

Wish Where is Home

Projeto em Informática

Milestone 4: Transition Phase
Group 7



deti

universidade de aveiro
departamento de eletrónica,
telecomunicações e informática





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Context of the project and
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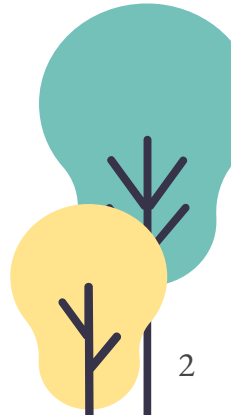
Main Features

Explaining main features
implemented

05

FUTURE WORK

Conclusion and Future Work



THE TEAM



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Advisor

CONTEXT AND STATE OF THE ART

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CONTEXT: PROBLEM & MOTIVATION

The real estate market is saturated with systems that focus on the **physical attributes** of properties.

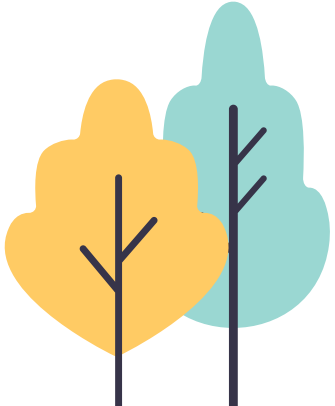
An individual's **quality of life** is closely tied to the availability of services and facilities **within or nearby an area**.

We wish to enhance the overall **well-being** and **satisfaction** of individuals by providing them with a tool which allows them to find a home that aligns with their **lifestyle** and **preferences**.



CONTEXT: PROBLEM & MOTIVATION

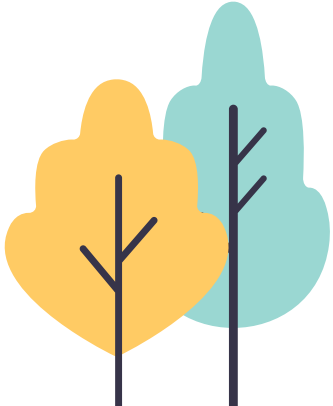
- Contact with Specialist and Redefinition of Project
- Focus on Universidade de Aveiro Students



	Idealista	Imovirtual	ERA	Zillow	Realtor	WisH
Physical aspects of the property	✓	✓	✓	✓	✓	✓
Choose district/ municipality from the map	✗	✗	✗	✗	✗	✓
View	✗	✗	✗	✓	✓	✓
Establishments nearby	✓	✓	✓	✓	✓	✓
Parking spaces	✗	✗	✓	✓	✓	✓
GreatSchool Ranking	✗	✗	✗	✗	✓	✓
TransitScore, BikeScore or WalkScore	✗	✗	✗	✗	✗	✓
Portuguese	✓	✓	✓	✗	✗	✓

GOALS

- Develop an innovative real estate platform with unique functionalities
- Incorporate additional metrics for students
- Client can explore areas based on personal preferences



CONCEPTUAL MODELING

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QUESTIONNAIRE RESULTS

86 responses

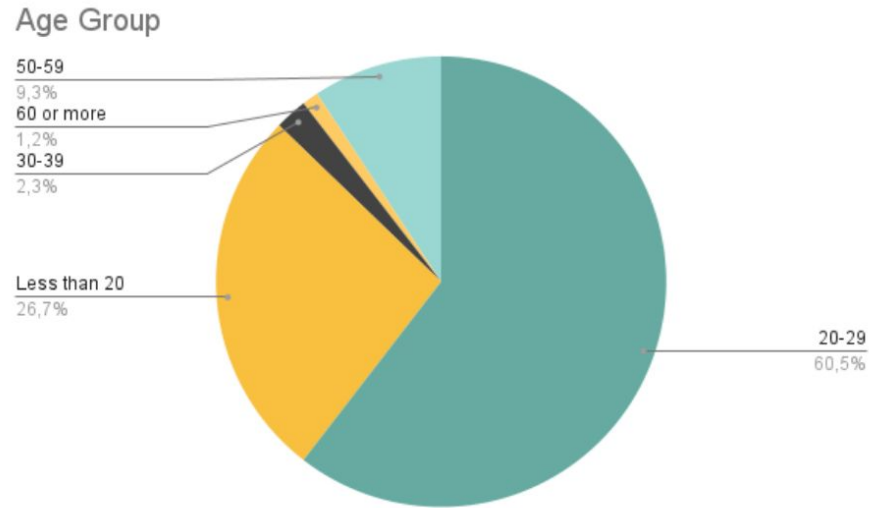


Figure X - Age Group

QUESTIONNAIRE RESULTS

What are the biggest challenges you've encountered when searching for housing?

