

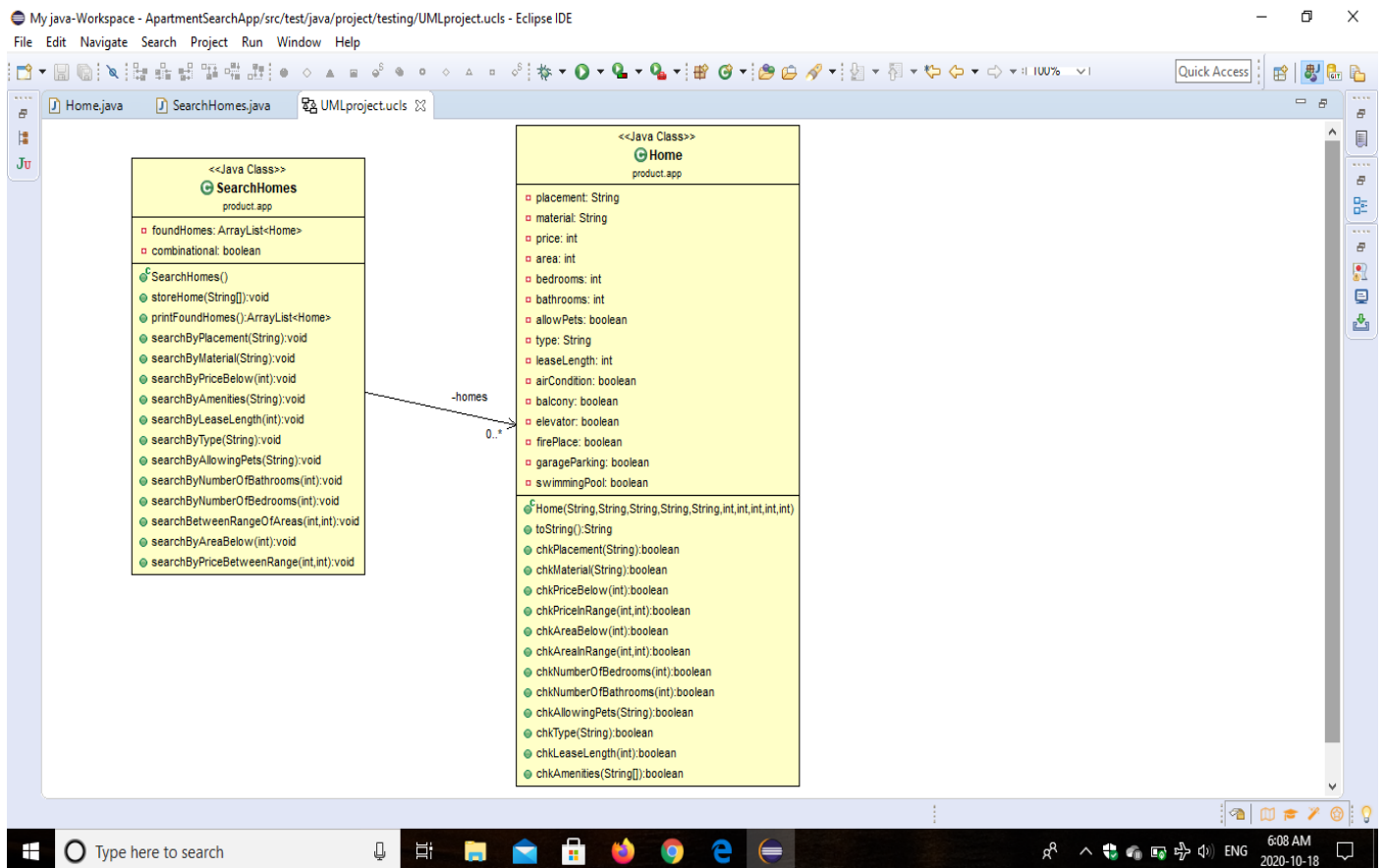
Output for assignment (2)

Apartment searching app project

This is the second part of the project, we focused on refactoring the code in depth using **SonarQube** tool to produce better quality of the product. Then we used (CI) principle by **Jenkins** that can rebuild the project many times to check everything is going well with no worries. On the other hand, we have added a third party to the product that is email sending service. We achieved the testing by using Mocking technique.

