MID TERM LAB PROJECT

SOFTWARE ENGINEERING

SECTION: [F]

Group 1:

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Problem Domain

1.1 Background of the problem:

The name of our application is "Organization Software". It has both mobile application version and a website. As per we know due to our current situation, we have been through COVID-19 pandemic. For this we had to quarantine for about 2 years. In these 2 years people hardly enjoy that much. And also, some people still afraid to go outside and organize things like they do. For them actually is our approach. So that people can actually do things through online. People always likes works to be done by online. Now many peoples earning source is really down by keeping them in mind we also providing less cost tickets. And those sellers who will sell their things via their shops they can easily get their chance to fulfill their needs. companies get closed. Many companies refused to give salaries and fired their employees. This is the root cause of this problem. Though the govt gave help but it became beneficial only for the poor and middle-class families. So, it is very important to consider the situation for the rich people who have a better condition because it is about the lives of people.
Though we have created this application for this current situation but we will continue our project. At this moment, our main focus will be on the best organization process. After overcoming this situation, we will focus on the best service we can provide. For those who will come to our fair and also for those who will give their stalls.
So, giving cash directly to the individuals isOrganization Software's simplicity and indeed this can be the best way in these types of circumstances. Many people wantto come in this type of programs but they cannot trust all of them. Besides, some softwaredoes not have good service as well as a good image. So thus they can trust our project.

PROJECT PROPOSAL:

Organization Software

REQUIREMENT ANALYSIS:

1. Login (Purpose of any Exhibition, Fair,conference) Password
2. Button option for choice:

    1. Exhibition
    2. Fair
    3. conference

For Fair:

1. All Shop List
2. All Shop owner list
3. Shop instrumentsdetails
4. Payment :
    1. Shop payment
    2. Products price
    3. Stuffs payment
5. Ticket Counters list
6. Ticket Prices List
7. Customers Entry/Outing Details
8. Contacts

Exhibition:

1. All Stall List
    i) Stall details
    ii) Members information
    iii) Staff information
2. Stall owners name list
3. Stall instruments details
4. payment
    1. Stall payment
    2. Product Price
    3. Stuff Payment
5. Ticket price List
6. Customer Entry/Outing Details
8. Contacts

Conference:

1. All member List:
    1. Add Member
    2. Delete Member
2. ticket list such as customer/member Entry and outing time and schedule
3. Ticket payment add and schedule

Functional Requirements:

LOGIN

1. User must login to the software to run the Software.
2. Password should have 8 characters.
3. Before login user must register his/her account
4. Forregistration user must write first name, last name, NID number, and phone Number, Email address.
5. User must click the on box that will be the acceptance of our terms and condition
6. At last user must press LOGIN button for login.
7. After Login User can see three option button (Fair, Exhibition, Conference) and then They can choose where they want to go between this three options.

Fair:

1. User must login to his/her account first
2. User will see the fair option in the main page
3. User must click into the fair to be redirected to the fair page.
4. The user will be able to see the list of all the shops
5. The user will see the list of all the owner of the shops
6. Shop instruments will be detailed out onto the page
7. The buyer detail and the payment details will be shown
8. User can add and delete payment details according to their program Requirement.
9. User will able to see ticket list which they can add and delete.

Exhibition:

1. User must login to his/her account first.
2. User will see the exhibition option in the main page. When User chose Exhibition User The user will be able to see All Stall List.
3. User Can Check Stall details, Members information, Staff information.
4. The user will be able to see Stall owners name list & also check Stall instruments Details.
5. Stall payment, Product Price, Stuff Payment detail will be shown.
6. The user will be able to see Ticket price List which they can add and delete.
7. Customer Entry/Outing Details also shown in thepage which they can add and Delete.
8. The user will see the Contacts for any kind of help.

Conference:

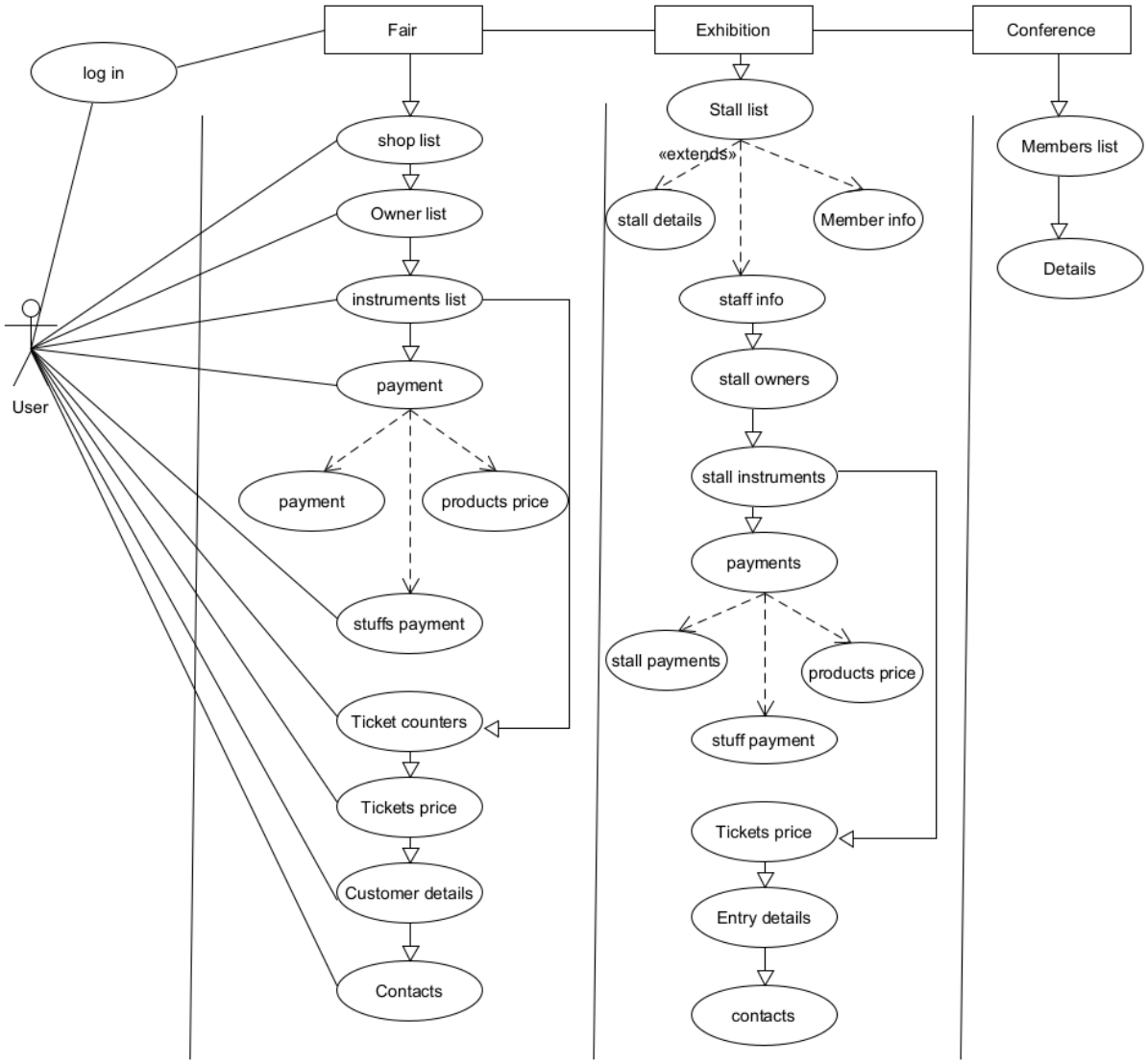
1. User can see the member list which they can add and delete.
2. User can ticket list which they can add and delete.

Non-Functional Requirements:

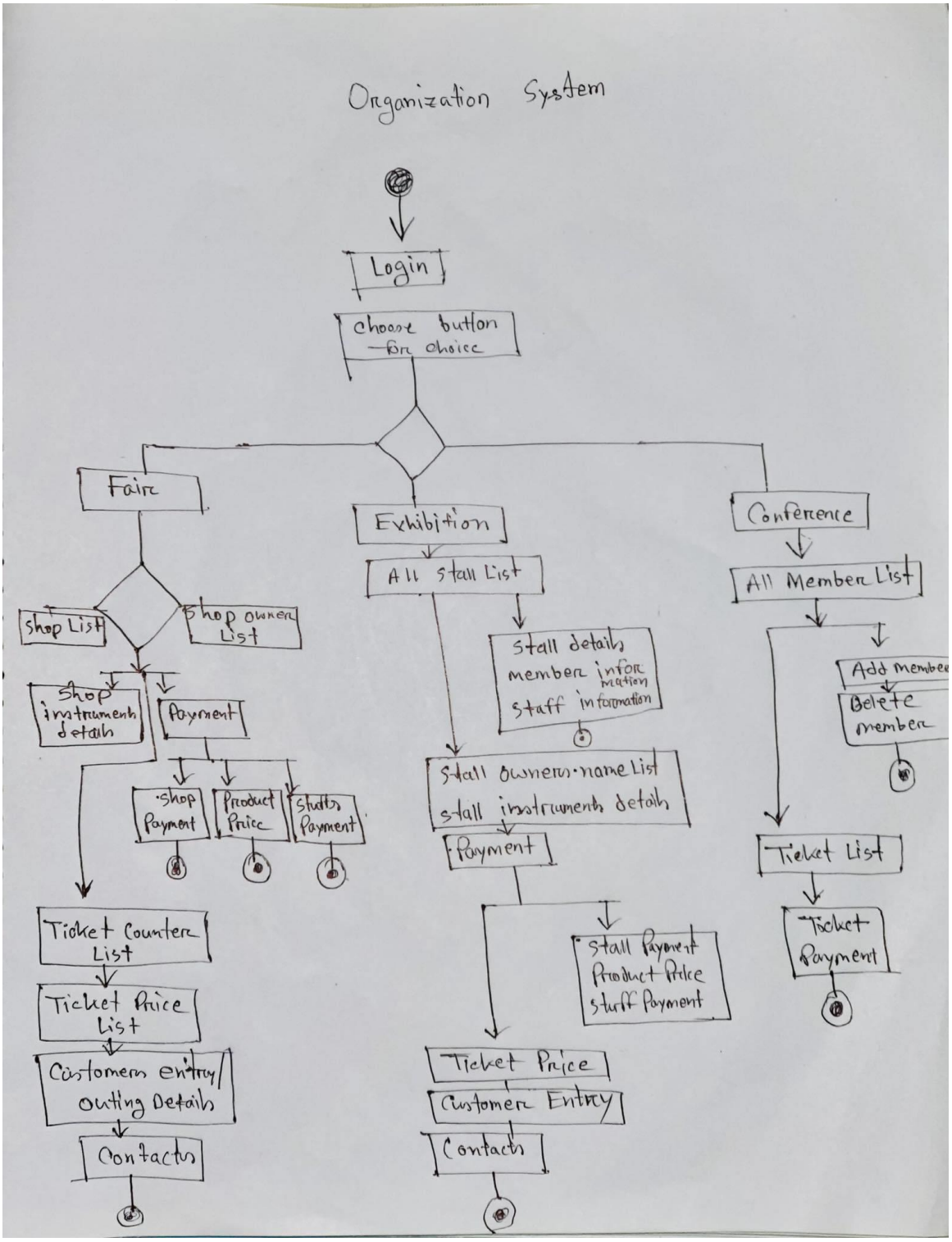
User can use this Software fully securely. This Software will becreated bymaintainability. All the features should be in clear maintenance. Even if they faced any problem they contact us using contact numbers which is in the contact option. All the features will be in scale.

Diagrams:

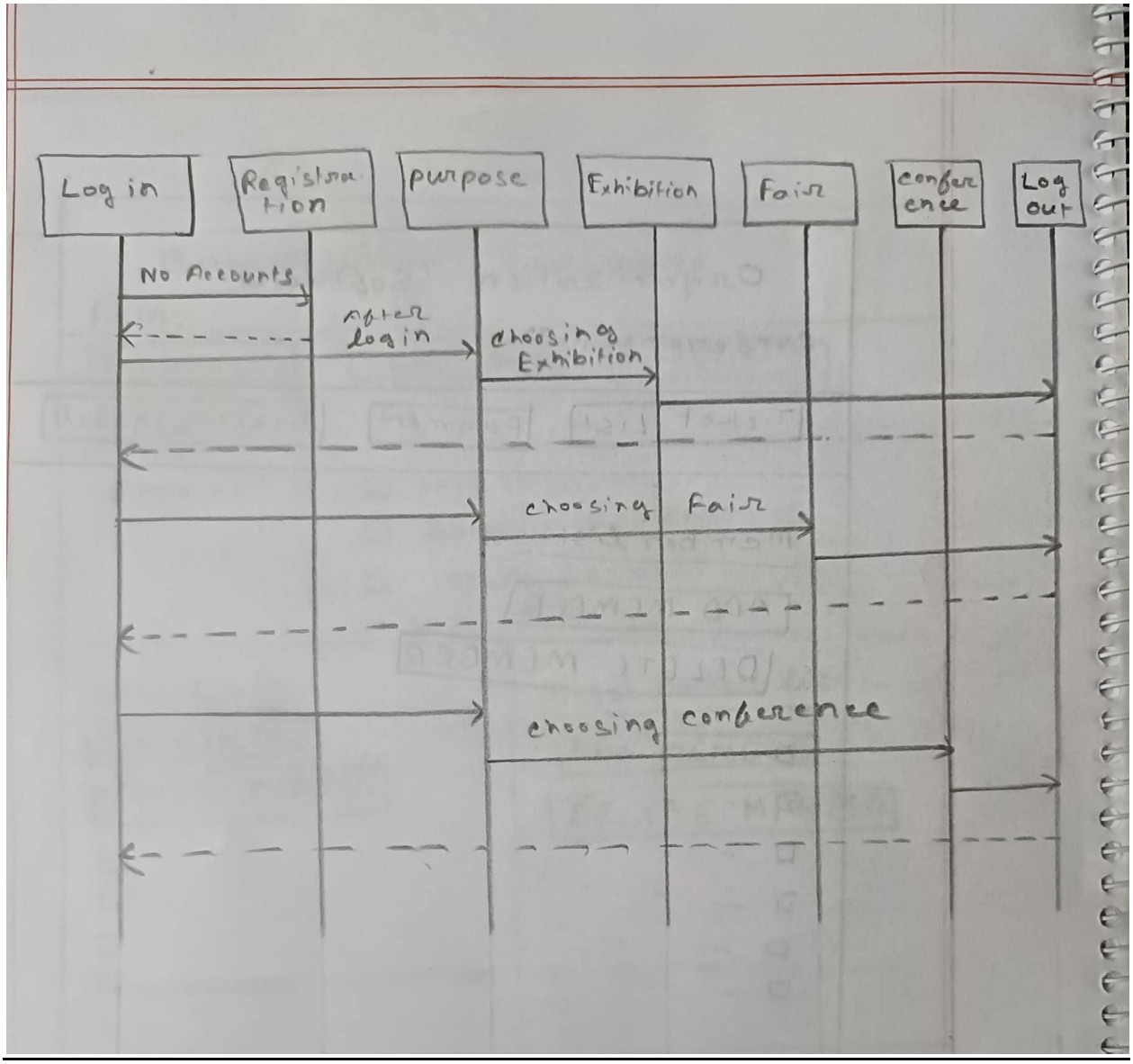
Usecase Diagram:



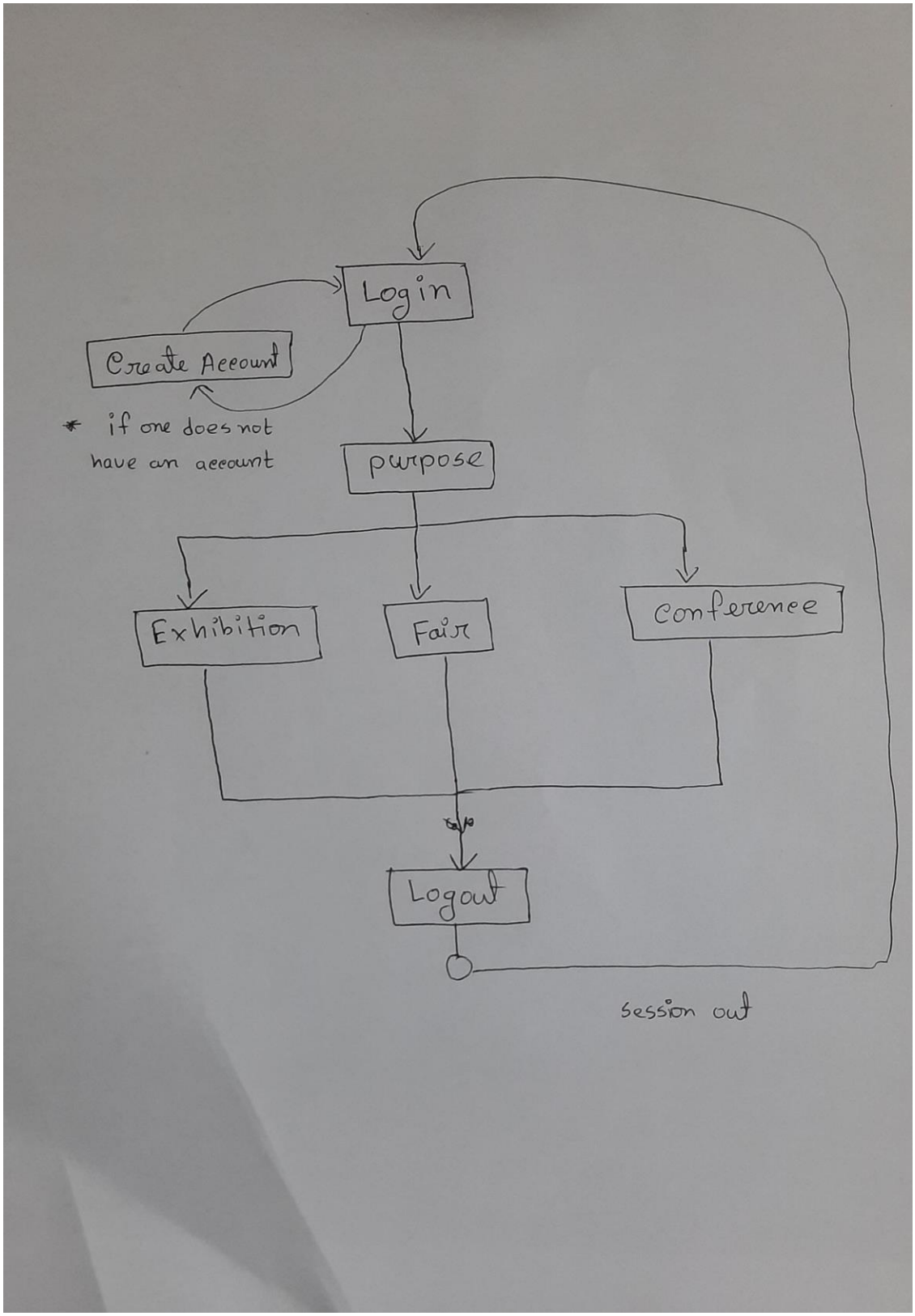
Activity Diagram:



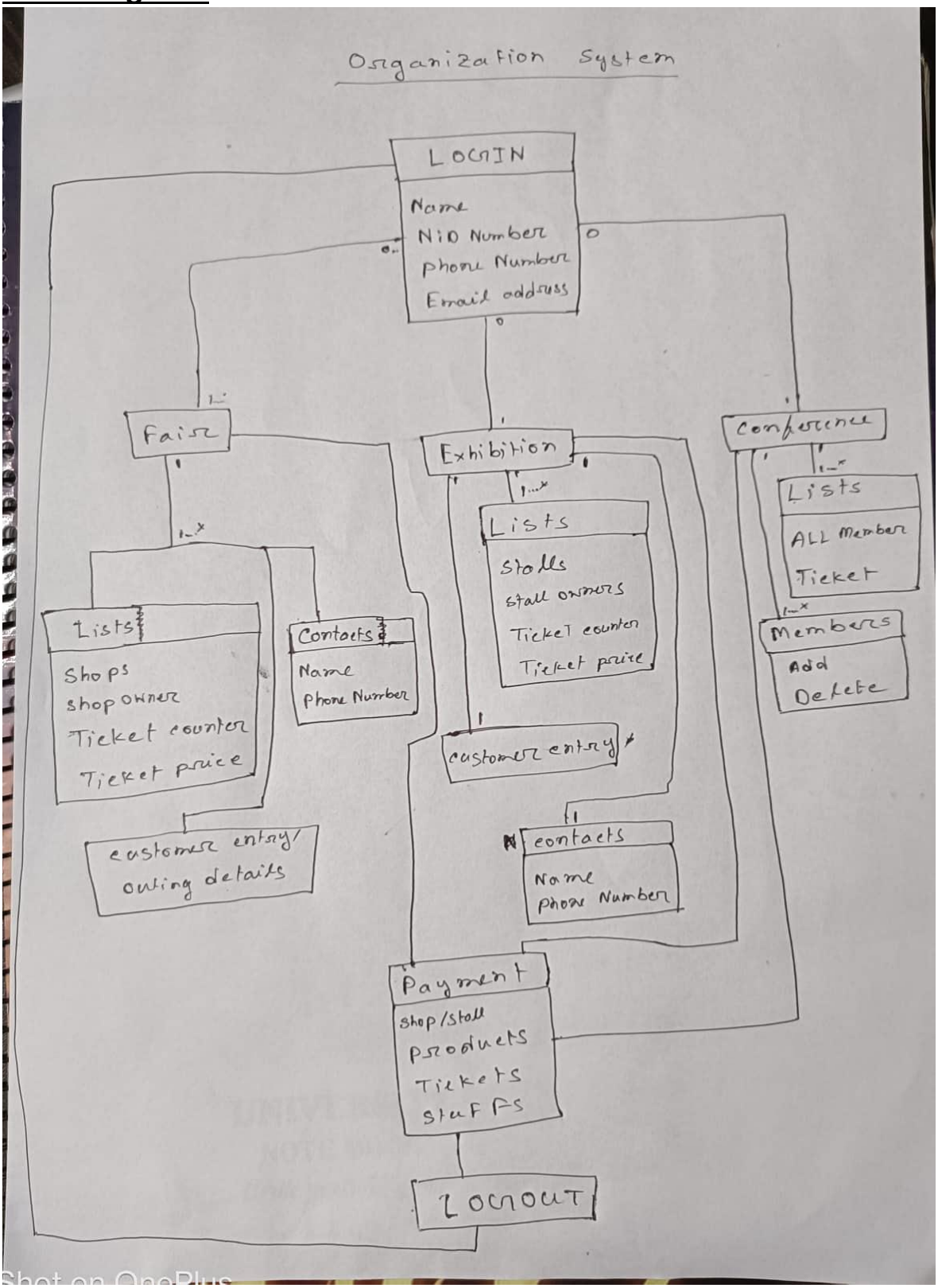
Sequence Diagram:



State Diagram:



Class Diagram:



Model Selection:

The V-model represents a development process that may be considered an extension of the waterfall model, and is an example of the more general V-model. Instead of moving down in a linear way, the process steps are bent upwards after the coding phase, to form the typical V shape. V-Model also referred to as the Verification and Validation Model. In this, each phase of SDLC must complete before the next phase starts. It follows a sequential design process same as the waterfall model. Testing of the device is planned in parallel with a corresponding stage of development.

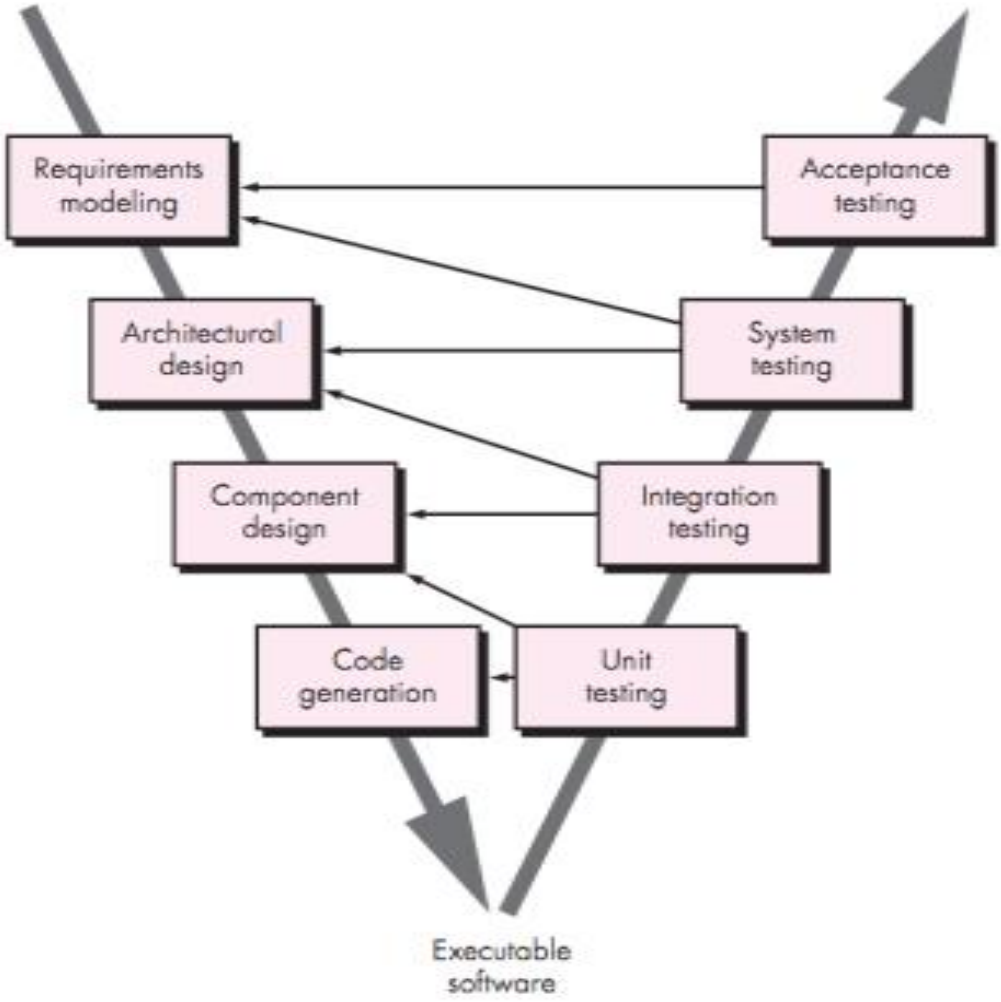
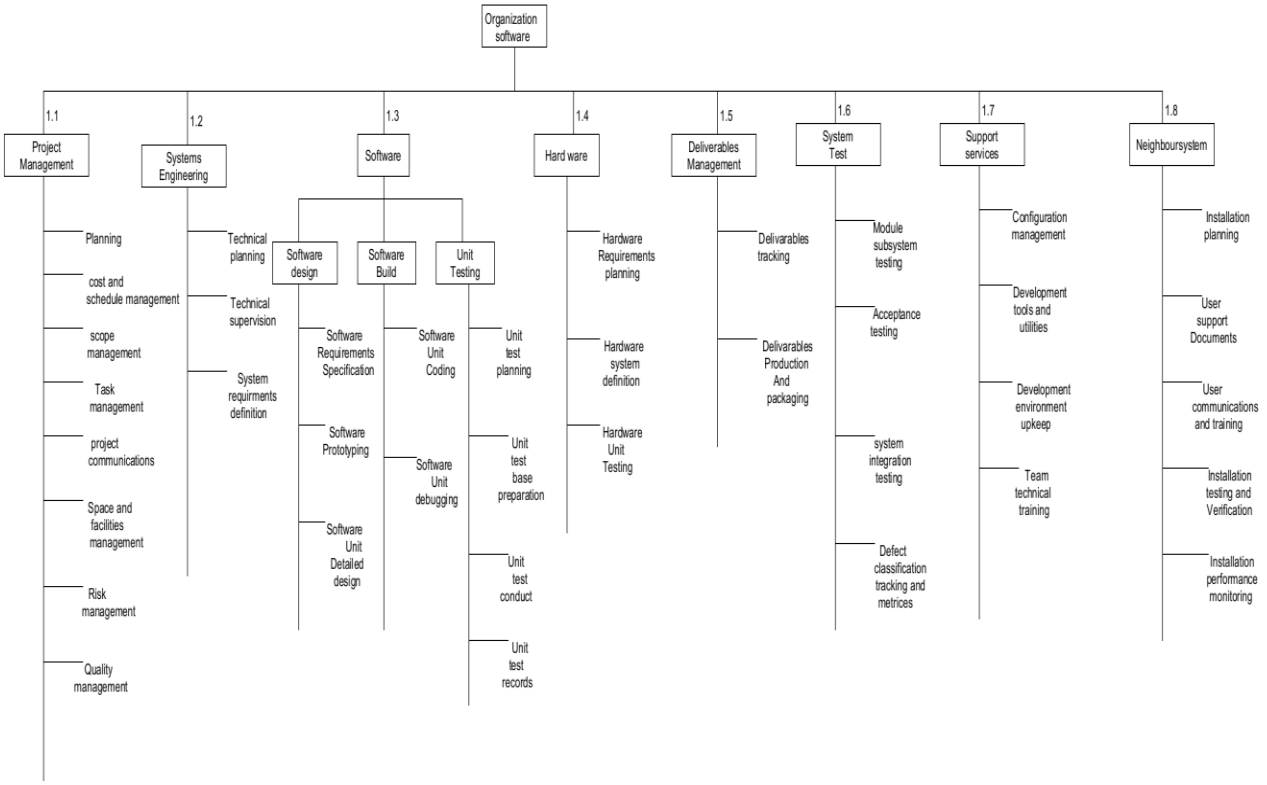