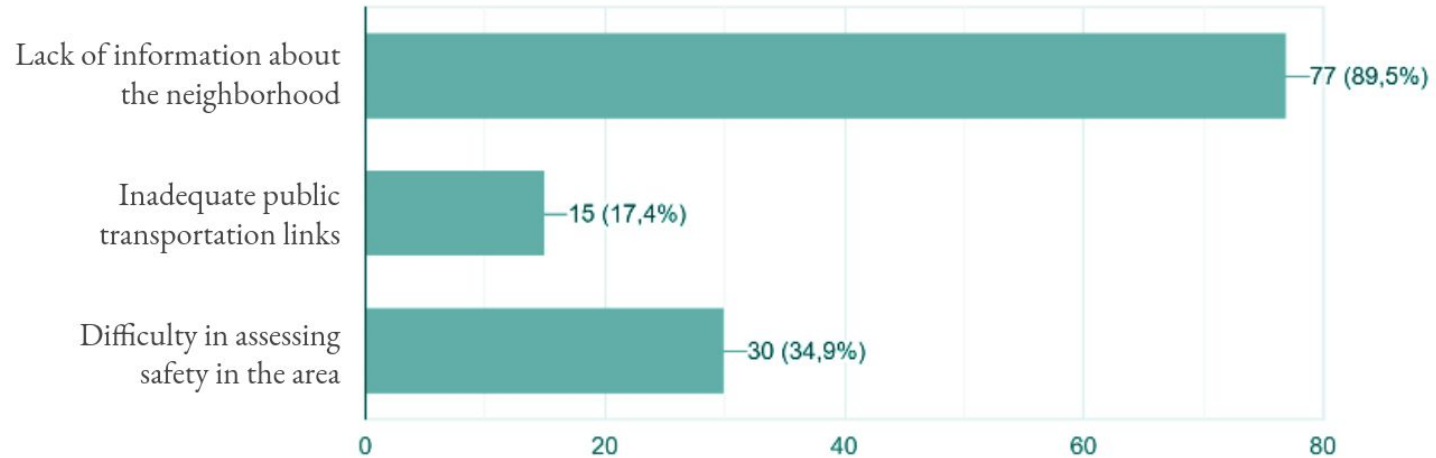


Figure X - Challenges

QUESTIONNAIRE RESULTS

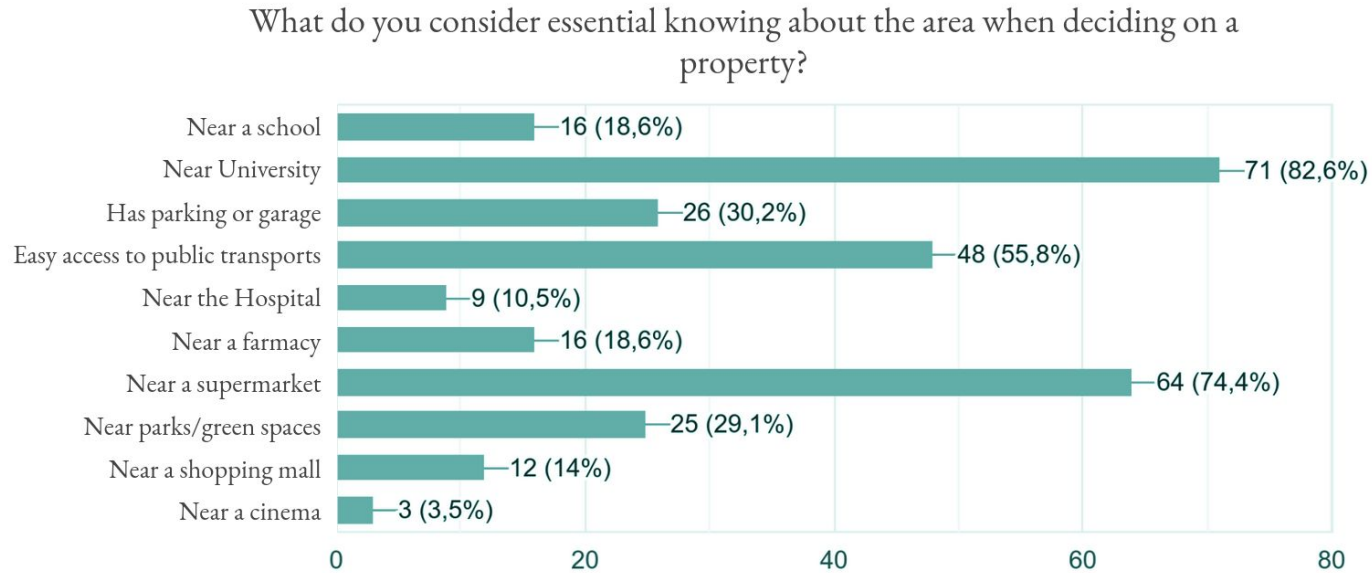


Figure X - Essential information



QUESTIONNAIRE

Do you take note of anything **lacking** or any **missing aspects** in the real estate applications/websites?

- Trustworthiness and quality of the adverts
- Contact information
- Specific tools for students
- Interface and process personalization and updates
- Detailed information about the location

QUALITY OF LIFE STUDY



HEALTH

Health services, Water quality,
Pollution



EDUCATION

Schools and Access to
education



ENTERTAINMENT

Leisure places and
cultural events



ENVIRONMENT

Green spaces and
access to natural
resources

Study: “8+1 dimensions of quality of life”.

Goal: Integrate indicators into our platform to offer a comprehensive perspective on quality of life, adjustable to individual preferences.

Challenges: Free data limitations; prioritization based on questionnaires.

EVALUATION METRICS



HEALTH



SOCIAL & LEISURE



EDUCATION



NATURE & SPORTS



SERVICES



COMMERCE

Functional Requirements

A **Client** is able to:

- Login/Register
- Manage account details
- Manage personal preferences
- Interact with and filter the evaluation metrics
- View results based on the metrics
- View properties and their information



An **Owner** is able to:

- Login/Register
- List properties
- Manage properties & rooms
- Upload photos/videos

An **Admin** is able to:

- Approve bedrooms and properties
- Deny bedrooms and properties
- Provide Feedback on denied rooms

