

Computer Engineering Department (2022-2023)

Software Engineering Project

● Introduction

Our project aims to simplify the process of renting properties and buying or selling furniture by bringing tenants, property owners, and administrators together on a single platform.

1. Tenants: can search for rental properties and engage in furniture commerce, making it easier to find a new home and furnish it according to their needs.
2. Owners: can directly showcase their properties to potential tenants, eliminating unnecessary intermediaries and providing more control.
3. Admins: manage the website, overseeing permissions and maintaining the platform's integrity to ensure a smooth user experience.

By centralizing these activities, we're creating a user-friendly system that makes the process of moving to a new place more efficient and less stressful for everyone involved.

We've made this project using Java Spring Boot, HTML, CSS & JS.

● GUI

The project's Graphical User Interface (GUI) is designed for simplicity and ease of use. Tenants, owners, and admins can quickly navigate through the platform with clear sections for renting properties and buying or selling furniture. With straightforward forms and displays, the interface allows users to find what they need without hassle, making the process of renting, selling, or managing properties more accessible and efficient.

- **Home Page**

The Home page of the project is a user-friendly gateway that makes it easy to learn about the website. It has "Sign In" and "Login" buttons for creating or accessing accounts, highlighting the site's focus on convenience and ease of use.

Sakancom

Welcome To Sakancom

Find the right place for you!

Discover and rent your dream home effortlessly while buying and selling used furniture on our intuitive online platform. Browse available housing, book with ease, and connect directly with owners. Simplify your housing journey today and find the perfect place to call home.

Discover More

Sakancom's locations & coverage

An-Najah National University

Jenin

Jerusalem

Nablus

ABOUT

Here at Sakancom, all we care about is HOME!

OUR MISSION

OUR VISION

ABOUT

Here at Sakancom, all we care about is HOME!

OUR MISSION

Our mission is to revolutionize the way people find and rent housing by providing a seamless and user-centric platform. We are committed to offering a comprehensive range of housing options, innovative features, and exceptional customer service. Through advanced technology and data-driven solutions, we aim to streamline the entire rental process, saving time, reducing stress, and ensuring a positive experience for both tenants and housing providers.

Our mission is to be the trusted partner that connects individuals with their dream homes and simplifies their housing journey.

OUR VISION

Our vision is to create a world where everyone can easily find and enjoy their perfect living space. We envision a future where the process of searching for housing is simplified, transparent, and personalized, empowering individuals to discover their ideal homes with confidence and convenience.

PRODUCTS & SERVICES

Sakancom specializes in creating services that meet the needs of an environment full of modern competitive businesses.

Family

Establish contact to all necessary parties through constant feedback and friendly interfaces in-website that encourages them the chance to contribute to the well-being of the site.

Reliability

Working in a comfortable environment that provides wholesome and integrity to our services.

Honesty

Provide honesty and complete transparency through our services.

Quality

Ensure great quality service for both customers and clients through our website.

CONTACT US

Location:
An-Najah National University, Nablus, Palestine

Email:
contact@Sakancom.com

[Send Message](#)

About the company

Sakancom offers a diverse range of rental properties to suit every budget. With a commitment to service and transparency, we make finding your perfect home easy and enjoyable.

When pressing the Sign In button, the website will go to another page that allows the user to enter his information to complete sign in to the website.

Screenshot of the Sakancom SignUp account creation process. The page title is "CREATE YOUR ACCOUNT!". It shows a progress bar with four steps: Account (selected), Personal, Information, and Finish. Below the progress bar, the "Account Information" section is displayed. The "Email:" field contains "yossalam261@gmail.com", which is highlighted in blue with the message "Valid email address". The "Password:" and "Confirm Password:" fields both contain three dots ("..."). A note below the password fields says "Passwords match". A "Next" button is visible at the bottom right.

We've made restrictions that the email should be valid and the passwords must match to enable the button “Next”.

Screenshot of the Sakancom SignUp account creation process, Step 2 - 4. The page title is "CREATE YOUR ACCOUNT!". It shows a progress bar with four steps: Account, Personal (selected), Information, and Finish. Below the progress bar, the "Personal Information" section is displayed. The "First Name:" field contains "yosef", the "Last Name:" field contains "salam", the "Contact No.:" field contains "0598666558", and the "Alternate Contact No.:" field contains "05999652440". Both the "First Name:" and "Last Name:" fields are highlighted in blue with the message "Required". A "Previous" button is visible at the bottom left, and a "Next" button is visible at the bottom right.

Also the input fields are required to enable the button “Next”.

Sakancom

CREATE YOUR ACCOUNT!
Fill all form field to go to next step

Step 3 - 4

Informations:

University Major*: C E

Work Place*: Student

Age*: 21

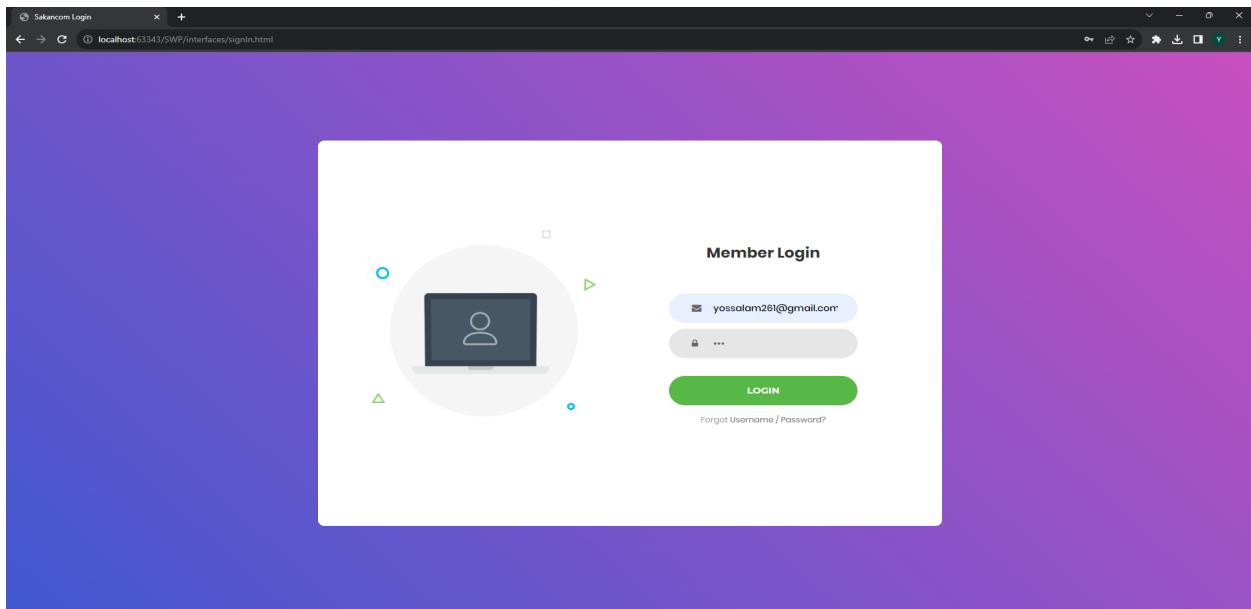
Type*: Tenant

Previous **Submit**

The user can choose to register as either a tenant or an owner, making the website more user-friendly.

