing on integrating client calls with the Node.js server and the other on developing the server side.

Use your FlatFinder Client Side (React) project and follow:

Goals

The project is supposed to make the student gain confidence in the following skills:

- Developing Server Side.
- Developing REST API.
- Manage authentication and authorization.
- Manage a database.

Technologies

- Server - Node, Express
- Database - MongoDB
- Test - Postman/Insomnia
- Security - json web token

Soft Skills

The journey of this project will include practicing and evolving the following skills:

1. Code Review and Peer Review Skills: Practicing the ability to review someone else's code constructively, focusing on identifying areas for improvement while acknowledging strengths.
2. Flag Raising Abilities: Learning to raise flags effectively, addressing concerns about technical issues or project integrity in a clear and concise manner.

3. Communication with Team Leaders (your trainer): Developing skills in communicating with team leaders, including the ability to convey technical complexities in understandable terms and facilitate alignment and decision-making.
4. Diplomacy and Feedback: Cultivating diplomacy in providing feedback during code reviews, fostering a culture of constructive criticism and mutual growth within the team.
5. Transparency and Collaboration: Understanding the importance of transparency and collaboration within the team, ensuring that concerns are addressed openly and contributing to a cohesive project environment.
6. Individual Problem-Solving: Enhancing problem-solving abilities by independently tackling challenges encountered during the project, fostering resilience and creativity in finding solutions.
7. Self-Learning Skills: Emphasizing the importance of continuous self-learning to stay updated with new technologies and methodologies, enabling personal and professional growth in the ever-evolving field of full-stack development.

Team Work

A team has two members and the division of labor is as follows

Entities

User (Developer A)

- id
- email
- password
- first name
- last name
- birth date
- is admin
- favourite flats list
- created
- updated

Flat (Developer B)

- id
- city
- street name
- street number
- area size
- has ac

- year built
- rent price
- date available
- owner id
- created
- updated

Message (Developer B)

- id
- content
- flat id
- sender id
- created

End Points

Regarding the permissions of the following endpoints: all of them require the clients to be at least logged in.

User

function	route	http method	permissions
getAllUsers	/users	GET	admin
getUserById	/users/:id	GET	
updateUser	/users	PATCH	admin/account owner
deleteUser	/users	DELETE	admin/account owner
login	/users/login	POST	
register	/users/register	POST	

Flat

function	route	http method	permissions
getAllFlats	/flats	GET	
updateFlat	/flats	PATCH	flat owner
deleteFlat	/flats	DELETE	flat owner
addFlat	/flats	POST	flat owner
getFlatById	/flats/:id	GET	

Messages

function	route	http method	permissions
getAllMessages	/flats/:id/messages	GET	flat owner
getUserMessages	/flats/:id/messages/:senderId	GET	the sender
addMessage	/flats/:id/messages	POST	

Summary

The development will be done in the following order:

Task	Days
User API	1
Flat API	1.5
Messages API	1
Auth API	1.5
Total	5

Good Luck!