Firstly: For assignment (1) - to compare:

- We have the old UML diagram from assignment (1):



We have initial SonarQube dashboard assignment (1) → **39 bad smells**

The screenshot shows the SonarQube dashboard for the project 'ApartmentSearchApp'. The overall status is 'Failed'. The dashboard displays the following metrics:

Metric	Value	Quality Gate
Bugs	0	A
Vulnerabilities	0	A
Hotspots Reviewed	-	A
Code Smells	39	A
Coverage	0.0%	F
Duplications	0.0%	F
Lines	329	XS

The project is analyzed in Java and XML. The last analysis was 9 minutes ago. A warning message states: 'Embedded database should be used for evaluation purposes only. The embedded database will not scale, it will not support upgrading to newer versions of SonarQube, and there is no support for migrating your data out of it into a different database engine.'

Secondly: For assignment (2) - current task after refactoring:

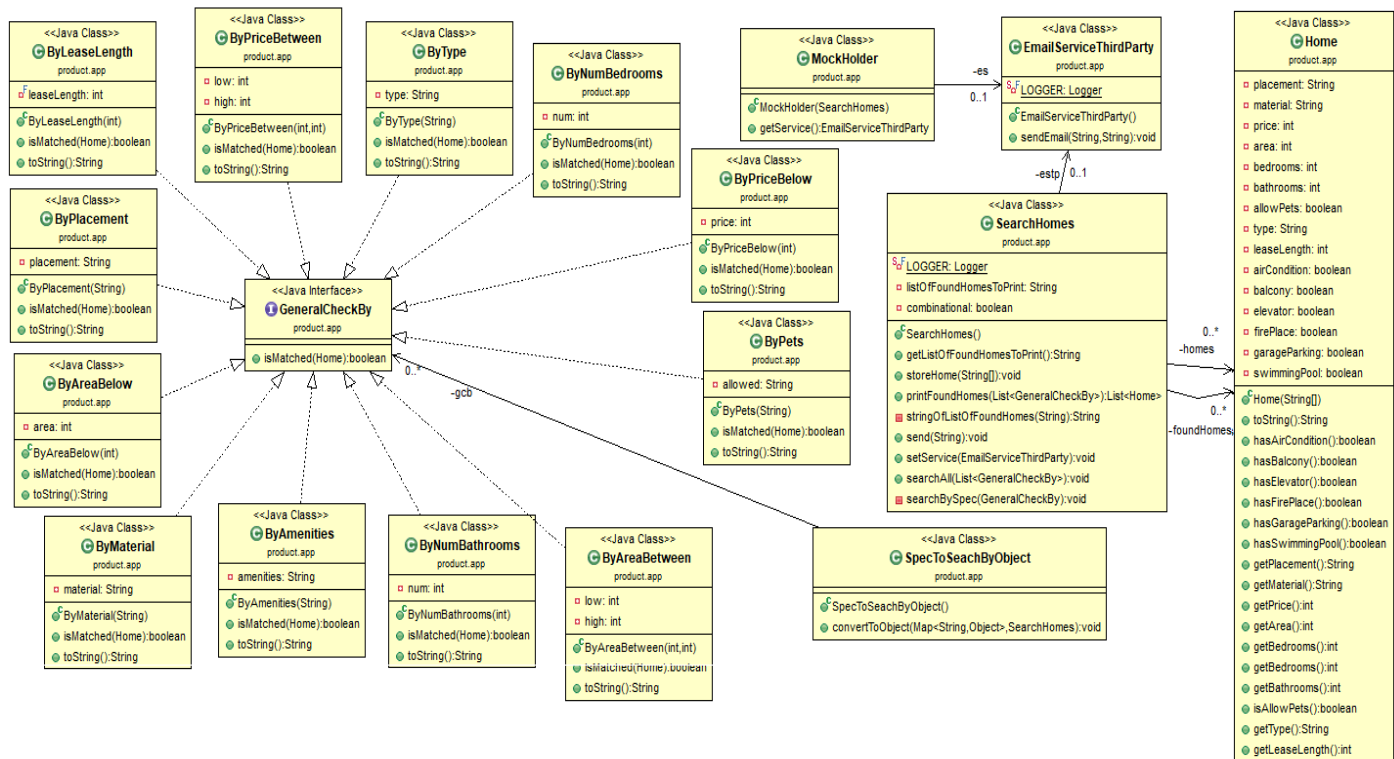
- Here we have the final dashboard from SonarQube tool:

The screenshot shows the SonarQube dashboard for the project 'ApartmentSearchApp' after refactoring. The overall status is 'Failed'. The dashboard displays the following metrics:

Metric	Value	Quality Gate
Bugs	0	A
Vulnerabilities	0	A
Hotspots Reviewed	-	A
Code Smells	0	A
Coverage	0.0%	F
Duplications	0.0%	F
Lines	354	XS

The project is analyzed in Java and XML. The last analysis was 2 minutes ago. A warning message states: 'Embedded database should be used for evaluation purposes only. The embedded database will not scale, it will not support upgrading to newer versions of SonarQube, and there is no support for migrating your data out of it into a different database engine.'

- The final UML diagram from **eclipse IDE**:














- The final **Jenkins** dashboard (The last build):

The screenshot shows the Jenkins dashboard for the 'Yazan-Habash114/SEProject'. The main table displays the build status for 'ApartmentSearchApp' as 'Success' (S) with a duration of 1 min 30 sec. The left sidebar contains navigation links for 'New Item', 'People', 'Build History', 'Project Relationship', 'Check File Fingerprint', 'Manage Jenkins', 'My Views', 'Lockable Resources', and 'New View'. The bottom status bar shows the system time as 3:48 PM on 2020-11-07.

S	W	Name ↓	Last Success	Last Failure	Last Duration
S		ApartmentSearchApp	14 min - #8	N/A	1 min 30 sec

```
[INFO] Analysis report uploaded in 125ms
[INFO] ANALYSIS SUCCESSFUL, you can browse http://localhost:9000/dashboard?id=searching%3AApartmentSearchApp
[INFO] Note that you will be able to access the updated dashboard once the server has processed the submitted analysis report
[INFO] More about the report processing at http://localhost:9000/api/ce/task?id=AXWi60NmYyKCylsBmPD0
[INFO] Analysis total time: 19.063 s
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 52.187 s
[INFO] Finished at: 2020-11-07T15:35:28+02:00
[INFO] -----
Finished: SUCCESS
```

And here we can see a list of the last eight builds have been done on Jenkins: → **all success**

Build History trend ^	
<input type="text" value="find"/>	
 #8	Nov 7, 2020 3:34 PM
 #7	Oct 30, 2020 2:01 PM
 #6	Oct 26, 2020 10:09 AM
 #5	Oct 21, 2020 6:37 PM
 #5	Oct 18, 2020 5:50 AM
 #4	Oct 17, 2020 6:32 PM
 #3	Oct 17, 2020 6:27 PM
 #2	Oct 17, 2020 6:23 PM
 #1	Oct 17, 2020 5:32 PM
 Atom feed for all  Atom feed for failures	

Before execution and run the project on Eclipse IDE:

We have these homes in data set (Search.feature file):