When the user presses the button “Submit”, the information of the user will be saved in the database.

When the user presses the “login” button, the website will go to another page that allows the user to enter his email and password to enter his account.



If the email doesn't exist or the password is incorrect, a message appears defining that the information isn't correct.

If the user account is registered as an owner, then when logging in the website will go to the owner's home page.

If the user account is registered as a tenant, then when logging in the website will go to the tenant's home page.

● Owner Interface

The Owner's homepage consists of two sections, one for viewing the ads and one for viewing the owner's residences.

The top screenshot shows the Sakacom Owner Interface homepage. It features a large image of a house with a balcony. Below the image, there is a summary card with the following details:

- Price: \$13000
- City: Nablus
- Area: 230M2
- Explore More button

The bottom screenshot shows a section titled "View A Sample Of Your Properties Below:". It displays two property cards:

- palestine**
Nablus
Very Good Property, Its clean and well designed
190 People 190 m2 \$ 900
[View all of them? Click here!](#)
- palestine**
Nablus
Very Good Property, Its clean and well designed
220 People 220 m2 \$ 1100
[View all of them? Click here!](#)

When pressing the "residence" button, the website will go to a page that shows the owner's residences.

The screenshot shows a web browser window with the Sakancom logo at the top left. The top navigation bar includes links for 'Residences', 'Dashboard', 'Log Out', and a search icon. Below the navigation, a large header says 'Your Amazing Properties'. A teal button labeled 'Add Property' is centered above three property cards. Each card displays a thumbnail image of a house, its location ('palestine, Rammallah, Al-Tireh', 'palestine, Nablus, rafediya', or 'palestine, Nablus, Al-Masaken'), its rent price ('RENT | 1000 / MONTH', 'RENT | 900 / MONTH', or 'RENT | 1100 / MONTH'), and a 'Click here to view >' button.

When hovering on the residence, it will show the residence price, area and number of bathrooms, bedrooms and floors.

This screenshot shows the same three property cards as the previous one, but with additional information overlays. Each card now includes a detailed description box at the bottom. The first card for 'Rammallah, Al-Tireh' shows 'RENT | 1000 / MONTH' and 'Click here to view >'. The second card for 'Nablus, rafediya' shows 'RENT | 900 / MONTH' and 'Click here to view >'. The third card for 'Nablus, Al-Masaken' shows 'RENT | 1100 / MONTH', 'Click here to view >', and a table with details: Area 220m², Beds 3, Baths 2, Floor(s) 2.

The “Add Property” button allows the owner to add a new residence to the tenants.

RENT YOUR PROPERTY!
Fill all form field to go to next step

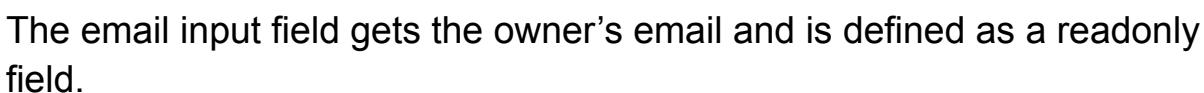
Step 1 - 4

Account Information:

Owner Email: *

mohammadaker7@gmail.com

Next



The email input field gets the owner's email and is defined as a readonly field.

Personal Information:
Step 2 - 4

Country: *

City: *

Location: *

Address, Street, etc...

Floor number: *

How many floors does the residence have?

Area:

Enter the total area of your residence in square meter

Bedrooms: *

How many bedrooms does the residence have?

Bathrooms: *

How many bathrooms does the residence have?

Description:

After that, the owner must fill in the information of his residence such as the exact location (country , city , address) also the number of bathrooms , bedrooms and floors, and the area of the residence, also he can write a description to describe his residence.

RENT YOUR PROPERTY!

Fill all form field to go to next step

Step 3 - 4

Image Upload:

Upload Your Photo:
Choose Files No file chosen

Price:
Please note that the price is in USD (United States Dollar)

Services:
Enter a service

Add

Previous Submit

Lastly, the owner should upload an image of his residence. (this input field is multiple, which means the owner can upload more than one photo)
Also the owner should define the rent price and add the services or the features of his residence.

After that the admin can accept or delete his add property request.

When pressing on one of the owner's residences, it shows the owner the information of his residence.

Property Description

Very Good Property, Its clean and well designed

Quick Summary

Property ID:	6
Location:	palestine, Nablus, Al-Masaken
Area:	220 m2
Beds:	3
Baths:	2
Floor(s):	2

