

PROJECT PLAN

PROJECT TITLE: HoGo - An Apartment Community App

GROUP NUMBER: 14

TEAM INFORMATION:

Shriya Harish (PES2UG20CS463)

Aarav Babu (PES2UG20CS486)

Aditya Lawankar (PES2UG20CS488)

Advaith Shet (PES2UG20CS490)

1: Identify the lifecycle to be followed for the execution of your project and justify why you have chosen the model.

(PES2UG20CS463 - Shriya Harish

PES2UG20CS488 - Aditya Lawankar)

We have chosen Agile Model(Scrum) for the execution of our project since:

- We are working in 2 week long Sprints, during which we work on the deliverables
- We follow individuals and interactions over process and tools
- We prioritise responding to changes over following a rigid plan
- We are sure of the requirements of the project we are developing
- Our project team adheres to the characteristics of Scrum Teams, which are:
 - Cross functional and self-organising
 - Each member is a contributor to the deliverables and responsible for shipping deliverable increments

2: Identify the tools which you want to use throughout the lifecycle like planning tool, design tool, version control, development tool, bug tracking, testing tool.

(PES2UG20CS463 - Shriya Harish)

Function	Tool used
Planning Tool	Gantt Pro
Design Tool	JIRA
Version Control	GitHub
Development Tool	MERN, Visual Studio Code
Bug Tracking	
Testing Tool	

3: Determine all the deliverables and categorise them as reuse/build components and justify the same.

(PES2UG20CS486 – Aarav Babu)

The deliverables of our project include:

A functional web-app that has a user and management side.

The app has the following features.

Gate Features/Security:

Reuse:

Authorization for entry/exit has been done before. So we can reuse components to suit our scenario very easily. These components can be combined to strengthen the security features.

Customer Registration:

Reuse:

Customer registration and storage of usernames and passwords securely can be done by using already existing components. These components can be edited to store adequate information that we require and use for granting access.

Maintenance:

Build:

Building a platform to pay bills and view transactions has to be built from scratch as it is custom to our user base and can be done using the appropriate tools.

Directories:

Build:

Although we can find templates for directories, we would prefer to build our directories by ourselves, since it grants us control over abstraction, data flow and UI.

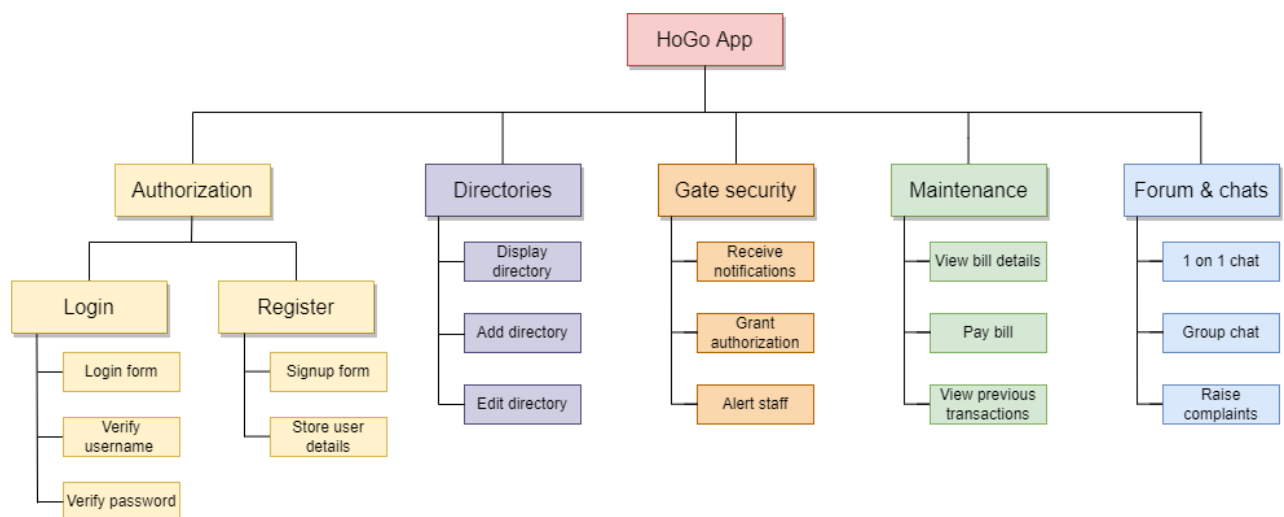
Forums and Chat Section:

Reuse:

Useful components and tools to build custom chat rooms and forums already exist, we can modify these with respect to our user base and include extra features as well.

