



IT3030

Programming Application and Framework

3rd Year, 1st Semester

PAF Project Assessment

E-Power Station

Submitted to
Sri Lanka Institute of Information Technology

Bachelor of Science Special Honors Degree in Information Technology

26.04.2022

Group details

Group Number: No group List –IT17028424

Group Members with workload:

| | Name | IT Number | Function | Workload |
|---|-----------------------------------|------------|-----------------|--|
| 1 | Ekanayake E.M.W.C.L (Member 1) | IT17028424 | User Management | <ul style="list-style-type: none">• Create, Update and delete accountants detail after login• Can search bill accountant• Can search All candidate can update and delete them. |
| 2 | Member 2 | “ ” | Admin | <ul style="list-style-type: none">• Can search the Customer personal and payment details as per requirement after login• Can update the old customers record• Can save new customers information |
| 3 | Member 3 | “ ” | User | <ul style="list-style-type: none">• User Loin• Insert, View |
| 4 | Member 4 | “ ” | Payment | <ul style="list-style-type: none">• View payments• Make payments• Update and Delete details |

Acknowledgement

When I embarked this project, it appeared to me as onerous task. Slowly as I progressed I did realize that I was not alone after all.

I wish to express my gratitude to my teachers as well as my staff who gave us the golden opportunity to do this wonderful project under the PAF Subject, I would also like to express my gratitude to everyone who extended their kind help, guidance and suggestion without which it could not have been possible for me to complete this project report. My sincere thanks to my all entire faculty members.

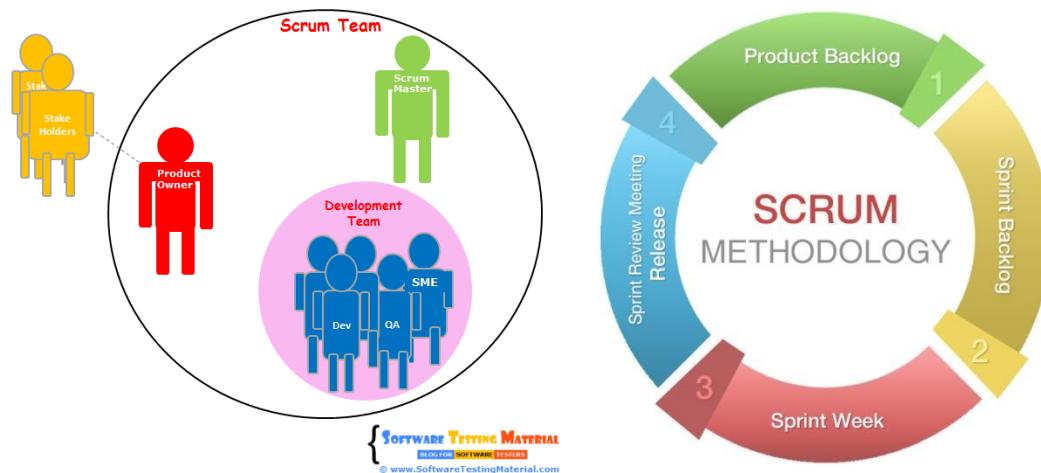
Content...

| | Page No. |
|--|-----------------|
| I. SE Methodology | 04 |
| II. Stakeholder analysis - (Onion diagram) | 04 |
| III. Requirements analysis - (Functional and Non-functional requirements) | 05 |
| IV. Requirements modeling - (Use case diagram) | 05 |
| V. Overall architecture | 05 |
| VI. Activity diagrams | 05 |
| VII. Any other relevant design diagrams | 08 |
| VIII. Time schedule (Gantt chart) | 13 |
| IX. Clickable URL to your GIT repo | 13 |

1. SE Methodology

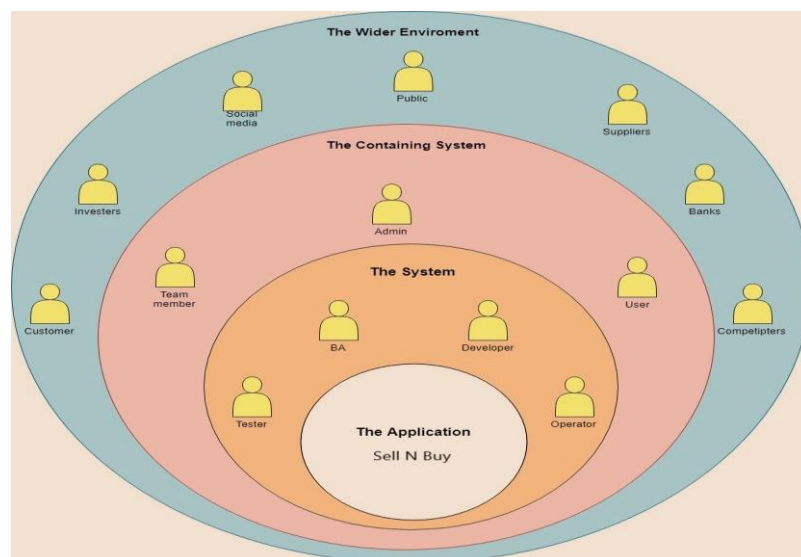
- In here we used agile scrum methodology to build our project.
- It is easy way to build a system software for a given period.