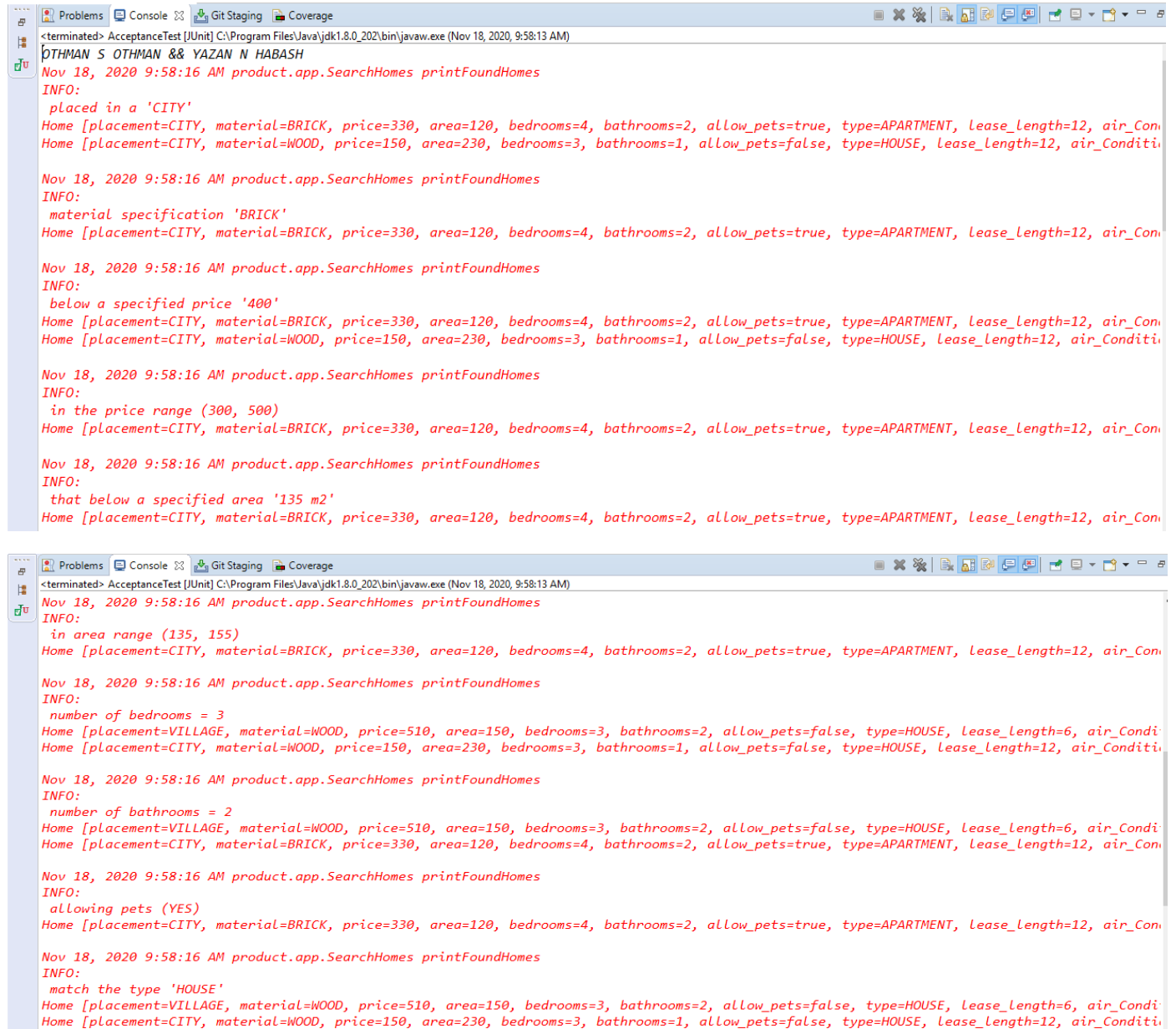
Background: The System has a repository of homes with their specifications

Given these homes are contained in the system

HOUSE_WOOD_VILLAGE_NO_GARAGEPARKING,FIREPLACE,ELEVATOR	510_150_3_2_6
APARTMENT_BRICK_CITY_YES_ELEVATOR	330_120_4_2_12
HOUSE_WOOD_CITY_NO_AIRCONDITIONING,BALCONY,ELEVATOR,GARAGEPARKING,FIREPLACE,SWIMMINGPOOL	150_230_3_1_12

After execution and run the project:

The output on the console screen has been shown as following:



```
<terminated> AcceptanceTest [JUnit] C:\Program Files\Java\jdk1.8.0_202\bin\javaw.exe (Nov 18, 2020, 9:58:13 AM)
OTHMAN S OTHMAN && YAZAN N HABASH
Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    placed in a 'CITY'
Home [placement=CITY, material=BRICK, price=330, area=120, bedrooms=4, bathrooms=2, allow_pets=true, type=APARTMENT, Lease_Length=12, air_Conditioning=1]
Home [placement=CITY, material=WOOD, price=150, area=230, bedrooms=3, bathrooms=1, allow_pets=false, type=HOUSE, Lease_Length=12, air_Conditioning=1]

Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    material specification 'BRICK'
Home [placement=CITY, material=BRICK, price=330, area=120, bedrooms=4, bathrooms=2, allow_pets=true, type=APARTMENT, Lease_Length=12, air_Conditioning=1]

Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    below a specified price '400'
Home [placement=CITY, material=BRICK, price=330, area=120, bedrooms=4, bathrooms=2, allow_pets=true, type=APARTMENT, Lease_Length=12, air_Conditioning=1]
Home [placement=CITY, material=WOOD, price=150, area=230, bedrooms=3, bathrooms=1, allow_pets=false, type=HOUSE, Lease_Length=12, air_Conditioning=1]

Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    in the price range (300, 500)
Home [placement=CITY, material=BRICK, price=330, area=120, bedrooms=4, bathrooms=2, allow_pets=true, type=APARTMENT, Lease_Length=12, air_Conditioning=1]

Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    that below a specified area '135 m2'
Home [placement=CITY, material=BRICK, price=330, area=120, bedrooms=4, bathrooms=2, allow_pets=true, type=APARTMENT, Lease_Length=12, air_Conditioning=1]

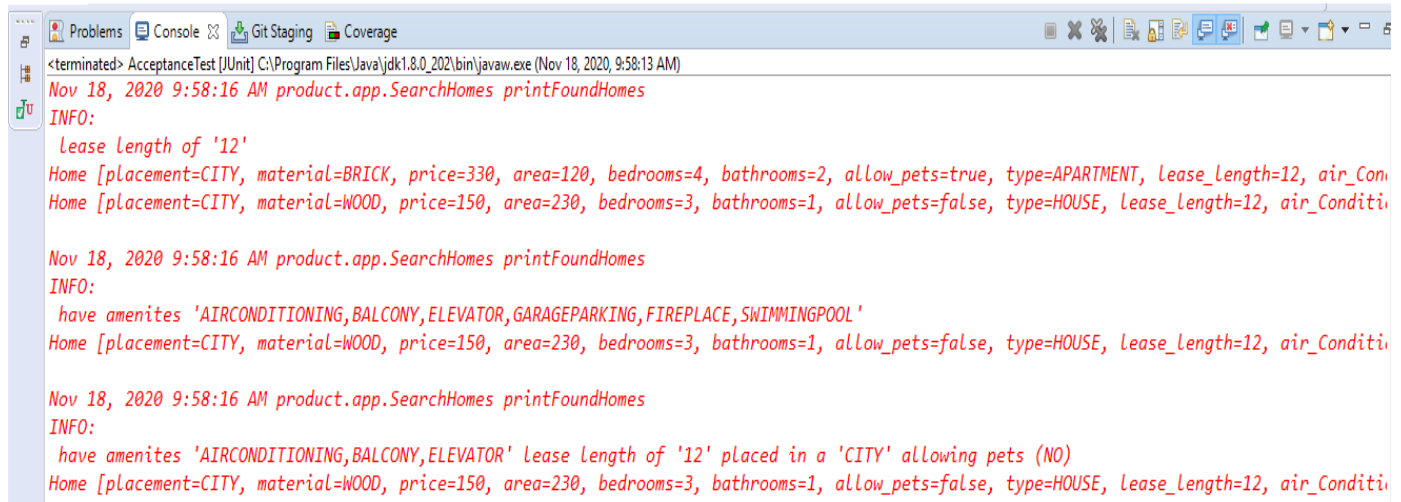
Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    in area range (135, 155)
Home [placement=CITY, material=BRICK, price=330, area=120, bedrooms=4, bathrooms=2, allow_pets=true, type=APARTMENT, Lease_Length=12, air_Conditioning=1]

Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    number of bedrooms = 3
Home [placement=VILLAGE, material=WOOD, price=510, area=150, bedrooms=3, bathrooms=2, allow_pets=false, type=HOUSE, Lease_Length=6, air_Conditioning=1]
Home [placement=CITY, material=WOOD, price=150, area=230, bedrooms=3, bathrooms=1, allow_pets=false, type=HOUSE, Lease_Length=12, air_Conditioning=1]

Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    number of bathrooms = 2
Home [placement=VILLAGE, material=WOOD, price=510, area=150, bedrooms=3, bathrooms=2, allow_pets=false, type=HOUSE, Lease_Length=6, air_Conditioning=1]
Home [placement=CITY, material=BRICK, price=330, area=120, bedrooms=4, bathrooms=2, allow_pets=true, type=APARTMENT, Lease_Length=12, air_Conditioning=1]

Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    allowing pets (YES)
Home [placement=CITY, material=BRICK, price=330, area=120, bedrooms=4, bathrooms=2, allow_pets=true, type=APARTMENT, Lease_Length=12, air_Conditioning=1]

Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    match the type 'HOUSE'
Home [placement=VILLAGE, material=WOOD, price=510, area=150, bedrooms=3, bathrooms=2, allow_pets=false, type=HOUSE, Lease_Length=6, air_Conditioning=1]
Home [placement=CITY, material=WOOD, price=150, area=230, bedrooms=3, bathrooms=1, allow_pets=false, type=HOUSE, Lease_Length=12, air_Conditioning=1]
```