Non-functional Requirements



Performance: Response Time & Scalability



Security: Authentication and authorization & Data protection



Usability: Ease of use



Maintainability

SYSTEM ARCHITECTURE

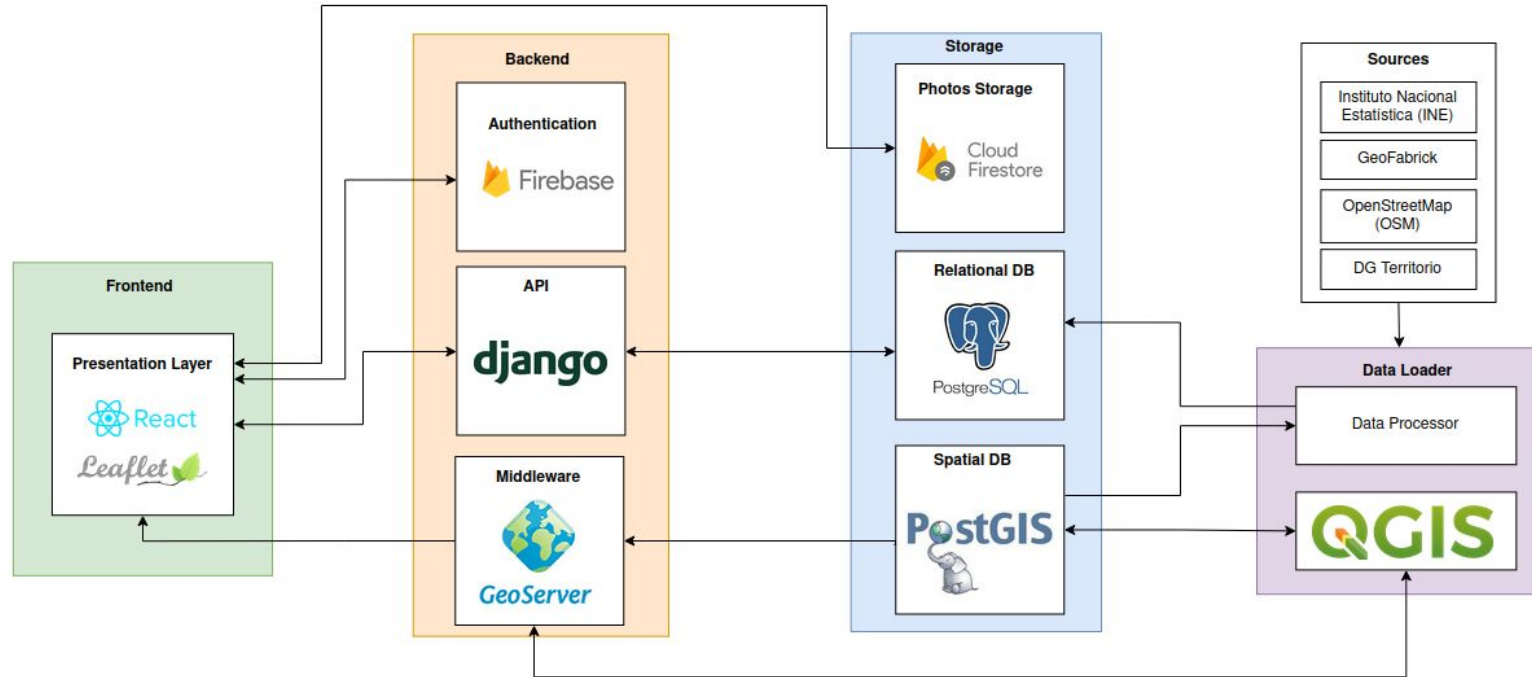


Figure 2 - Architecture

DEPLOYMENT ARCHITECTURE

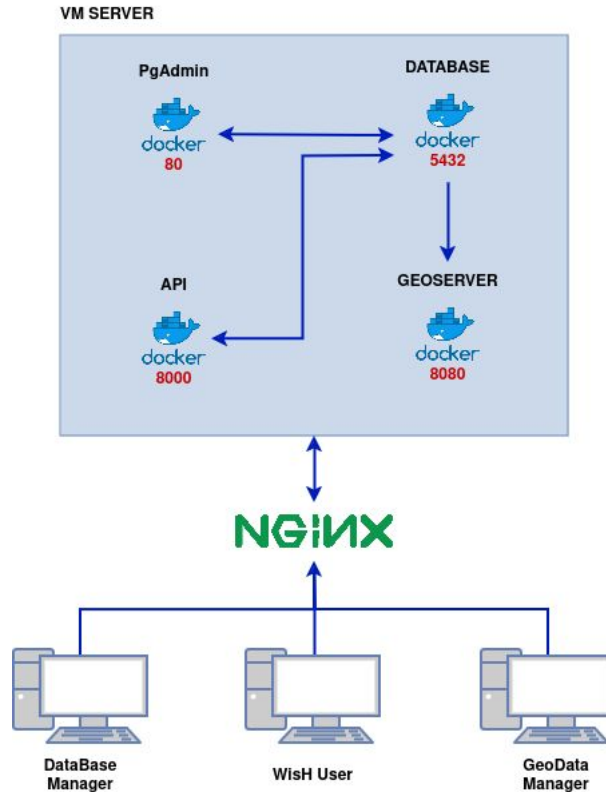


Figure 3 - Deployment Architecture