AGILE SCRUM METHODOLOGY



2. Stakeholder Analysis (Onion Diagram)

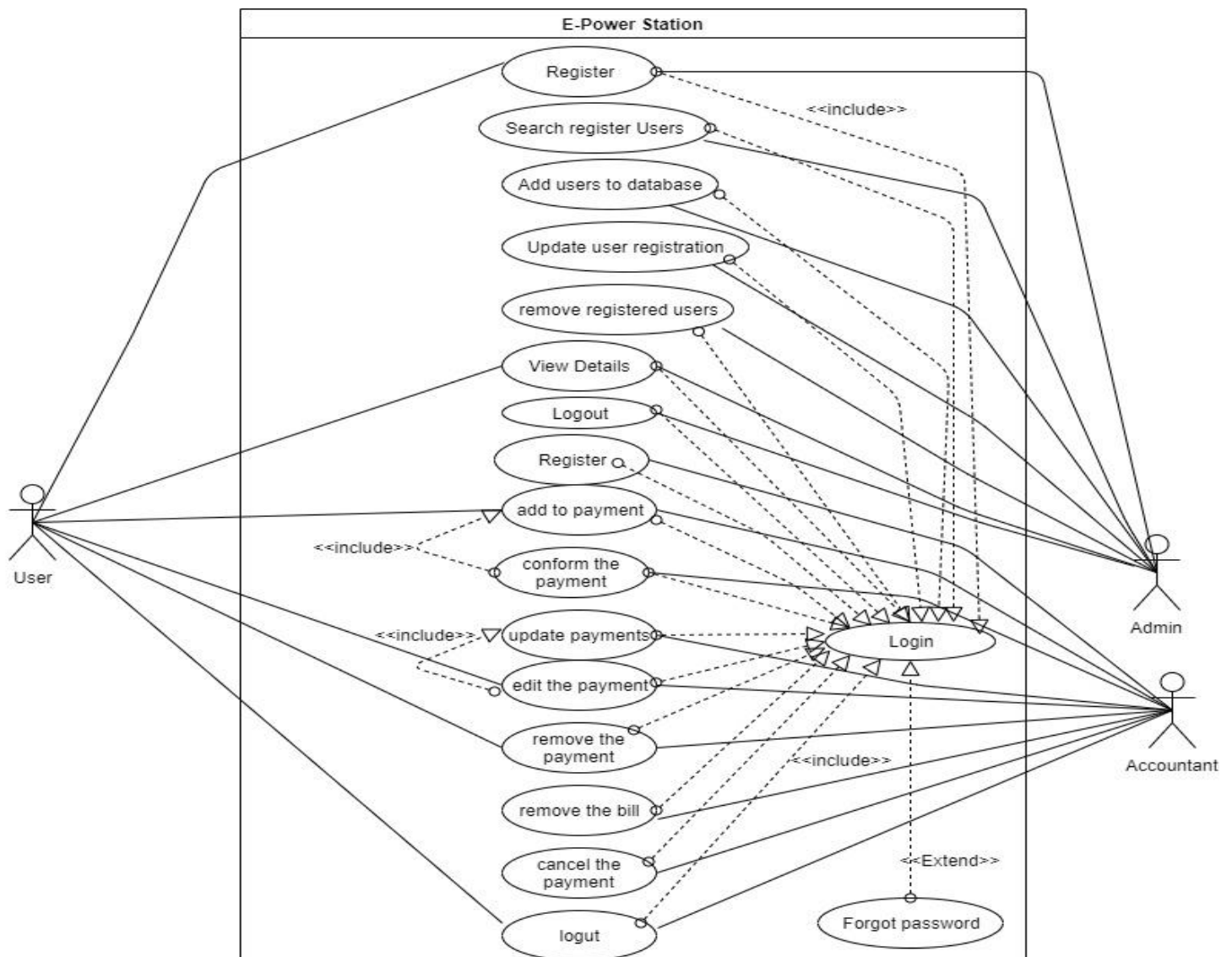
- This onion diagram shows the dependencies among parts of the project and organization.



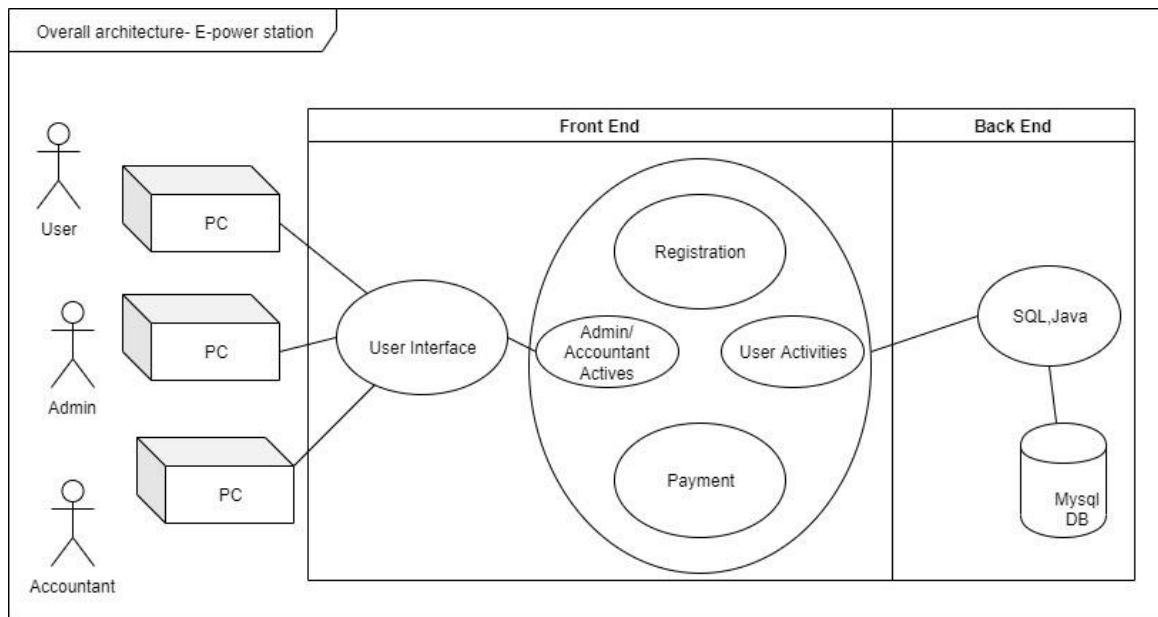
3. Requirement Analysis

| Functional Requirement | Non – functional Requirement | Technical Requirement |
|------------------------|------------------------------|--------------------------|
| 1. User management | 1. High performance | 1. Eclipse Java EE |
| 2. Bill management | 2. Usability | 2. Maven |
| 3. Payment management | 3. Time management | 3. MySQL |
| | 4. Maintainability | 4. HTML, CSS (Bootstrap) |
| | 5. Simplicity | 5. Simplicity |
| | 6. Quality | |
| | 7. Consistency | |

