SOFTWARE ENGINEERING MINI PROJECT

Project Plan Document

Project Title: HOMELY

Team Details:

SL.NO	NAME	SRN
1	Nilkant	PES2UG20CS530
2	Pradhyumna	PES2UG20CS533
3	Shreepathi	PES2UG20CS553
4	Manik	PES2UG20CS576

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

The lifecycle/methodology to be followed for the proposed project is **Agile, SCRUM**. The following are the reasons for the same

- Firstly, we would focus majorly on **developing the working software as soon as possible** rather than comprehensive documentation (minimum documentation).
- Regularly the team reflects on how to become more effective and make changes accordingly.
- Taking **fluctuating requirements** into consideration.
- Executing the work in teams (in case individual) so as to maximize the efficiency
- Since **SCRUM is based on Iterative approach** subsequent sprints would further optimize the application.
- **Active user collaboration** (in this case tenants and owners).

~ Credits: Pradhyumna, PES2UG20CS533

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.

The following are the tools used throughout the project

Planning tool - **Jira**

Design tool - **Figma**

Version control - **Git**

Development tool -

- **Android studio**

  Kotlin

- **phpMyAdmin**
  MySQL would be used as RDBMS

Bug tracking -

Testing tool -

~ Credits: Manik, PES2UG20CS576

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

The different deliverables are the synopsis, SRS, project planning document, detailed architectural designs, coding and report submission. The final deliverable is the complete and working project.

Overall Functionalities/Components includes:

- Login/Sign-up Interface.
- Personalized Tenant and owner view.
- Tenants can search, view, book rooms, add reviews and ratings.
- Owners can list their rooms, amenities provided, pricing info etc.

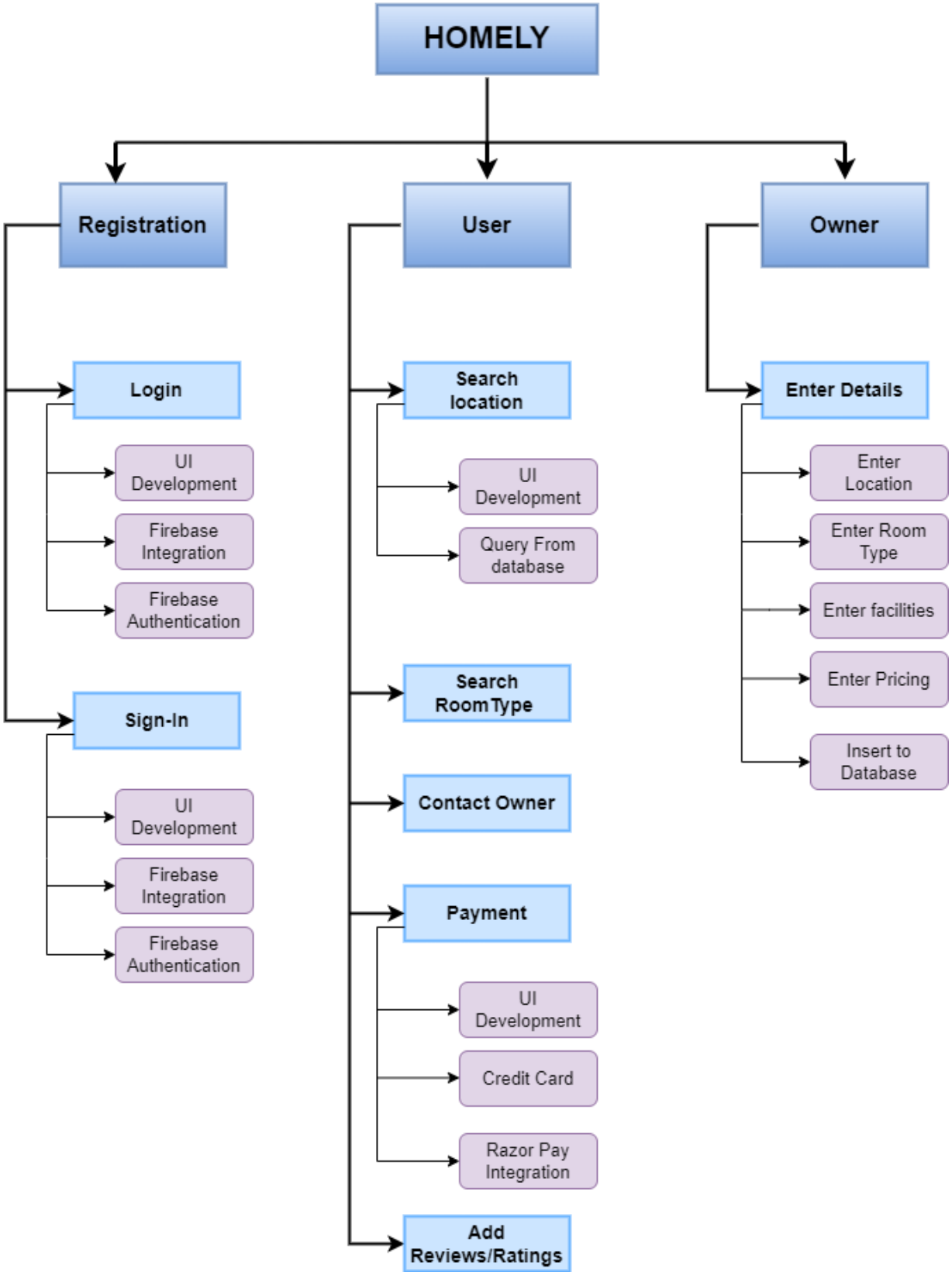
All of the components are built from scratch by the developing team. Hence no self-components would be used.