DOMAIN MODEL

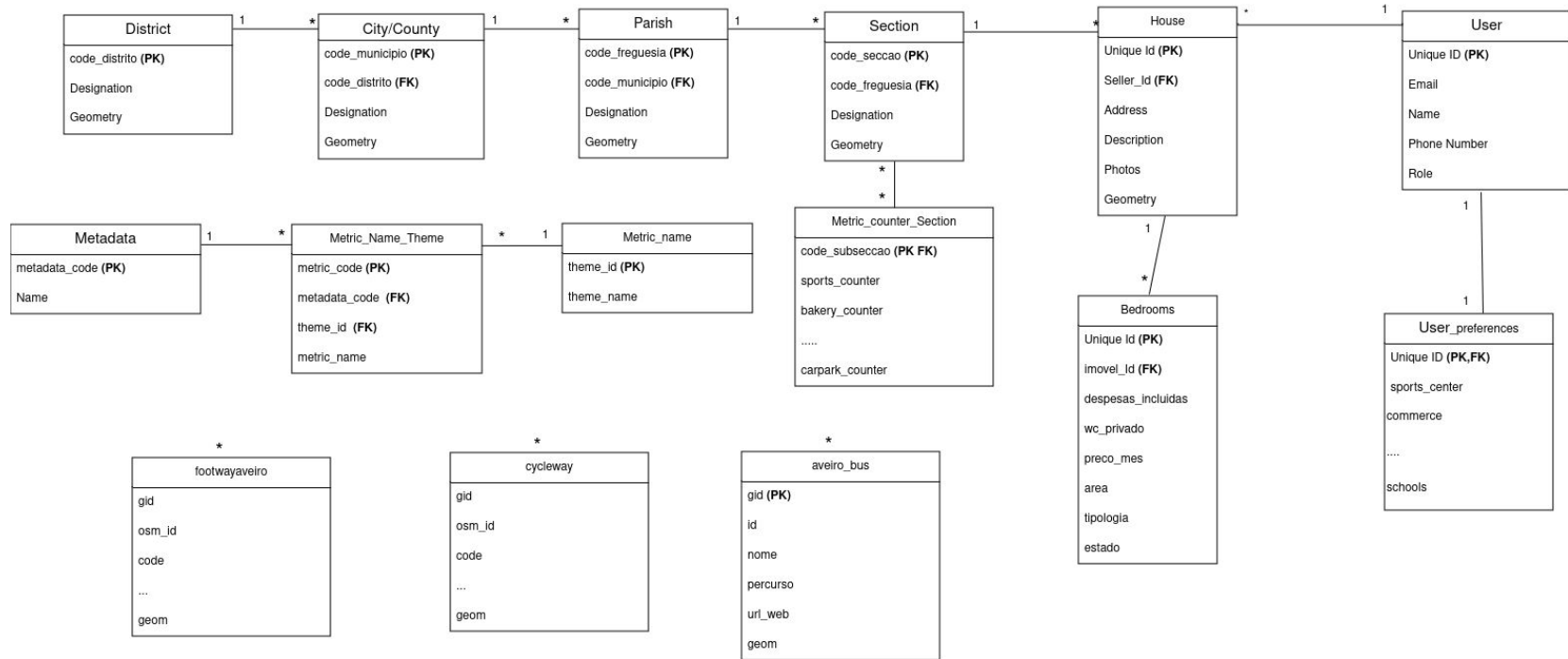


Figure 4 - Domain Model

MAIN FEATURES

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EVALUATION METRICS

City/County	District	Pharmacies	Hospitals
	Aveiro (01)		
	Aveiro (0101)		
	Aradas (010101)	2/2000	0/2000
	Glória (010102)	3/3000	1/3000
	Vera Cruz (010103)	5/2500	0/2500

Score per Area = Counter / Area