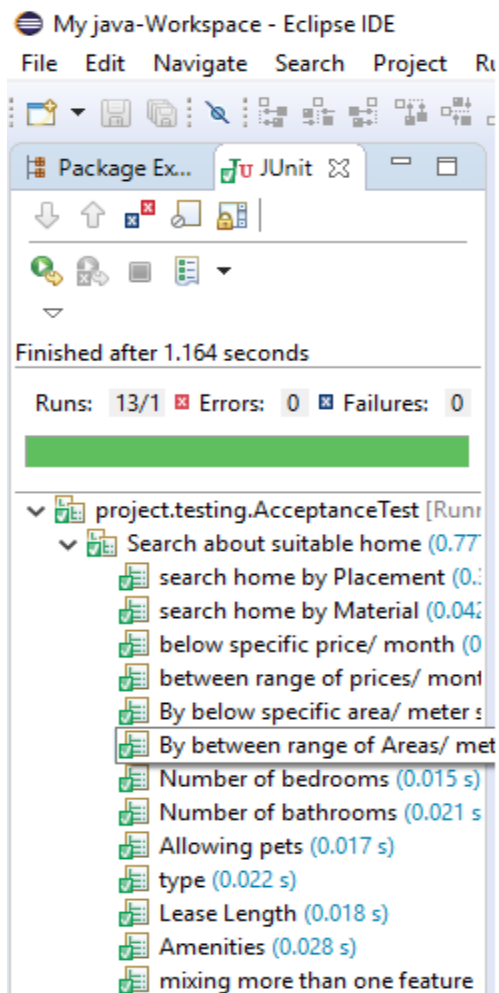
The screenshot shows the Eclipse IDE's console window. At the top, there are tabs for 'Problems', 'Console', 'Git Staging', and 'Coverage'. The console output is as follows:

```
<terminated> AcceptanceTest [JUnit] C:\Program Files\Java\jdk1.8.0_202\bin\javaw.exe (Nov 18, 2020, 9:58:13 AM)
Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    Lease Length of '12'
    Home [placement=CITY, material=BRICK, price=330, area=120, bedrooms=4, bathrooms=2, allow_pets=true, type=APARTMENT, Lease_length=12, air_Conditioning=NO]
    Home [placement=CITY, material=WOOD, price=150, area=230, bedrooms=3, bathrooms=1, allow_pets=false, type=HOUSE, Lease_length=12, air_Conditioning=NO]

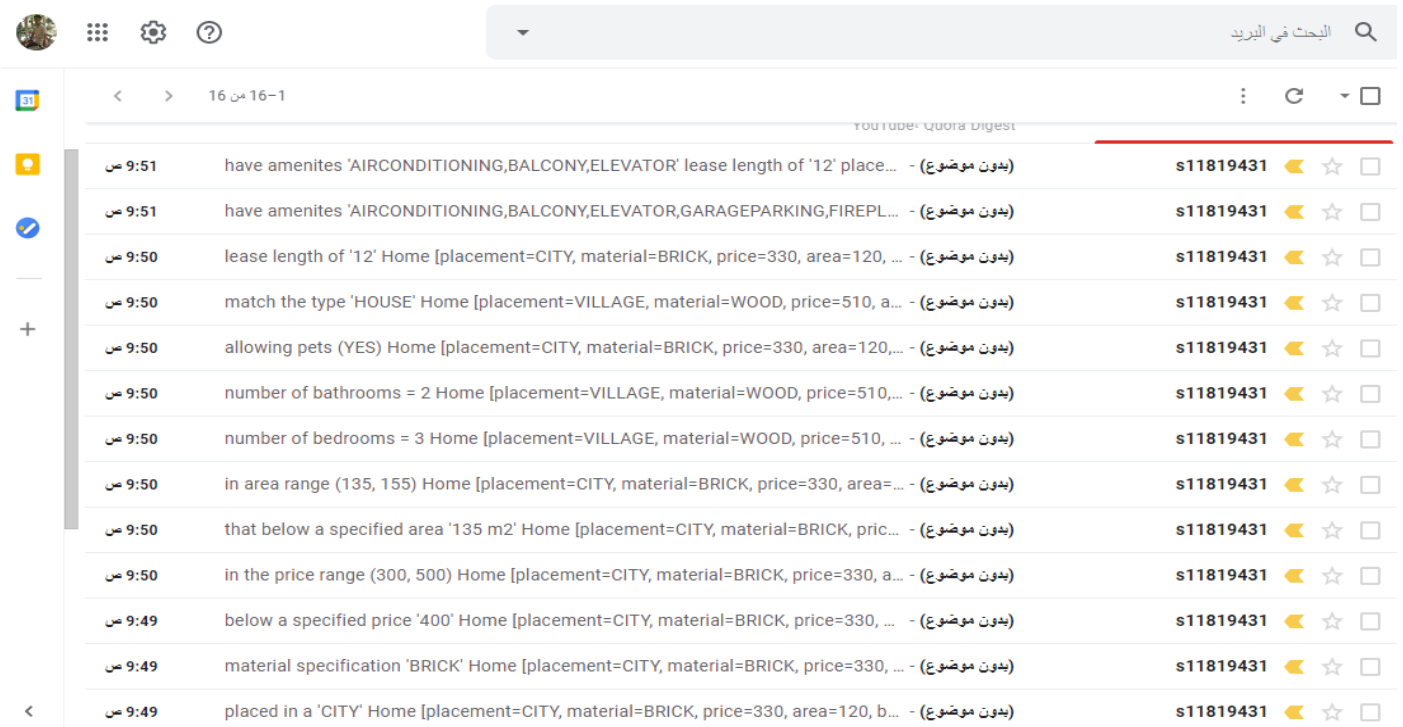
Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    have amenities 'AIRCONDITIONING,BALCONY,ELEVATOR,GARAGEPARKING,FIREPLACE,SWIMMINGPOOL'
    Home [placement=CITY, material=WOOD, price=150, area=230, bedrooms=3, bathrooms=1, allow_pets=false, type=HOUSE, Lease_length=12, air_Conditioning=NO]

Nov 18, 2020 9:58:16 AM product.app.SearchHomes printFoundHomes
INFO:
    have amenities 'AIRCONDITIONING,BALCONY,ELEVATOR' Lease Length of '12' placed in a 'CITY' allowing pets (NO)
    Home [placement=CITY, material=WOOD, price=150, area=230, bedrooms=3, bathrooms=1, allow_pets=false, type=HOUSE, Lease_length=12, air_Conditioning=NO]
```

And the Junit output status was **pass**:



- The output has been sent by email:



And there is an email similar to it that has been sent to you on
["haya.sammaneh@gmail.com"](mailto:haya.sammaneh@gmail.com).

Written by: Yazan Habash

Group members: Yazan Habash & Othman Othman