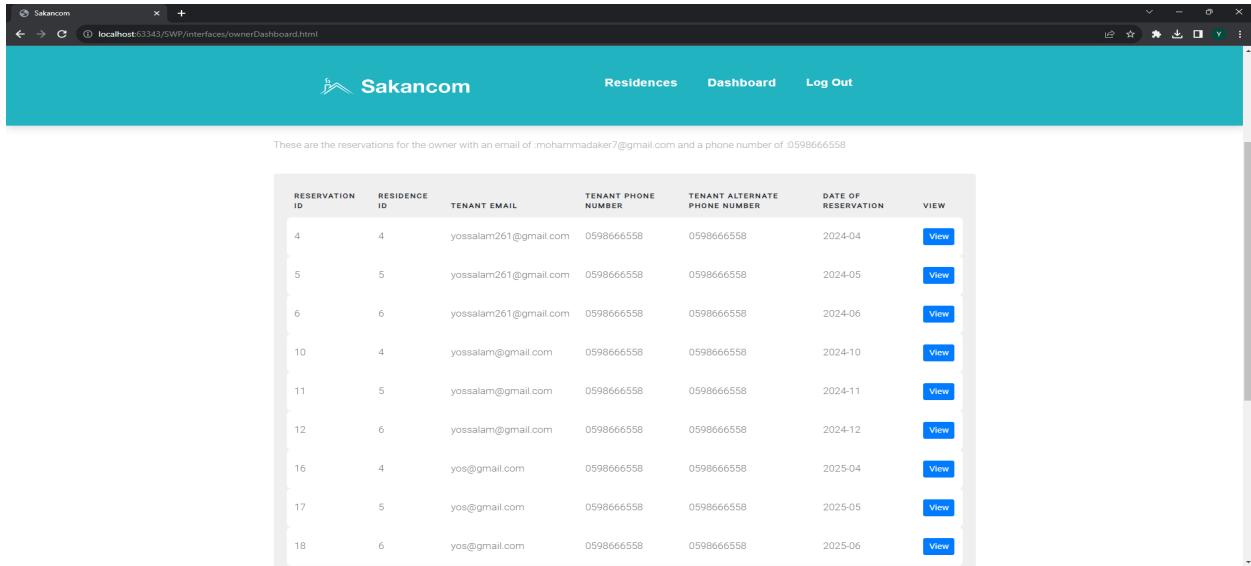
Services

- Roof
- Balcony
- Garden

REQUEST AD

The owner also can request an ad to show his residence for a large number of tenants by pressing the “Request Ad” button.

When pressing on Dashboard, the website goes to a page that shows all the rented residences, the information of the tenant and the date of each rented residence.



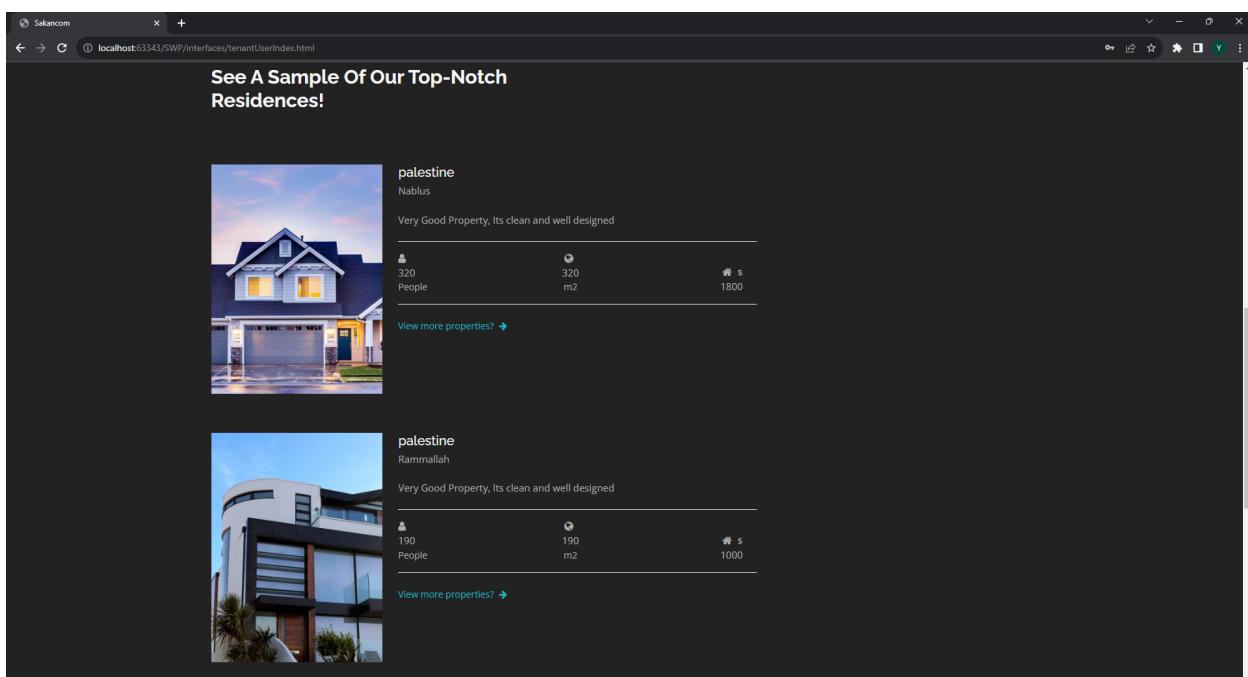
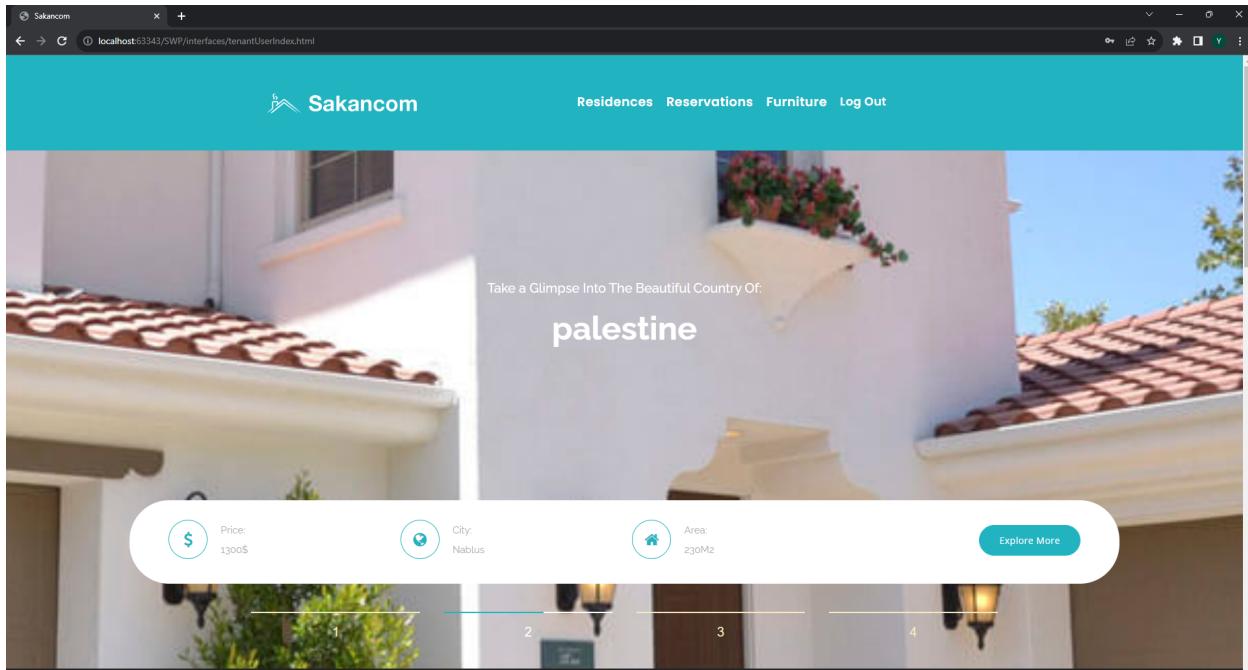
A screenshot of a web browser displaying the Sakancom Owner Dashboard. The title bar shows the URL as "localhost:63343/SWP/interfaces/ownerDashboard.html". The header includes the Sakancom logo, navigation links for "Residences", "Dashboard", and "Log Out", and a message stating, "These are the reservations for the owner with an email of .mohammadaker7@gmail.com and a phone number of .0598666558". Below the header is a table with the following data:

RESERVATION ID	RESIDENCE ID	TENANT EMAIL	TENANT PHONE NUMBER	TENANT ALTERNATE PHONE NUMBER	DATE OF RESERVATION	VIEW
4	4	yossalam261@gmail.com	0598666558	0598666558	2024-04	<button>View</button>
5	5	yossalam261@gmail.com	0598666558	0598666558	2024-05	<button>View</button>
6	6	yossalam261@gmail.com	0598666558	0598666558	2024-06	<button>View</button>
10	4	yossalam@gmail.com	0598666558	0598666558	2024-10	<button>View</button>
11	5	yossalam@gmail.com	0598666558	0598666558	2024-11	<button>View</button>
12	6	yossalam@gmail.com	0598666558	0598666558	2024-12	<button>View</button>
16	4	yos@gmail.com	0598666558	0598666558	2025-04	<button>View</button>
17	5	yos@gmail.com	0598666558	0598666558	2025-05	<button>View</button>
18	6	yos@gmail.com	0598666558	0598666558	2025-06	<button>View</button>

● Tenant Interface

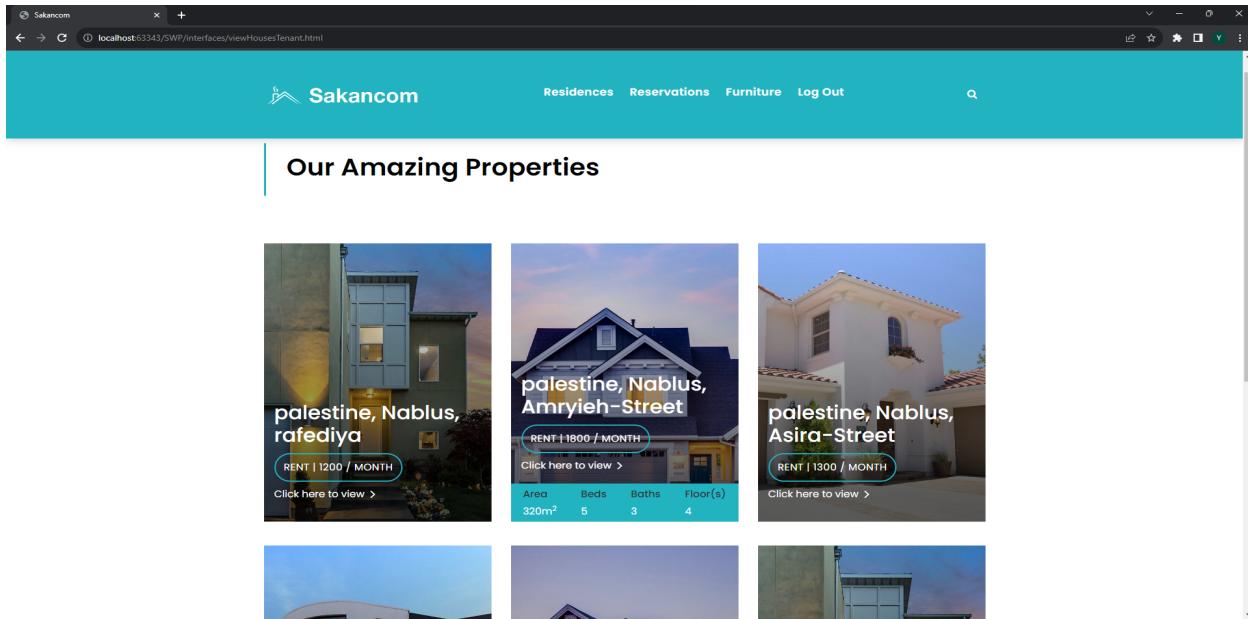
The Tenant's homepage consists of two sections, one for viewing the ads and one for viewing the residences.

The Ads that are accepted by the admin will be shown here for large number of tenants.



When pressing the “Residence” button, the website will go to a page that shows all the residences that are accepted by the admin. The tenant can see all the residences and rent the residence that he wants.

When hovering on the residence, it will show all the information of it.