4. Requirement Modelling (Usecase Diagram)

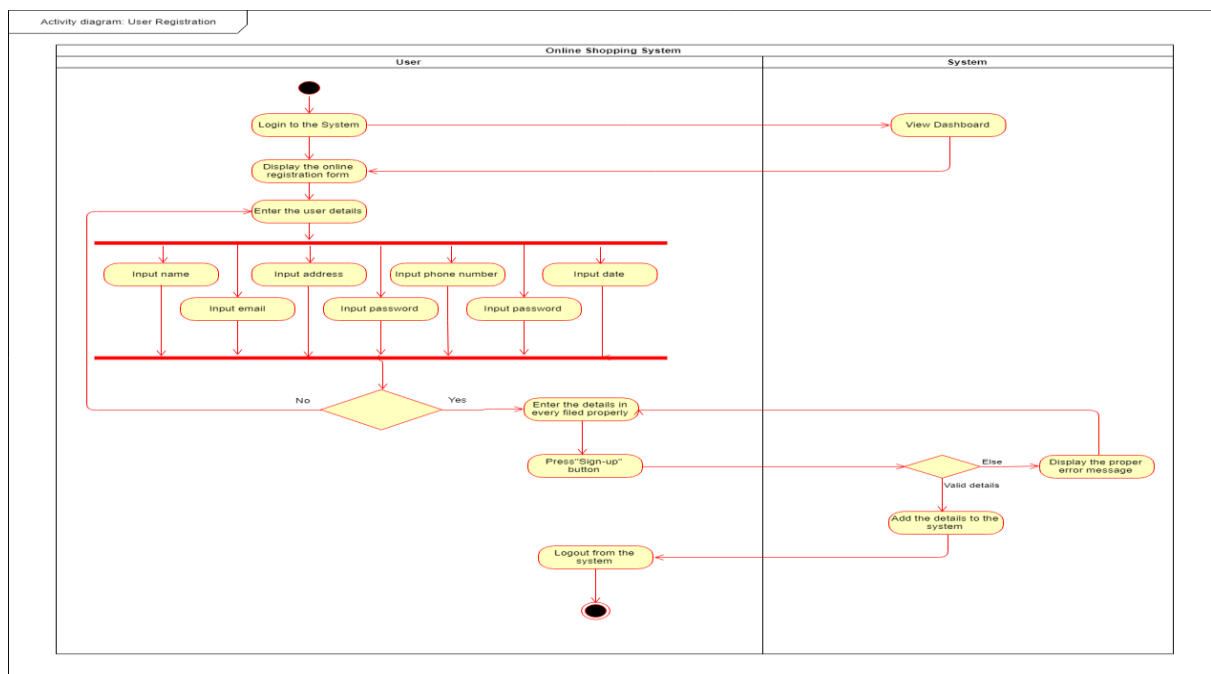


5. Overall Architecture