Counter - Number of "Metric" in the region
Area - Area of the region

EVALUATION METRICS

Aveiro (01)	Pharmacies	Hospitals
Aradas (010101)	0.001	0
Glória (010102)	0.001	0.00033
Vera Cruz (010103)	0.002	0

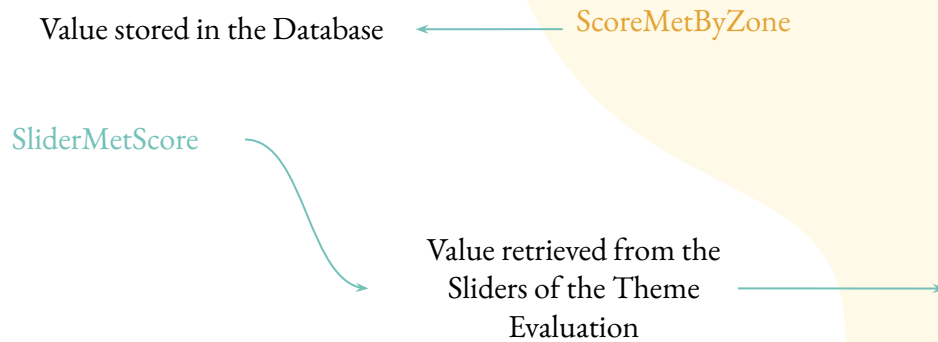
Take the highest value and divide all scores by that value, obtaining a comparison score between each by metric