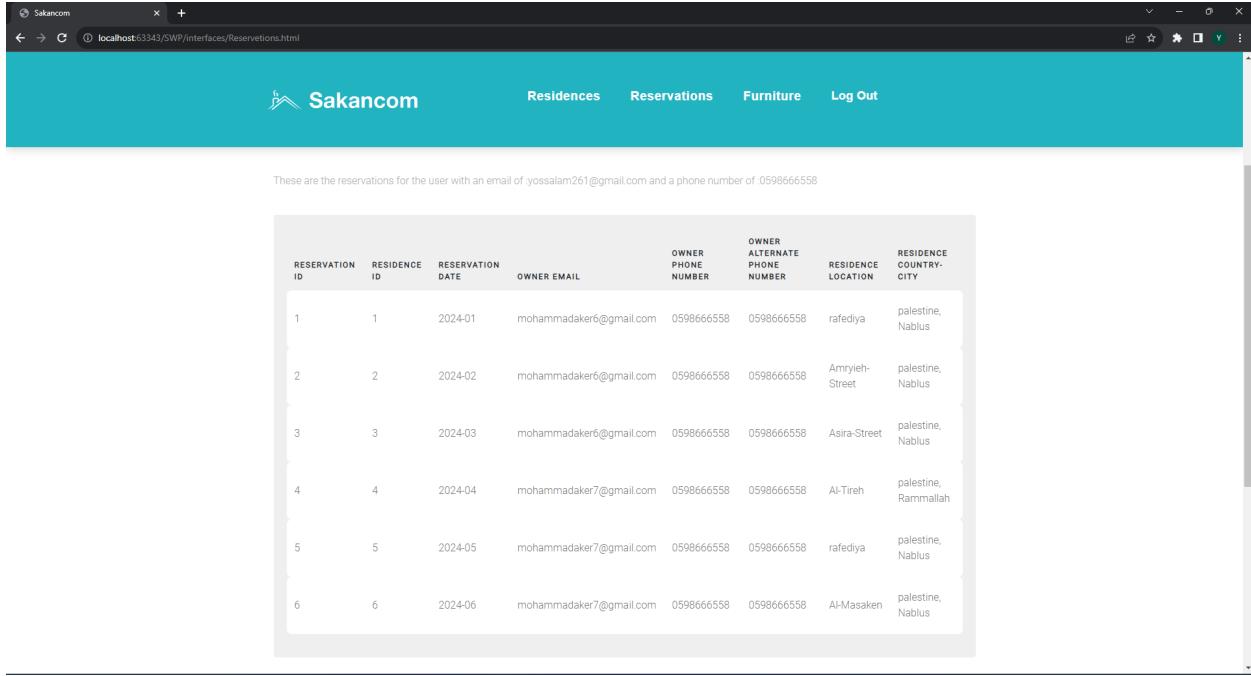


When pressing on a residence, it will go to a page that shows the information of the residence to apply to rent it.

Property ID:	2
Location:	palestine, Nablus, Amryieh-Street
Area:	320 m ²
Beds:	5
Baths:	3
Floor(s):	4

When pressing the “Rent” button, a small window pops up from the right. The tenant’s email and the residence owner’s email and the residence id automatically filled up in the input fields (readonly field). The user must choose the month date to rent the residence, if the residence is rented at the chosen month, an alert pops up and clears the input field.

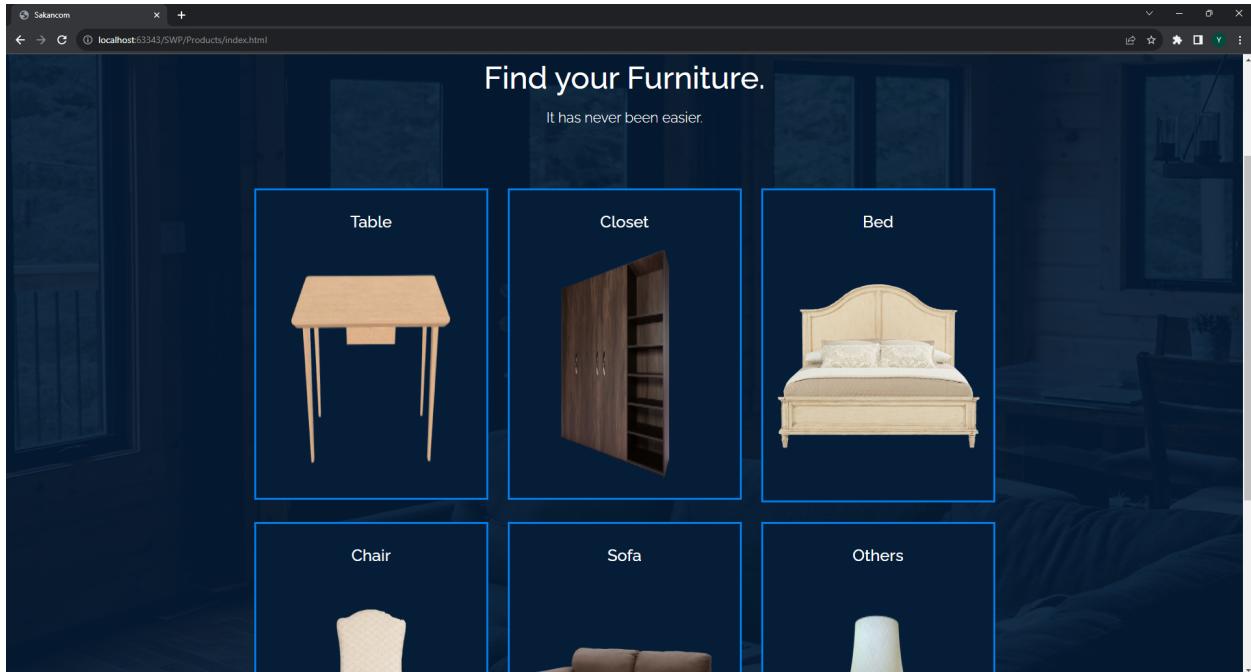
When pressing on the “Reservations” button, the website goes to a page that shows all the information of the reservations for the tenant.



The screenshot shows a web browser window for the Sakancom website. The URL is localhost:63343/SWP/interfaces/Reservations.html. The page has a teal header with the Sakancom logo and navigation links for Residences, Reservations, Furniture, and Log Out. Below the header, a message states: "These are the reservations for the user with an email of yossalam261@gmail.com and a phone number of 0598666558". A table lists six reservations with the following data:

RESERVATION ID	RESIDENCE ID	RESERVATION DATE	OWNER EMAIL	OWNER PHONE NUMBER	OWNER ALTERNATE PHONE NUMBER	RESIDENCE LOCATION	RESIDENCE COUNTRY-CITY
1	1	2024-01	mohammadaker6@gmail.com	0598666558	0598666558	rafediyah	palestine-Nablus
2	2	2024-02	mohammadaker6@gmail.com	0598666558	0598666558	Amryleh-Street	palestine-Nablus
3	3	2024-03	mohammadaker6@gmail.com	0598666558	0598666558	Asira-Street	palestine-Nablus
4	4	2024-04	mohammadaker7@gmail.com	0598666558	0598666558	Al-Tireh	palestine-Ramallah
5	5	2024-05	mohammadaker7@gmail.com	0598666558	0598666558	rafediyah	palestine-Nablus
6	6	2024-06	mohammadaker7@gmail.com	0598666558	0598666558	Al-Masaken	palestine-Nablus

When pressing on the “Furniture” button, the website goes to a page that shows the types of the furniture.



The screenshot shows a web browser window for the Furniture selection page. The URL is localhost:63343/SWP/Products/index.html. The page has a dark blue background with a central heading "Find your Furniture." and a subtext "It has never been easier." Below the heading are six categories of furniture, each with an image and a label: Table, Closet, Bed, Chair, Sofa, and Others.

The tenant chooses the type of the furniture that he would like to buy. When choosing the type, the website goes to a page that filters the furniture and shows the user the type of furniture that he would like to buy.