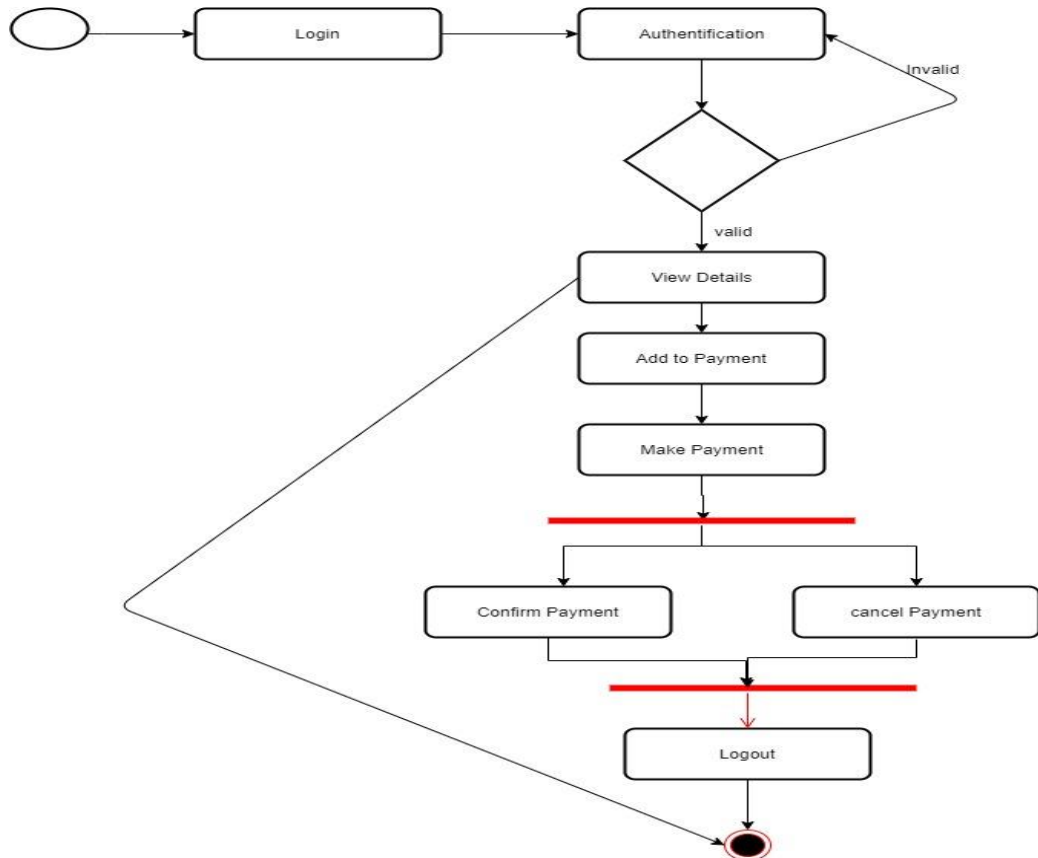


6. Activity Diagrams

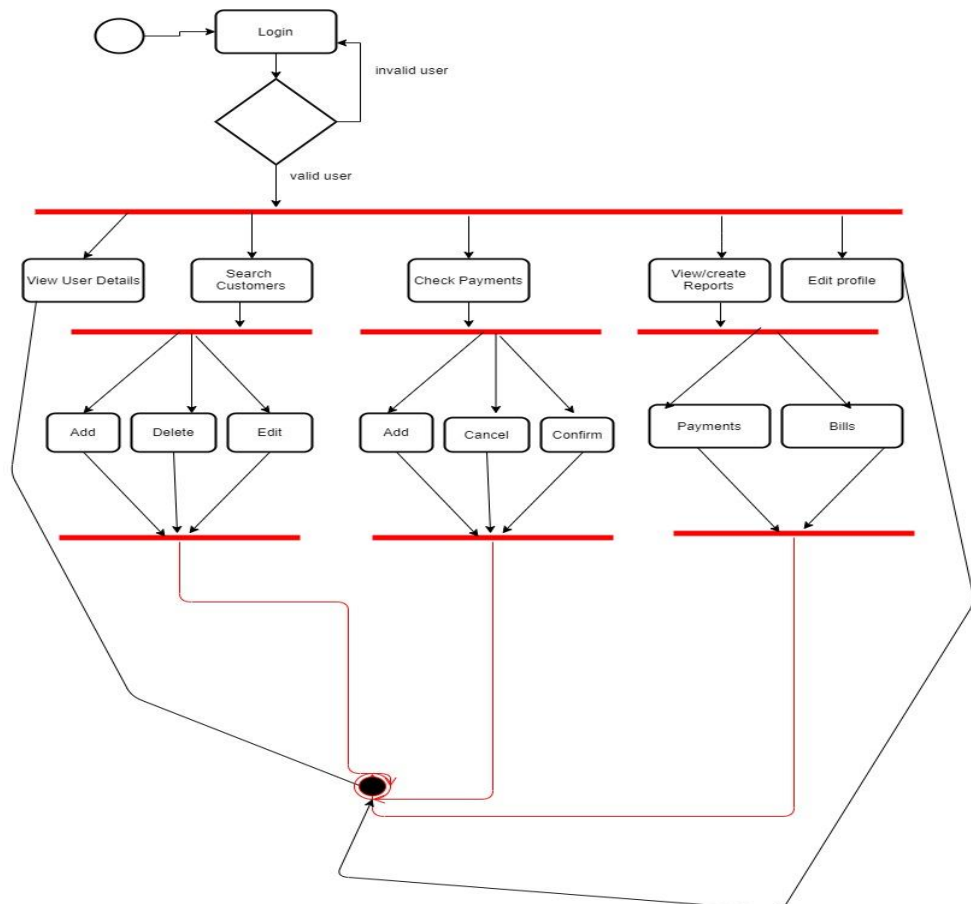
User Management (Registration)