EVALUATION METRICS

Aveiro (01)	Pharmacies	Hospitals
Aradas (010101)	0.5	0
Glória (010102)	0.5	1
Vera Cruz (010103)	1	0

Result = Score of each Metric by region (**ScoreMetByZone**)

EVALUATION METRICS



Portugal

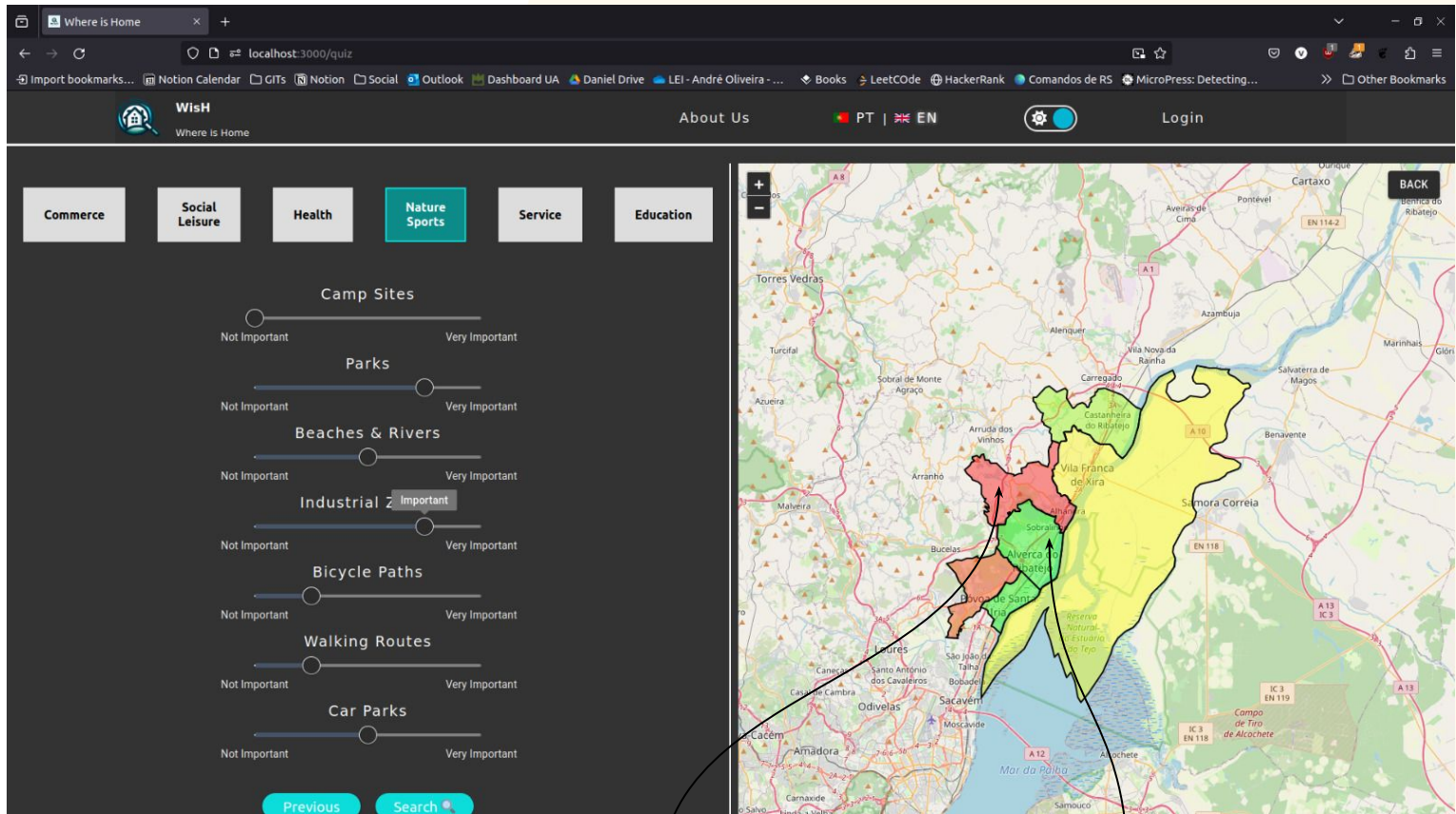
What are you looking for?