The screenshot shows a web browser window with multiple tabs open. The main content area displays a furniture listing for a 'Bed'. On the left is a thumbnail image of a dark wood bed in a bedroom setting. On the right is a detailed view of the same bed with the word 'Bed' above it and a 'BUY | 1200' button below. A tooltip-like overlay appears when hovering over the bed, containing the text 'Click here to view >' and a table with columns 'type', 'Quantity', and 'price', showing 'Bed', '1', and 'Buy | 900'. At the top of the page, there is a navigation bar with the Sakancom logo, menu items 'Residences', 'Reservations', 'Furniture', 'Log Out', and a search icon.

When hovering on the furniture, the information about it will be shown.

If the tenant wants to sell his furniture, he should press the “Sell Furniture” button and fill in the furniture information.

The screenshot shows a 'SELL YOUR FURNITURE' form. It is Step 1 of 4, titled 'Account Information'. The form includes fields for 'Email:' with the value 'yossalam261@gmail.com' and a 'Next' button. Above the form, a progress bar shows four steps: 'Account' (selected), 'Personal', 'Image', and 'Finish'. The Sakancom header and navigation bar are visible at the top.

SELL YOUR FURNITURE
fill all form field to go to next step

Step 1 - 4

Account Information:

Email: *
yossalam261@gmail.com

Next

Sakancom

Rafedya Street
Nablus, Palestine
+972595254709
+970508666558

About the company
Sakancom offers a diverse range of rental properties to suit every budget. With a commitment to service and transparency, we make finding your perfect home easy and enjoyable.

f t in o

The tenant email will be automatically filled in (Read only input field)

SELL YOUR FURNITURE
Fill all form field to go to next step

Step 2 - 4

Personal Information:

First Name: *
yosef

Last Name: *
salam

Contact No.: *
0598666558

Alternate Contact No.:
0598666558

Previous **Next**

Then, the tenant must fill in his information.

SELL YOUR FURNITURE
Fill all form field to go to next step

Step 3 - 4

Image Upload:
Upload Your Photo:
 bed.webp

Furniture Type: *
Closet

Number of Item:
2

Price In Dollar:
200

Description:
Enter a slight description of your residence

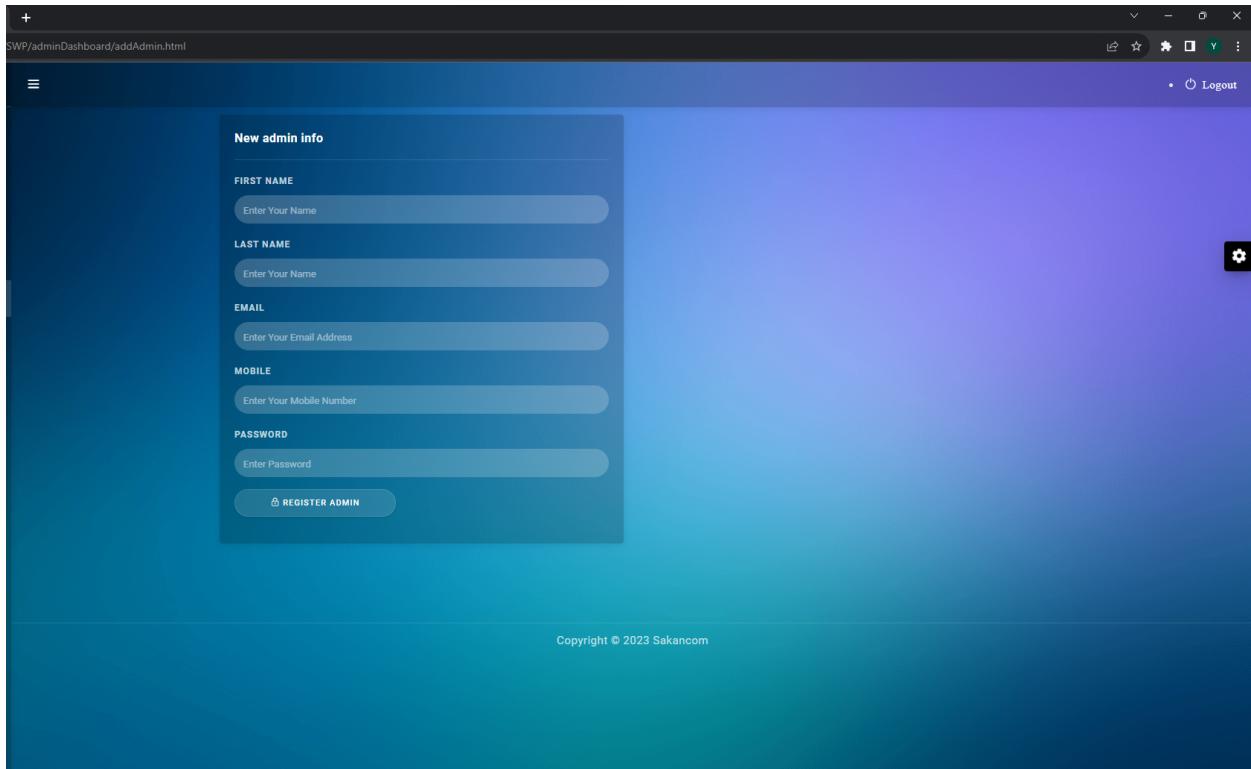
Previous **Submit**

The tenant must upload the furniture image and select the furniture type (Table,Chair,Sofa,Bed,Closet,Others), define the Quantity of the item and the price of it.

The tenant also can write a description about the furniture he would like to sell.

• Admin Interface

The admin has the ability to add other admins to the system, providing a level of control and collaboration within the platform. Additionally, all reservations can be viewed in a convenient table format. The admin also has the authority to accept residence requests, ensuring that the process is managed efficiently and according to the necessary guidelines.



The Admin can add other admins by filling in the new admin information such as email, password...etc.

Also the admin interface provides a table that can show all the reservations to all residences in the website.

Reservations

RESERVATION ID	RESIDENCE ID	OWNER EMAIL	TENANT EMAIL	DATE	
1	1	mohammadaker6@gmail.com	yossalam261@gmail.com	2024-01	
2	2	mohammadaker6@gmail.com	yossalam261@gmail.com	2024-02	
3	3	mohammadaker6@gmail.com	yossalam261@gmail.com	2024-03	
4	4	mohammadaker7@gmail.com	yossalam261@gmail.com	2024-04	
5	5	mohammadaker7@gmail.com	yossalam261@gmail.com	2024-05	
6	6	mohammadaker7@gmail.com	yossalam261@gmail.com	2024-06	
7	1	mohammadaker6@gmail.com	yossalam@gmail.com	2024-07	
8	2	mohammadaker6@gmail.com	yossalam@gmail.com	2024-08	
9	3	mohammadaker6@gmail.com	yossalam@gmail.com	2024-09	
10	4	mohammadaker7@gmail.com	yossalam@gmail.com	2024-10	
11	5	mohammadaker7@gmail.com	yossalam@gmail.com	2024-11	
12	6	mohammadaker7@gmail.com	yossalam@gmail.com	2024-12	
13	1	mohammadaker6@gmail.com	zos@gmail.com	2025-01	
14	2	mohammadaker6@gmail.com	zos@gmail.com	2025-02	
15	3	mohammadaker6@gmail.com	zos@gmail.com	2025-03	
16	4	mohammadaker7@gmail.com	zos@gmail.com	2025-04	

Finally, the admin can accept or delete an owner's request to add new property.