However, the following are the references for the proposed project

- No broker
- Google Maps

~ Credits: Manik, PES2UG20CS576

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



~ Credits: Shreepathi, PES2UG20CS553

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

Semi-Detached CoCoMo model will be used for the proposed project as the team has average previous experience in similar projects.

Estimation of Effort is calculated by the formula:

$$E = a(KLOC)^b$$

Here,

a=3,

b=1.12

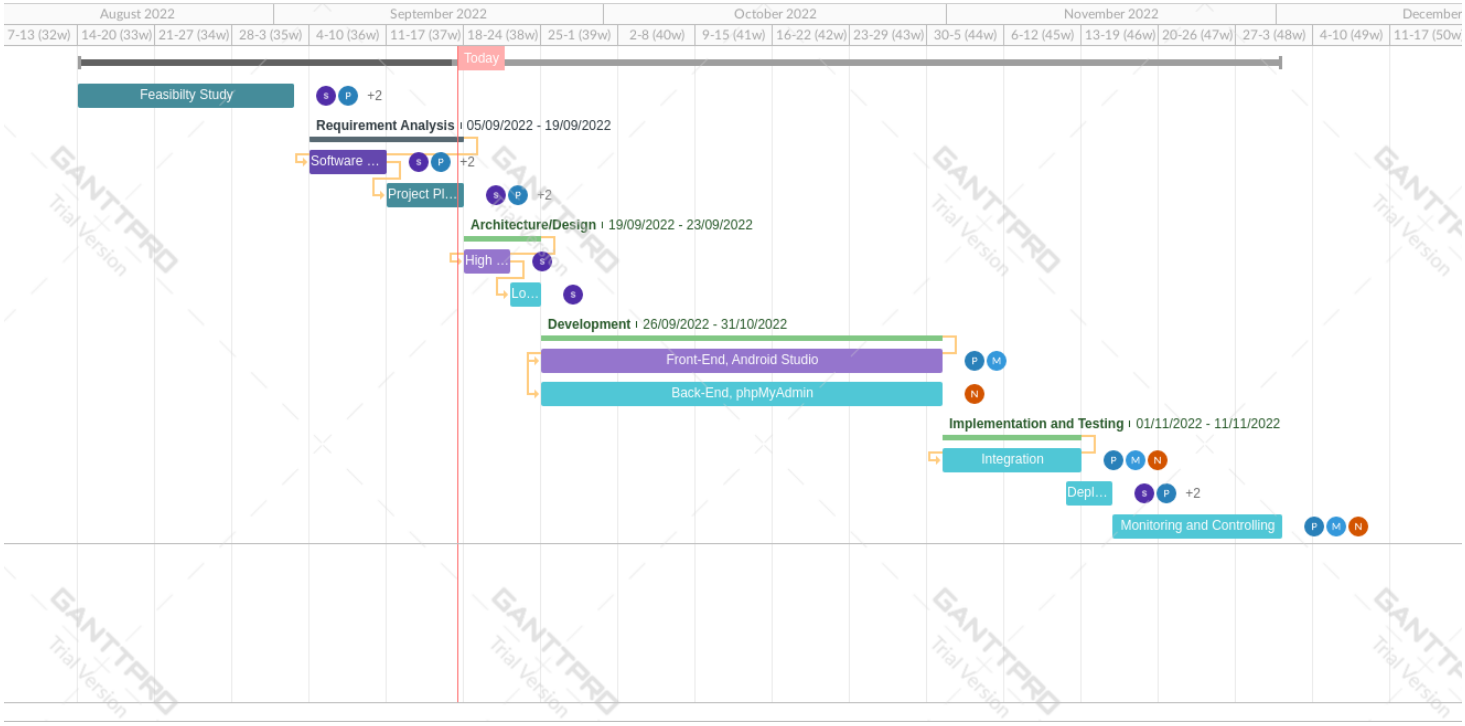
Effort $E = 3 \times (1.5)^{1.12}$

Effort E = 4.5 Person Month

~ Credits: Nilkant, PES2UG20CS530

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

	Task name	Assigned	Start date	End date	Progress	Status
			15/08/2022	**30/11/2022**	**31%**	
1	Feasibilty Study	S P +2	15/08/2022	02/09/2022	100%	Done
2	**Requirement Analysis**		**05/09/2022**	**19/09/2022**	**100%**	
2.1	Software Requirement Specification	S P +2	05/09/2022	12/09/2022	100%	Done
2.2	Project Planning	S P +2	12/09/2022	19/09/2022	100%	Done
3	**Architecture/Design**		**19/09/2022**	**23/09/2022**	**0%**	
3.1	High Level Design	S Shreepathi Achary	19/09/2022	21/09/2022	0%	Open
3.2	Low Level Design	S Shreepathi Achary	22/09/2022	23/09/2022	0%	Open
4	**Development**		**26/09/2022**	**31/10/2022**	**0%**	
4.1	Front-End, Android Studio	P M	26/09/2022	31/10/2022	0%	Open
4.2	Back-End, phpMyAdmin	N nilkantmanik87	26/09/2022	31/10/2022	0%	Open
5	**Implementation and Testing**		**01/11/2022**	**11/11/2022**	**0%**	
5.1	Integration	P M N	01/11/2022	11/11/2022	0%	Open
6	Deployment	S P +2	11/11/2022	15/11/2022	0%	Open
7	Monitoring and Controlling	P M N	16/11/2022	30/11/2022	0%	Open



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