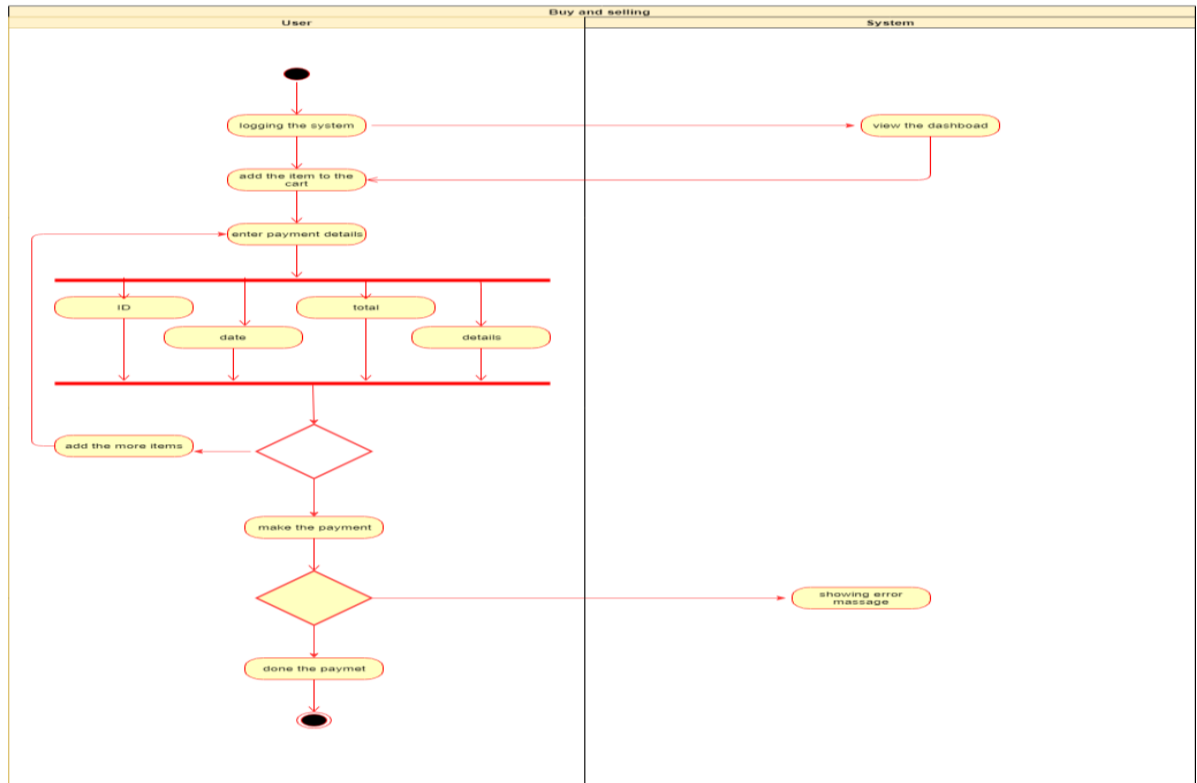
1) User



2) Admin

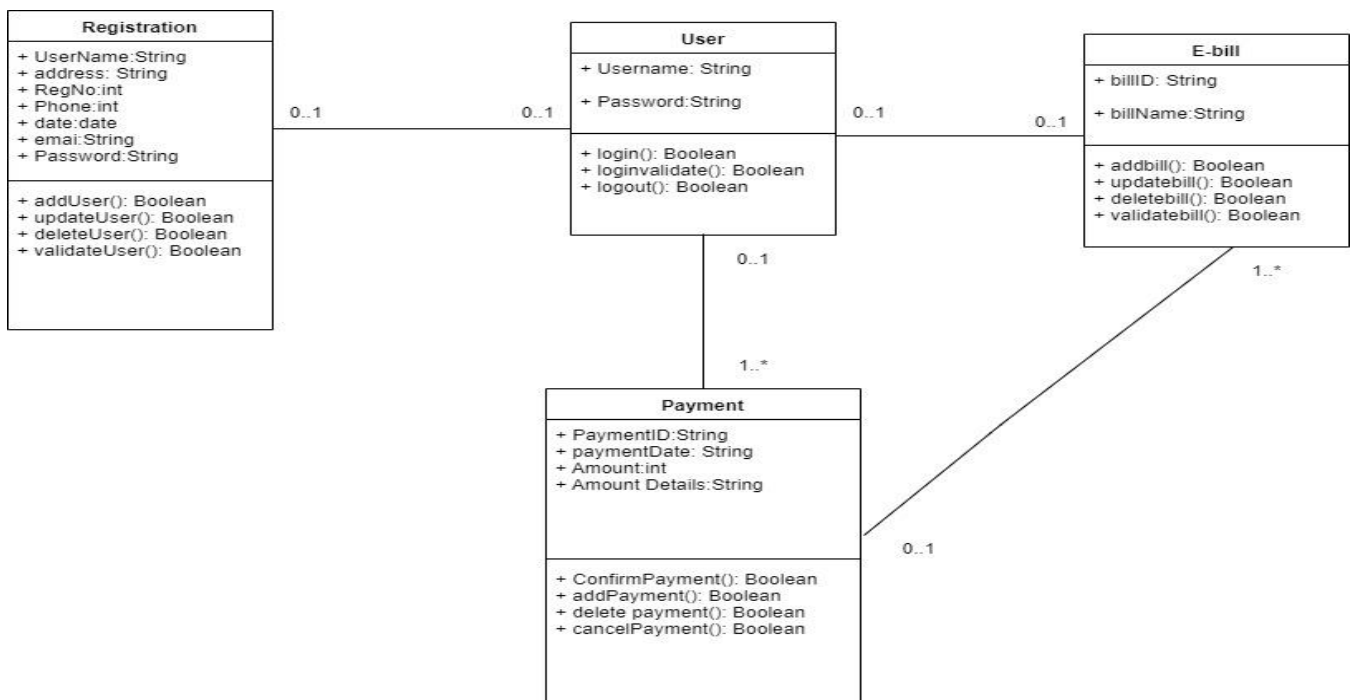


3) Payment

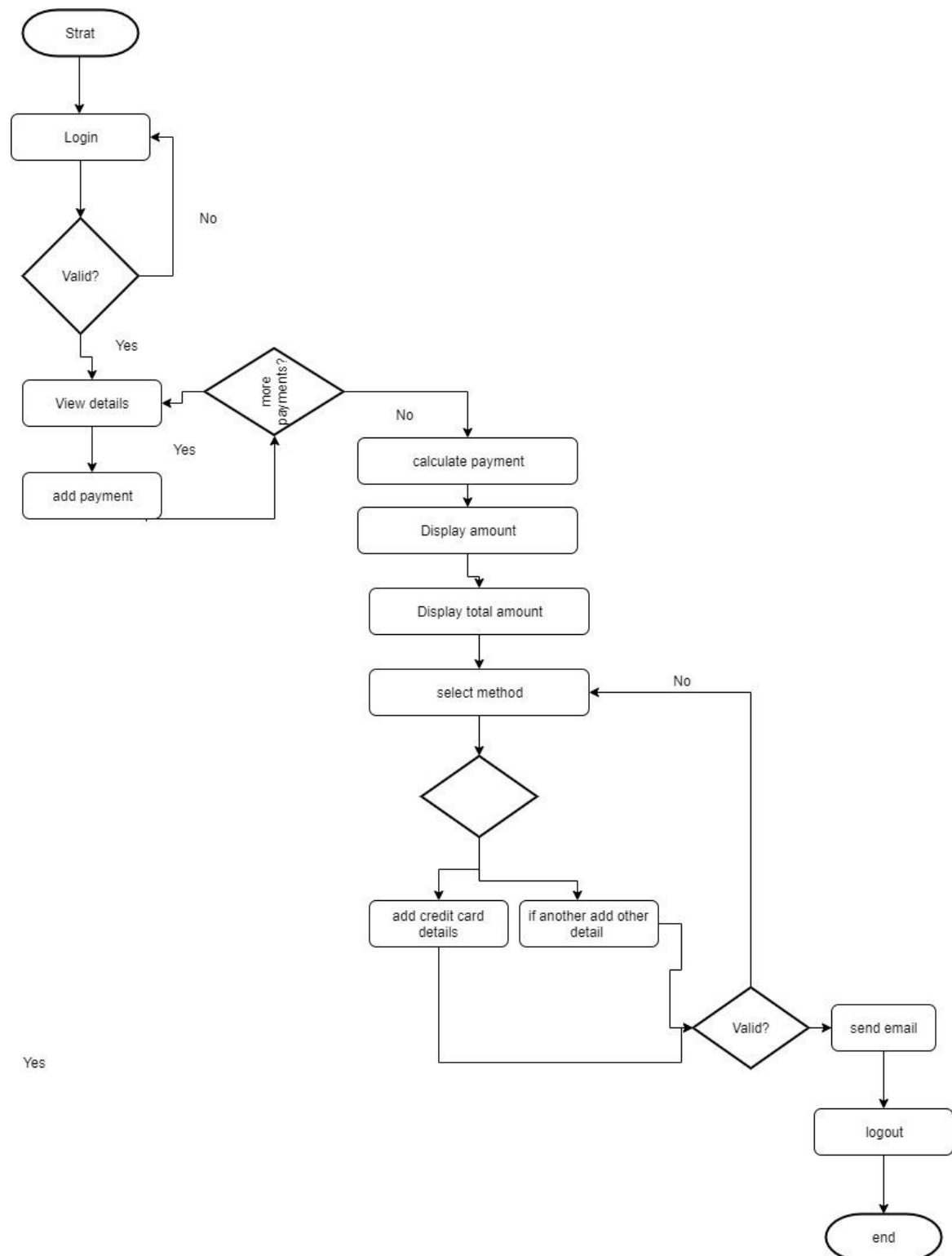