Also to accept or delete an owner's ad request.

Admin dashboard

WP/adminDashboard/residences.html

Logout

Residences added

ID NUMBER	OWNER EMAIL	PHONE NUMBER	AREA	PRICE	ACTIONS
7	mohammadaker6@gmail.com		180 m2	600	

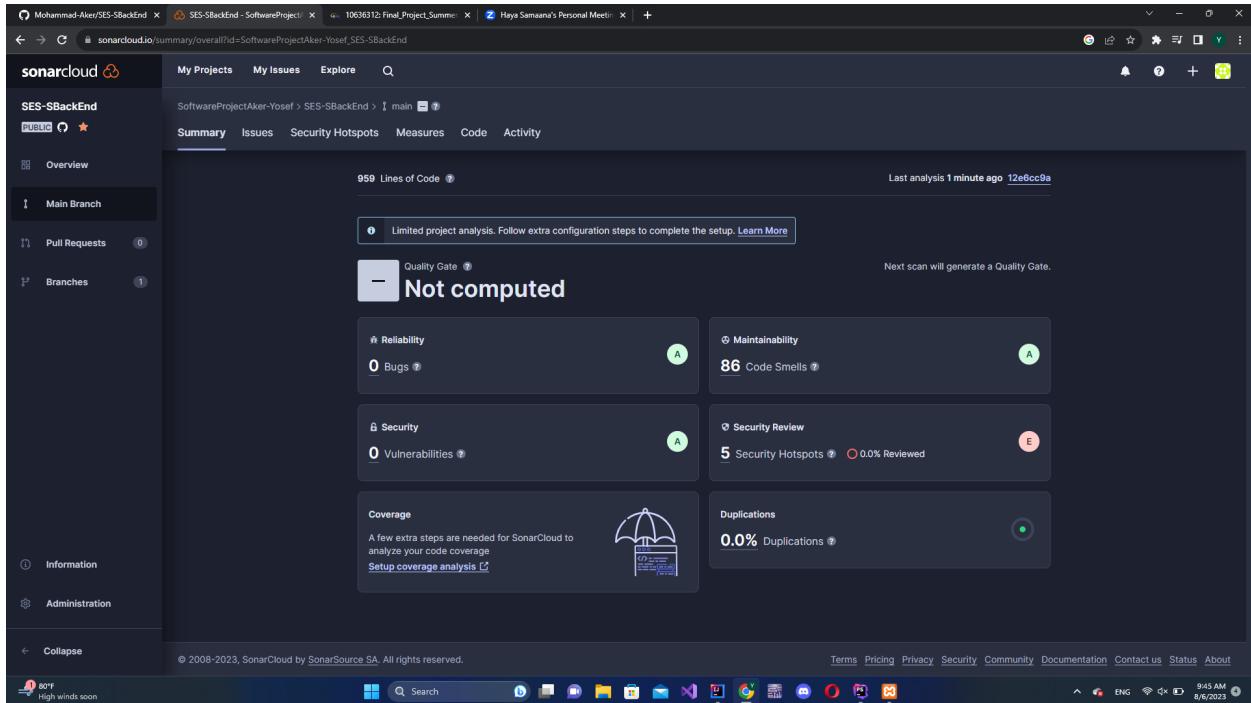
Ads requests

ID NUMBER	OWNER EMAIL	PHONE NUMBER	AREA	PRICE	
3	mohammadaker6@gmail.com		230 m2	1300	

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• Sonar Cloud Analysis

Here are the results before we have maintained our project:-



sonardcloud.io

My Projects My Issues Explore

SoftwareProjectAker-Yosef > SES-SBackEnd > main

Summary Issues Security Hotspots Measures Code Activity

959 Lines of Code Last analysis 1 minute ago 12e6cc9a

Limited project analysis. Follow extra configuration steps to complete the setup. Learn More

Quality Gate Not computed

Maintainability: 86 Code Smells (A)

Reliability: 0 Bugs (A)

Security: 0 Vulnerabilities (A)

Security Review: 5 Security Hotspots (E) 0.0% Reviewed

Coverage: A few extra steps are needed for SonarCloud to analyze your code coverage. Setup coverage analysis

Duplications: 0.0% Duplications (green)

Information Administration

Collapse

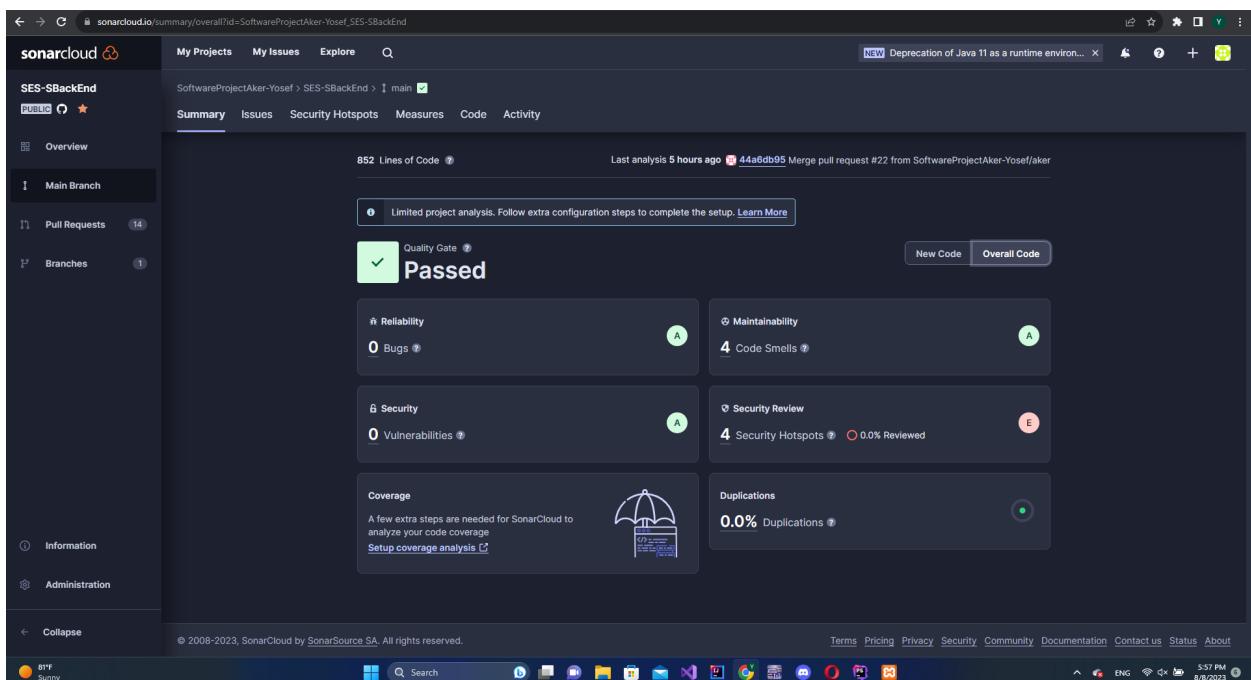
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80°F high winds soon