Commerce	<input type="range"/>
	Nothing Very Important
Social leisure	<input type="range"/>
	Nothing Very Important
Health	<input type="range"/>
	Nothing Very Important
Nature sports	<input type="range"/>
	Nothing Very Important
Service	<input type="range"/>
	Nothing Very Important
Education	<input type="range"/>
	Nothing Very Important

Next

$$x_i = \sum_{k=1}^p \theta_k (\sum_{j \in F_k} w_j \cdot score_{i,j})$$

- F_k is the set of metrics associated with theme t_k ,
- θ_k is the weight for theme t_k ,
- w_j is the weight for feature j ,
- $score_{i,j}$ is the normalized score of the metric j in zone i



Zone with the **lowest** score amongst all displayed zones

Zone with the **highest** score amongst all displayed zones



Wish

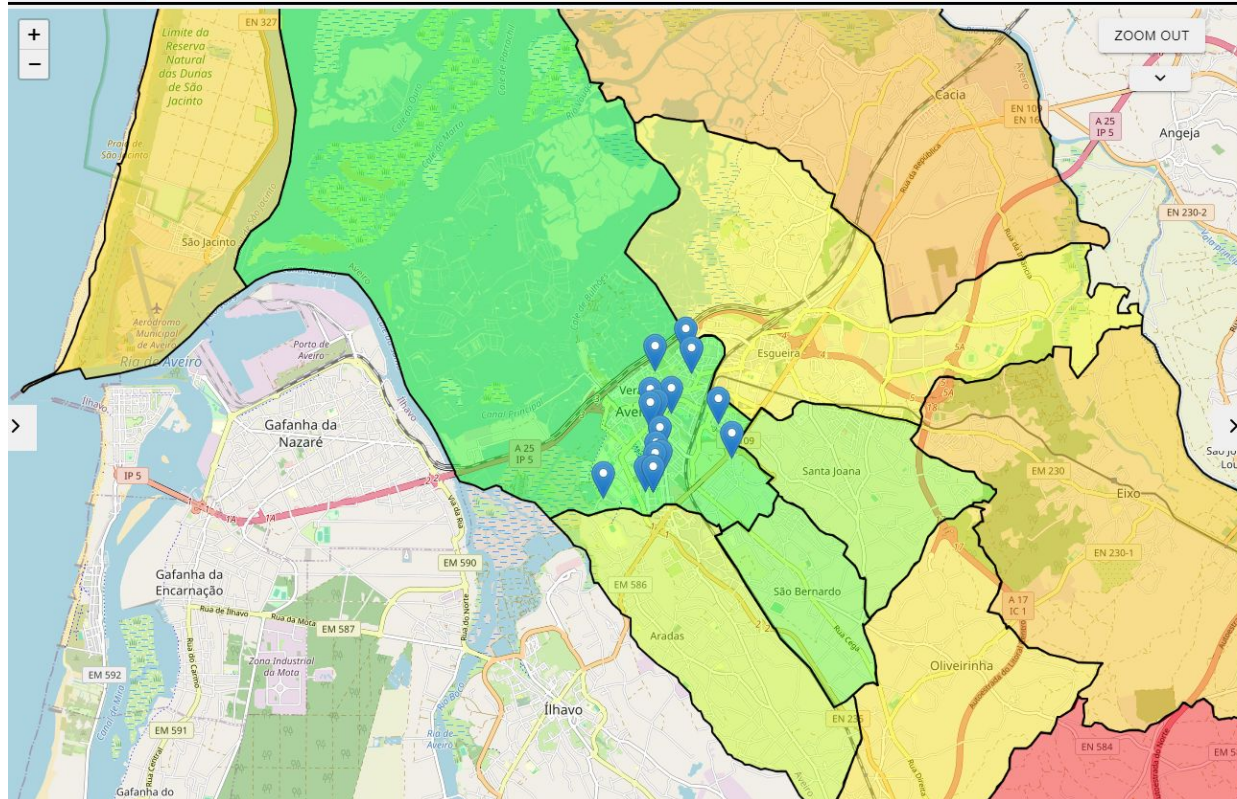
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Login