7. Any other relevant design diagrams

- **Class Diagram (Overall system)**

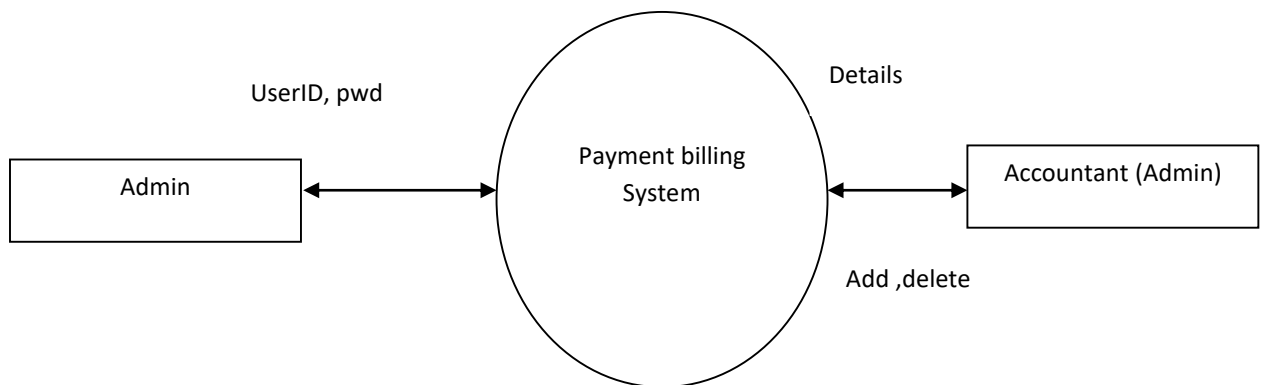


- **Flow Chart Diagram (Overall system)**