8:45 AM 8/8/2023 ENG

And here are the results after:



sonardcloud.io

My Projects My Issues Explore

SoftwareProjectAker-Yosef > SES-SBackEnd > main

Summary Issues Security Hotspots Measures Code Activity

852 Lines of Code Last analysis 5 hours ago 44a8db95 Merge pull request #22 from SoftwareProjectAker-Yosef/aker

Limited project analysis. Follow extra configuration steps to complete the setup. Learn More

Quality Gate Passed

Maintainability: 4 Code Smells (A)

Reliability: 0 Bugs (A)

Security: 0 Vulnerabilities (A)

Security Review: 4 Security Hotspots (E) 0.0% Reviewed

Coverage: A few extra steps are needed for SonarCloud to analyze your code coverage. Setup coverage analysis

Duplications: 0.0% Duplications (green)

Information Administration

Collapse

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80°F Sunny

8:45 PM 8/8/2023 ENG

The four bad smells remaining are for four constructors that are important to be in the class.

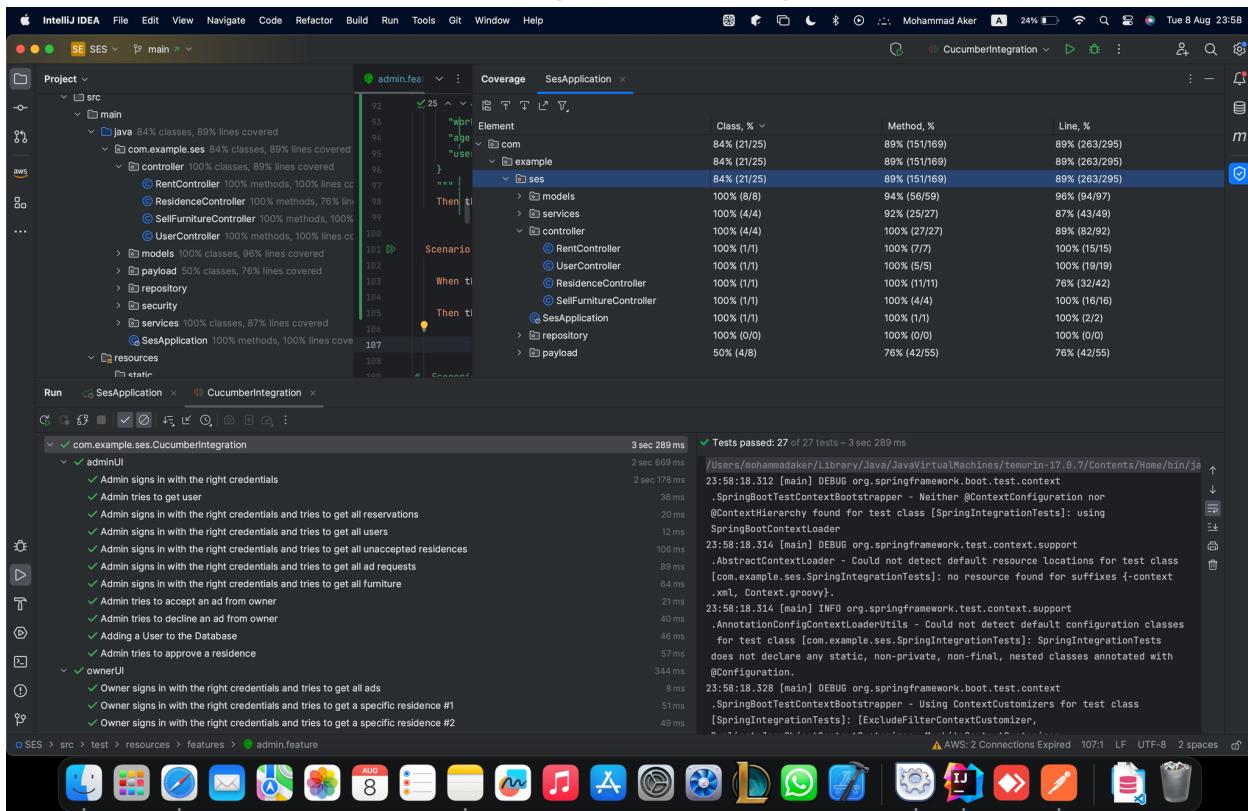
The four security warnings are for the “@CrossOrigin” annotation.

CORS regarding the cross-origin security risks, this occurs when an outside device tries to access the site, which is susceptible to injections and is vulnerable to shut down unexpectedly.

The solution is represented in writing a web configuration that handles and encrypts data according to the browser

• Coverage Analysis

Here are the result of the Coverage after testing:-



You may see the overall coverage a bit concerning, but we tested what may be requested by the client which is sent directly to the controller, all the controller methods have been tested.

It is worthy to note that the payloads achieved lower test coverage, the reason for this is that the payload is what the client sends to the server, that is a mock of the original entity that contains setters and getters from already-loaded Lombok.

I just wanted to point out the coverage results so that there is no confusion.

Jenkins was not used to test the coverage, because we require a database to test our backend, the tests did not run on their own Jenkins, we tried to configure a web-port via spring boot integrated tests class but the tests still did not run on their own, as a result of that we tested the code locally.

Done By:-

Mohammad Aker
Yosef AbdelSalam