Easy Home

Group:

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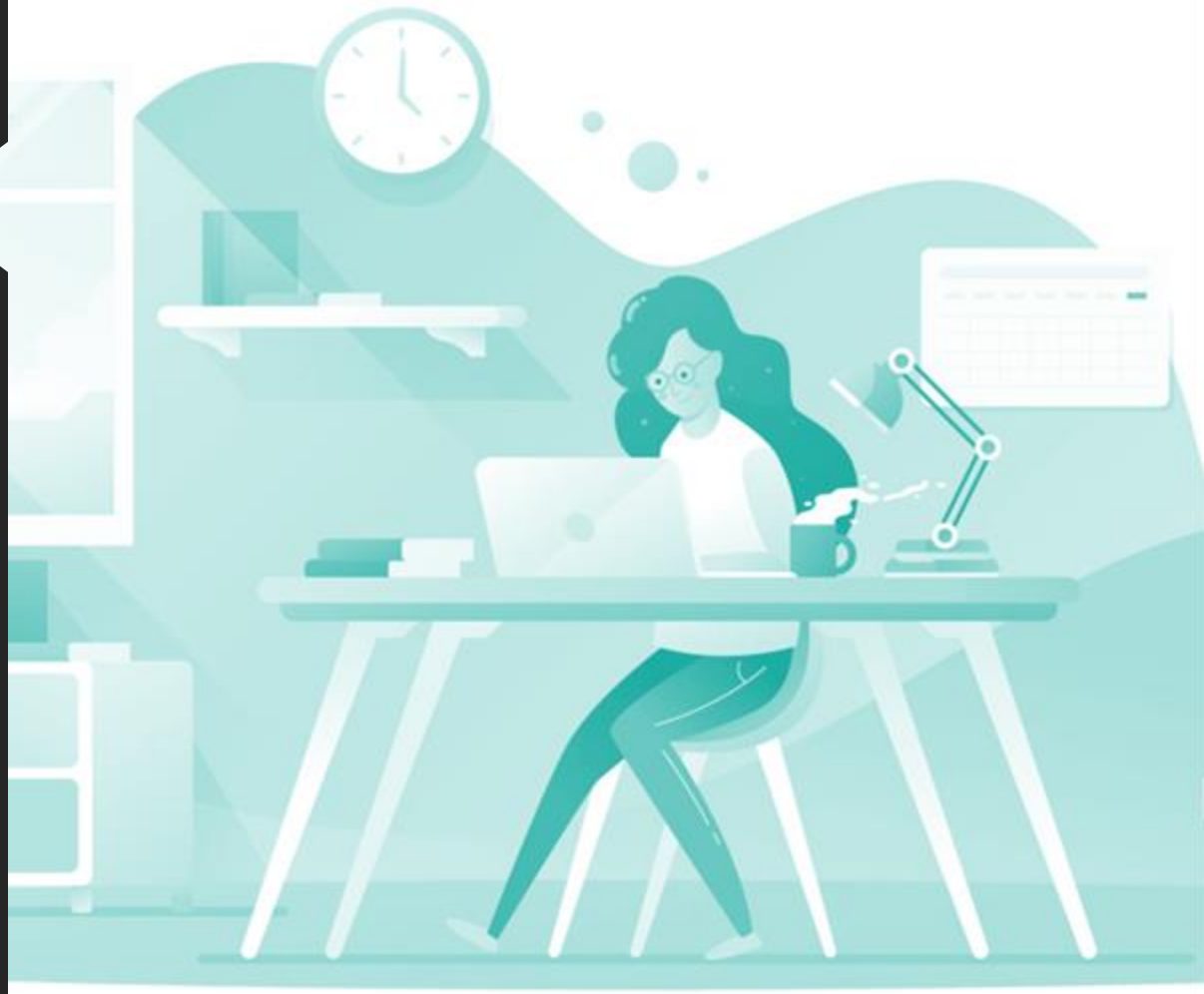
Lab Class:

- MIECT, P2



Introduction Easy Home

Smart house technologies are increasingly showing more:

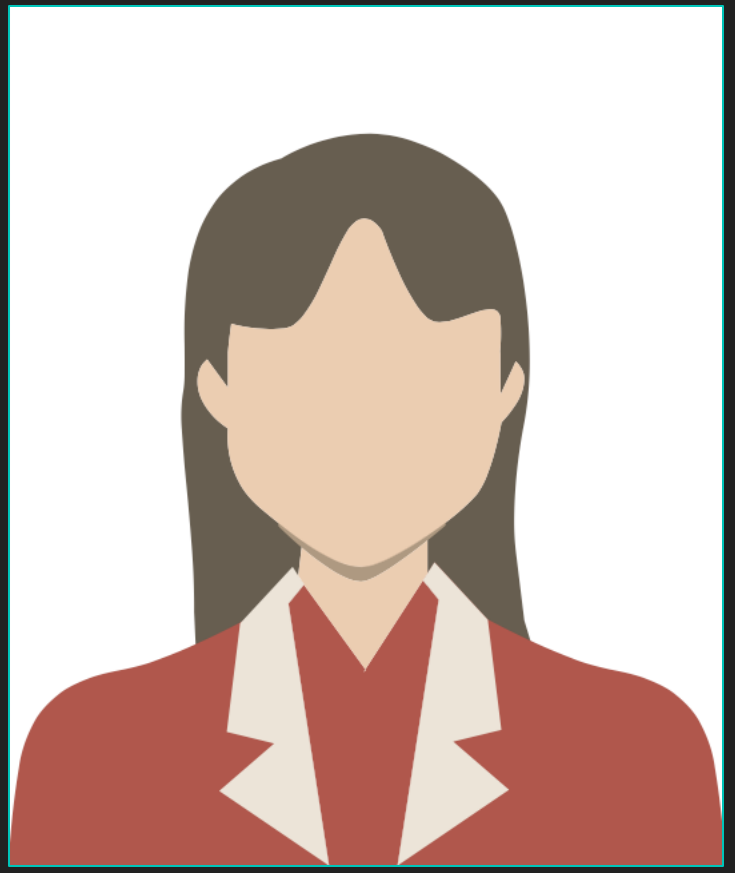
- Useful
- Miscellaneous
- Accessible
- Present in our homes

Goals

- App for monitoring and controlling a home place
- Make some daily tasks easier
- Development of an app that is easy to use with a friendly interface.

Name: Ana Maria Lopes
Age: 29
Profession: Accountant
Motivation: Working from home due to the pandemic, and would like to have more control over her home's expenses when she is working
Objetive: Verify the energetic consumption of the house

Personas



Name: João Carvalho
Age: 56
Profession: Businessman
Motivation: Given his work he is constantly busy and needs the house to somehow adjust to his lifestyle
Objetive: Automation of some functions, and control of devices

Personas

Scenarios

1. Monitor and check statistics about the house

2. Control of some devices in the house

Tasks: Monitorization

- Monitor the electric consumption data of the house
- Access the security cameras to watch the recordings
- Check for who is at home at the moment

Tasks: Control

- Control the lights on a room
- Open and close the blinds
- Control the house temperature
- Lock and unlock doors and windows
- Open the garage door

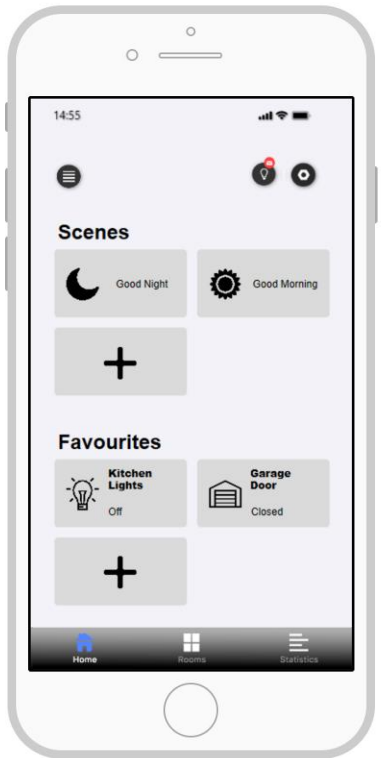
Requirements

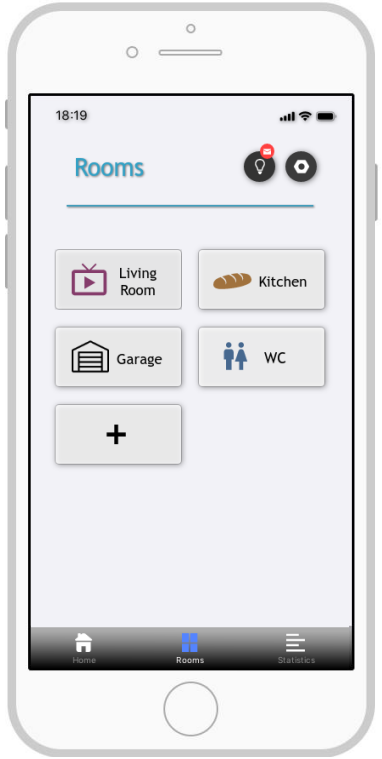
Functional Requirements:

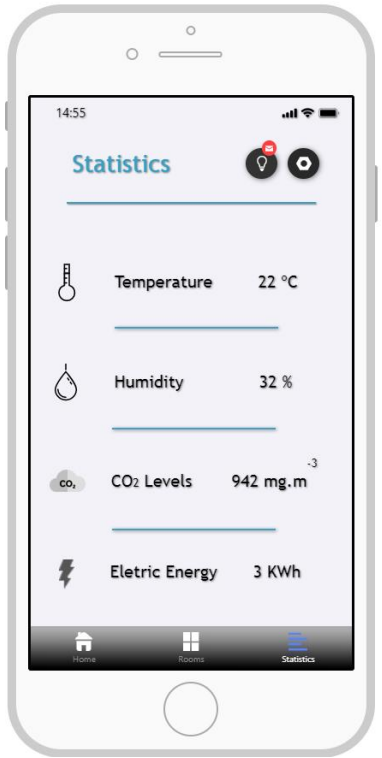
- The system should allow the user to choose and observe the statistics
- The system should allow the user to choose the home devices and allow their remote control
- The system should allow the user to create and use scenarios

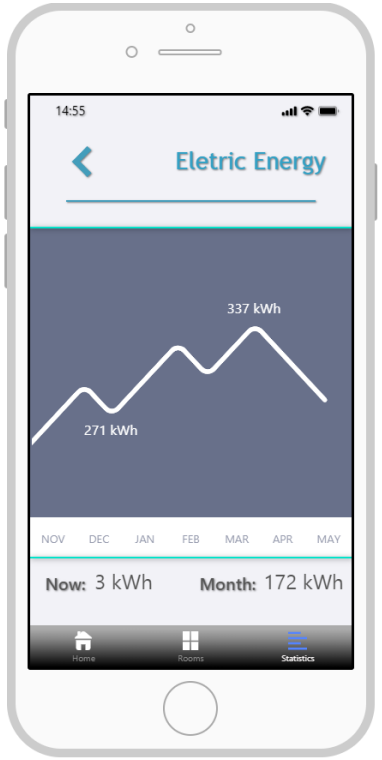
Non-Function Requirements:

- Every comunication between the app and the house should be done in less than 3 seconds
- Appealing interface and easy to use
- Easy to undersand information
- The system should be compatible with most operating systems





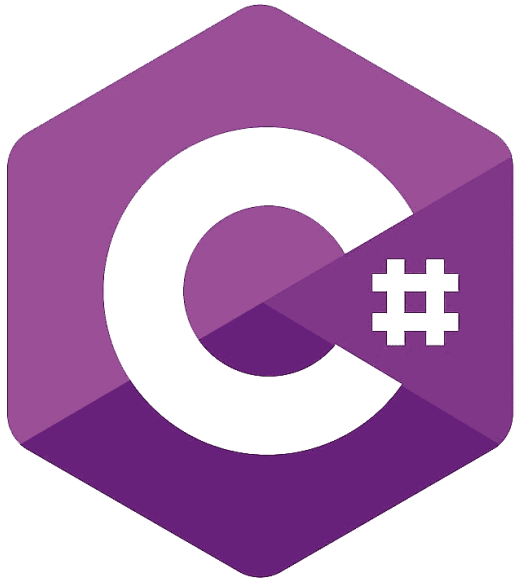




Low Fidelity Prototype

LFP
User Evaluation

Action	Difficulty
Check current medium temperature	1
Check currently selected house	2
Change Living Room's temperature	2
Open garage door	1
Activate Scene *Good Night*	2
Add a new favourite device from the Living Room	1



Platform Used for the Functional Prototype

Functional Prototype User Evaluation

Test	Difficulty
Adding new room	1
View current average temperature	1
View selected home	2
Select a room and close the front windows	1
Change room temperature	2
Open garage door	1
Activate Scene *Good Night*	2
Add new favorite device on living room	1

Future Work

- Store the data in a server
- Allow the user to customize the appearance
- Allow the user to add more Scenes and Favorites
- Implement Artificial Intelligence
- Implement a proper authentication this smart devices
- Add a tutorial for new users

Acknowledgments

- Design techniques
- Make user interaction easier
- Testing is important
- Talk with users to improve design
- Test can reveal useful information