Properties

15°

Rua Eça de Queiroz 12, Aveiro, 3810-109, Aveiro

1 2 0 125.00m²

450-450€



16°

Casa Bairro de Santiago T1

Rua de Arouca, 3810-104, Aveiro

1 1 0 123.00m²

250-250€



17°

Apartamento para Estudantes T1

Rua das Pombas, Aveiro, 3810-150, Aveiro

1 1 0 123.00m²

250-250€



18°

Apartamento Taxis T3

Rua Rodrigues, Aveiro

3 3 1 360.00m²

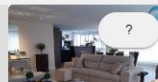
180-270€



19°

Apartamento Barrocas T3

Rua Barrocas, Aveiro





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Apartamento para Estudantes



Apartamento para Estudantes, floor 3

Rua das Pombas, Aveiro, 3810-150

T1 not equipped

Description

Rooms

Widgets

Description

Casa próxima da Universidade

Property Details:

- Area: 123.00 m²
- WCs: 1
- Kitchen not equipped
- Internet not included
- Expenses not included

Restaurants



191 Ratings

Nightlife



24 Ratings

Arts and Entertainment



8 Ratings

Services



3 Ratings

Active life



1 Rating

Take this opportunity!

Parking not included.

250€ per month

Reserve or Book Now!

?



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Apartamento para Estudantes



Apartamento para Estudantes, floor 3

Rua das Pombas, Aveiro, 3810-150

T1 not equipped

Description

Rooms

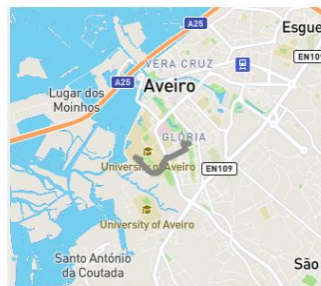
Widgets

Universidade de Aveiro



Calculate

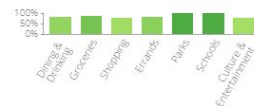
Distance to institution : 5 min (1.4 km)



Rua das Pombas Aveiro 3810-150

Walk Score
83

The Walk Score here is 83 out of 100 based on these categories. [View a map](#) of what's nearby.



Get scores for your address



Source: Walkscore API

19°

Rua Barrocas, Aveiro



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My Properties

Accepted

On Hold

Denied

Property Photo

Apartamento Taxis

More

Rooms

Delete Property

Property Photo

Apartamento Barrocas

More

Rooms

Delete Property

Property Photo

Apartamento Viela do Canto

More

Rooms

Delete Property

Property Photo

Apartamento Continente

More

Rooms

Delete Property

Property Photo

Apartamento Faramcia

Add Property

Name:

Address:

Zip Code:

Area (m²):

Floor:

Typology:

Number of Rooms:

Number of Bathrooms:

Description:

Elevator:

☐

Parking:

☐

Equipped:

☐

Kitchen:

☐

WiFi:

☐

Photos:

Add Photos

Add Rooms



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My Properties

Accepted

On Hold

Denied



Apartamento Taxis

More

Rooms

Delete Property

Room 1:

Included Expenses: Água, luz, internet

Private Bathroom: No

Price: 180.00 €

Available: No Available

Observations: Quarto mobiliado

Room 2:

Included Expenses: Água, luz, internet

Private Bathroom: Yes

Add Property



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5

Apartamento Bairro Santiago

Rua Ola, Aveiro, Portugal

denied

Apartamento Mário Sacramento



Area m2: 123.00

N' Bedrooms: 1

Quality assessment: N/A

Last Update: 27/05/2024 23:35:54

Equipped: No

Parking/garage: No

N' Wcs: 1

Wifi: No

Bedrooms:



Id: 150

Available: No

State: denied

Area m2: 12.00

Typology: individual

Price per month: 250.00

Expenses:

Expenses not included

Private WC: No



Accept

103

casa rodrigo

Vera Cruz, Aveiro, 3810-187

denied

FUTURE WORK

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FUTURE WORK

- UI update

- Frontend Deploy to the academic community

- Usability Tests

- Load Tests

THANK YOU

Does anyone have any questions?



<https://whereishome.netlify.app/>