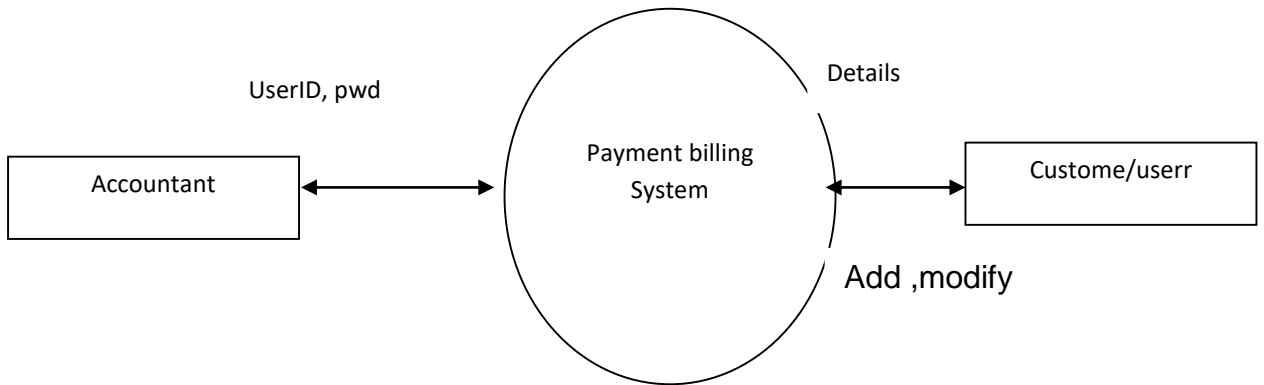


0-LEVEL DFD

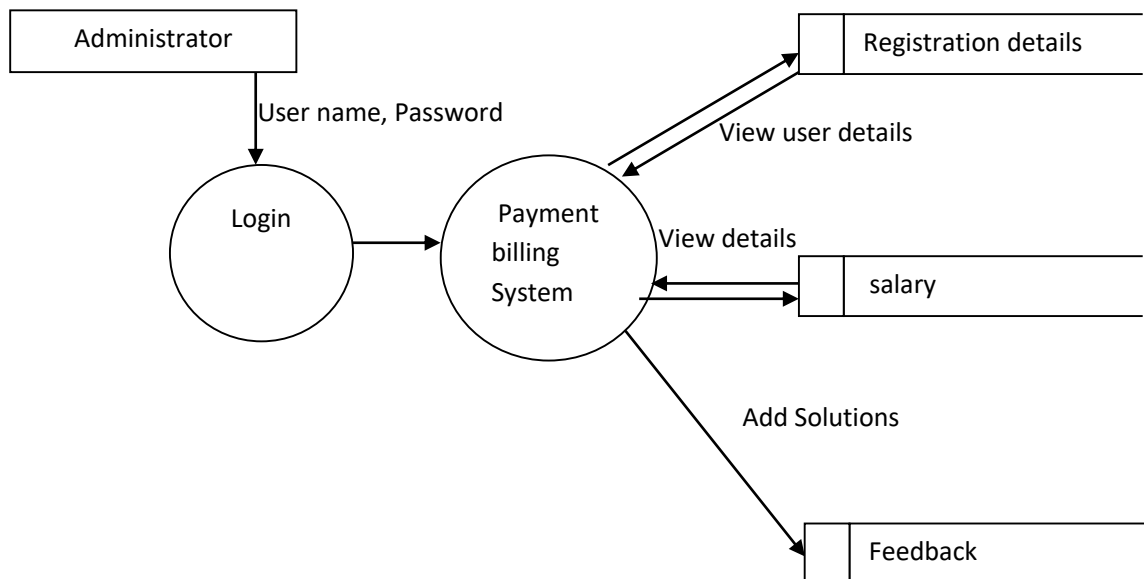
For The Admin:



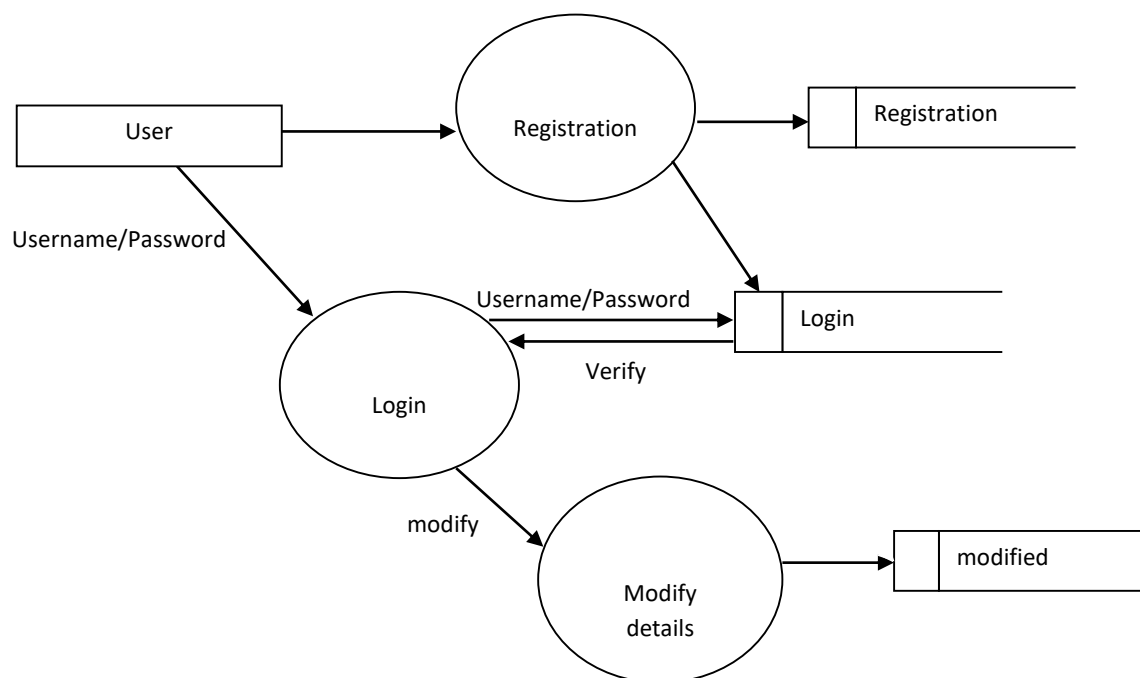
For the Accountant :