4: Create a WBS for the entire functionalities in detail.

(PES2UG20CS488 – Aditya Lawankar)



5: Do a rough estimate of effort required to accomplish each task in terms of person months.

(PES2UG20CS486 – Aarav Babu PES2UG20CS490 – Advait Shet)

The team is employing a semi detached cocomo model.

A rough estimate for the efforts required for each task is as follows

Efforts = $a \cdot (\text{KLOC})^b$ Person Months

For a semi detached project: $a = 3.0, b = 1.12$

a) Gate features

For this feature, KLOC = 20

Efforts = 86 Person Months

b)Maintenance

KLOC = 30

Efforts =135 Person Months

c)Chat Forum

KLOC = 30

Efforts = 135 Person Months

d)Customer setup and Directories

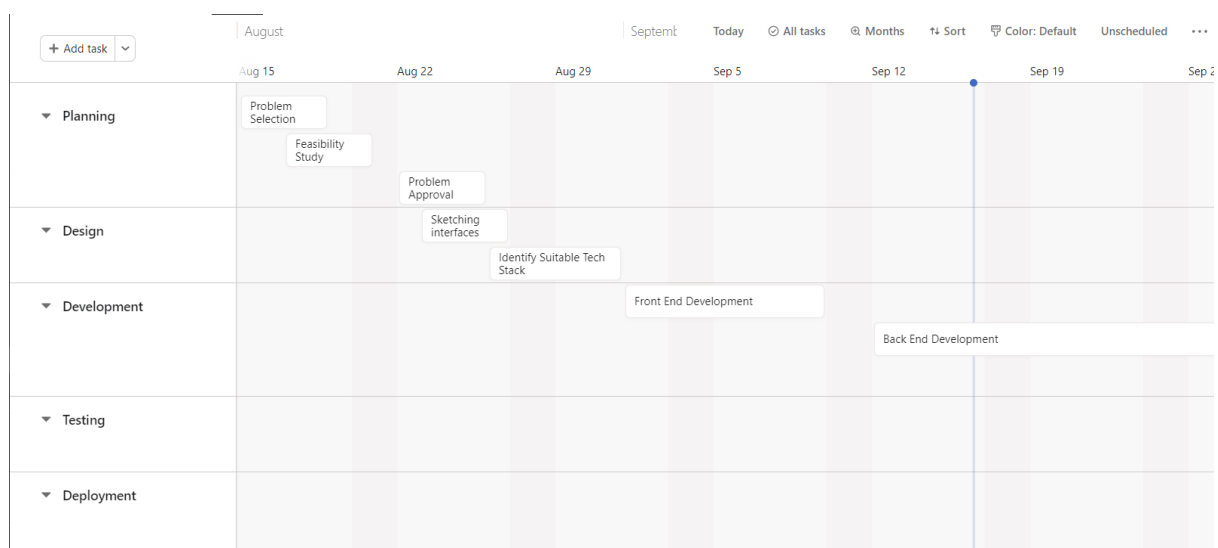
KLOC = 20

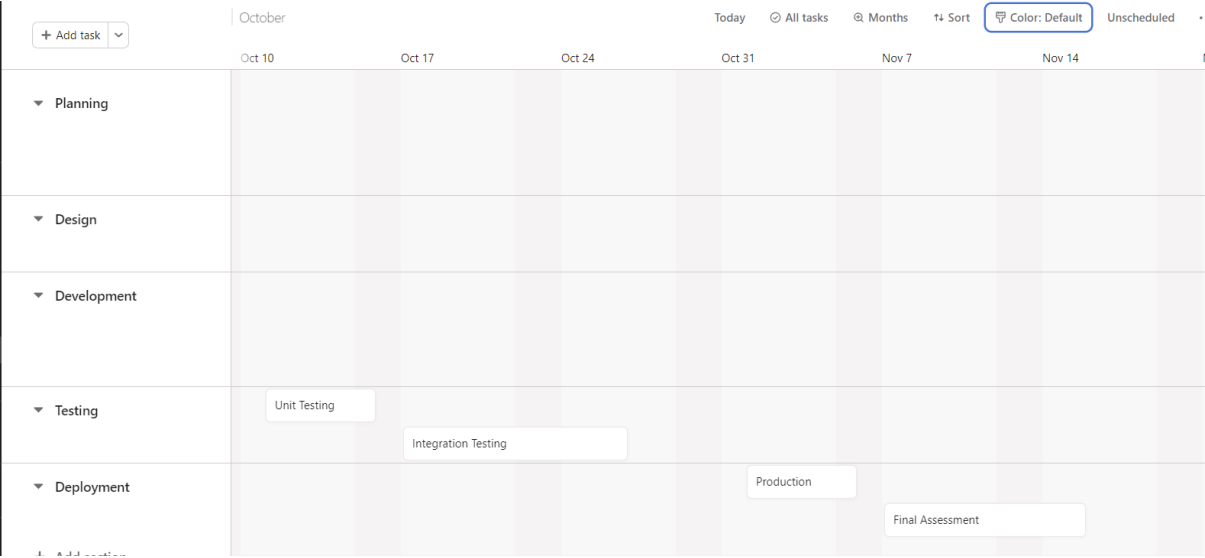
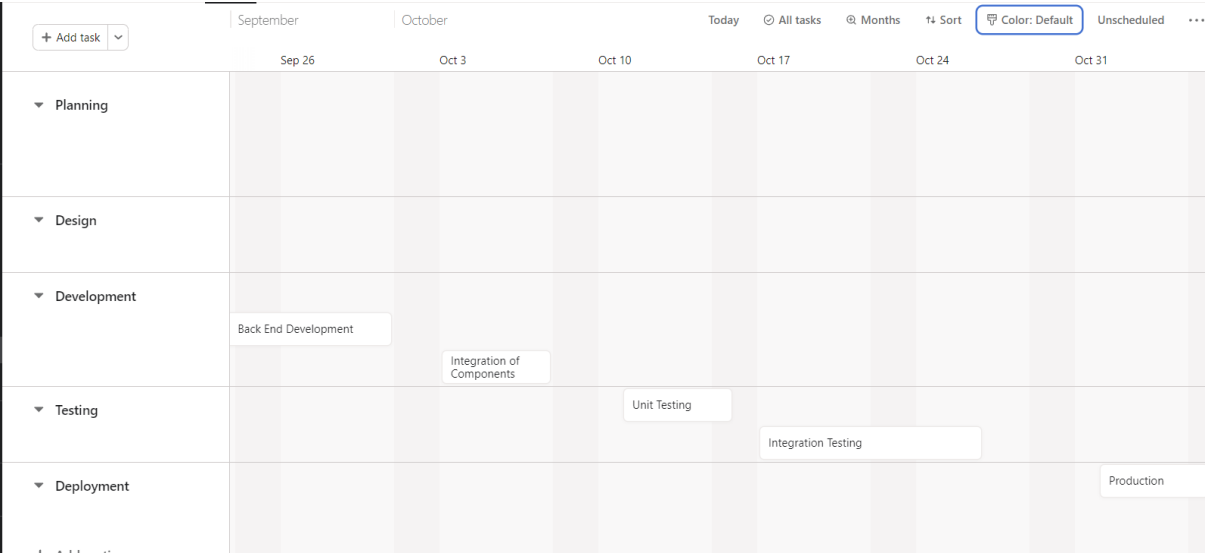
Efforts = 86 Person Months

Total KLOC for the project is around 110

Total efforts = 580 Person Months

6: Create the Gantt Chart for scheduling using any tool.





(PES2UG20CS490 – Advait Shet)