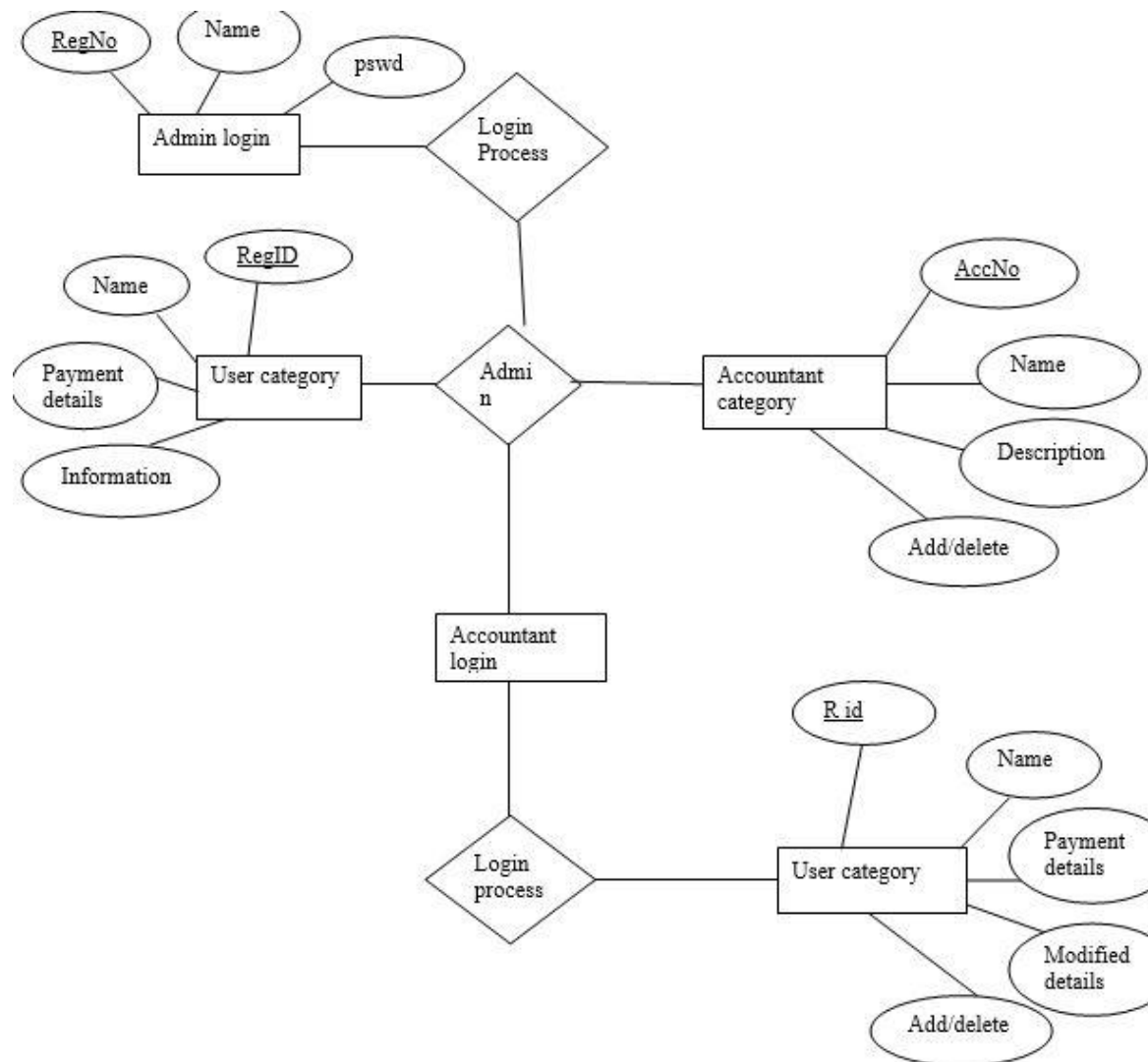
Level 1 DFD- Administrator



Level 1 DFD- Accountant (Admin):

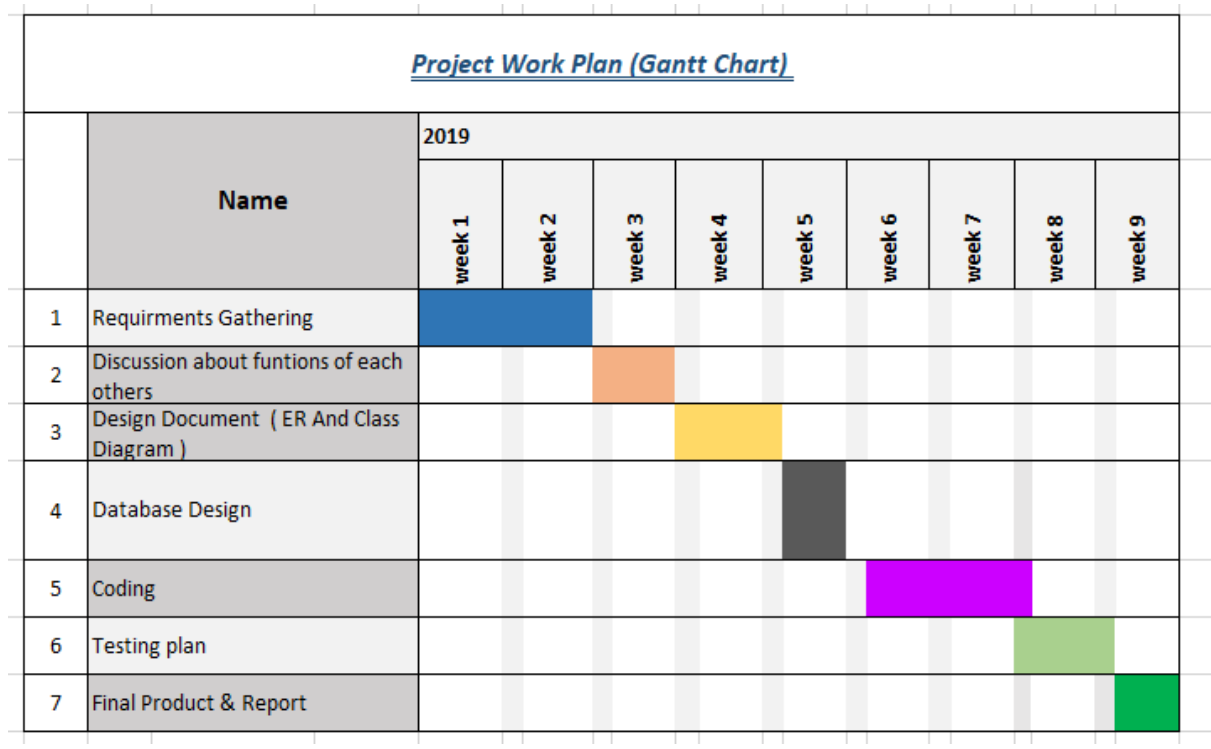


- **ER Diagram (Overall system)**



8. Gantt Chart

- Following is the time schedule that we suppose to finish this work.



9. Clickable URL to your GIT repo

https://github.com/lakshaniekanayake/PafAssessment_I_T17028424.git