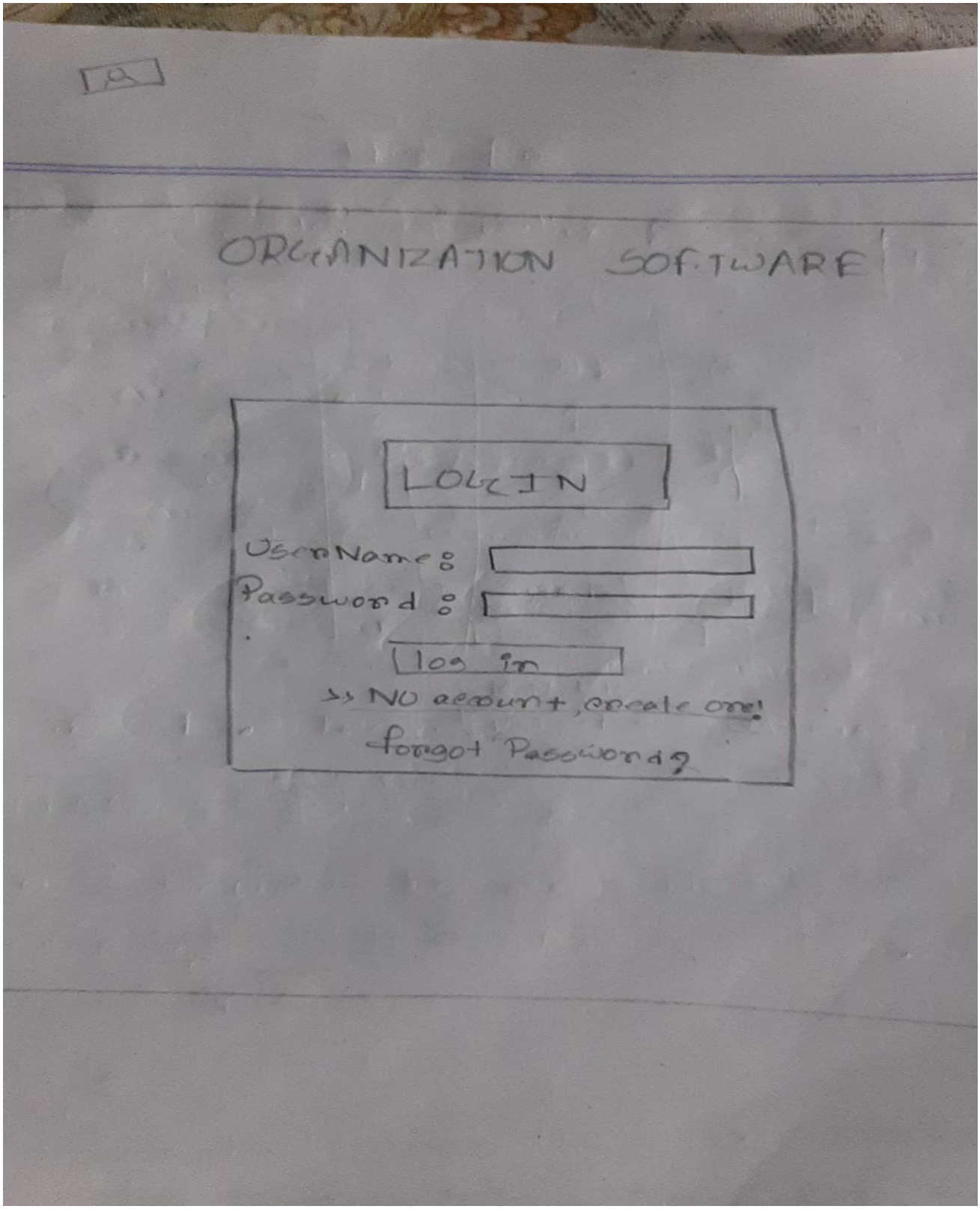
Figure: V-model

The V-model in Software Engineering is the best process For our project because our project is one time delivery with proper testing no backtracking. Initially we will collect all the requirements from the Customer. Then we build the system requirement wise and when we going to deliver our project we will check our whole system properly and test it like a V-model.

WBS:


Organization software
1.1
Project Management
Planning
cost and schedule management
scope management
Task management
project communications
Space and facilities management
Risk management
Quality management
1.2
Systems Engineering
Technical planning
Technical supervision
System requirments definition
1.3
Software
Software design
Software Requirements Specification
Software Prototyping
Software Unit Detailed design
Software Build
Software Unit Coding
Software Unit debugging
Unit Testing
Unit test planning
Unit test base preparation
Unit test conduct
Unit test records
1.4
Hard ware
Hardware Requirements planning
Hardware system definition
Hardware Unit Testing
1.5
Deliverables Management
Delivarables tracking
Delivarables Production And packaging
1.6
System Test
Module subsystem testing
Acceptance testing
system integration testing
Defect classification tracking and metrices
1.7
Support services
Configuration management
Development tools and utilities
Development environment upkeep
Team technical training
1.8
Neighboursystem
Installation planning
User support Documents
User communications and training
Installation testing and Verification
Installation performance monitoring

Project Frames:



Organization Software

Create Account

First Name:

Last Name:

User Name:

Email Address:

NID Number:

Phone Number:

password :

confirm password:

☐ Do you agree, with all terms and conditions

submit

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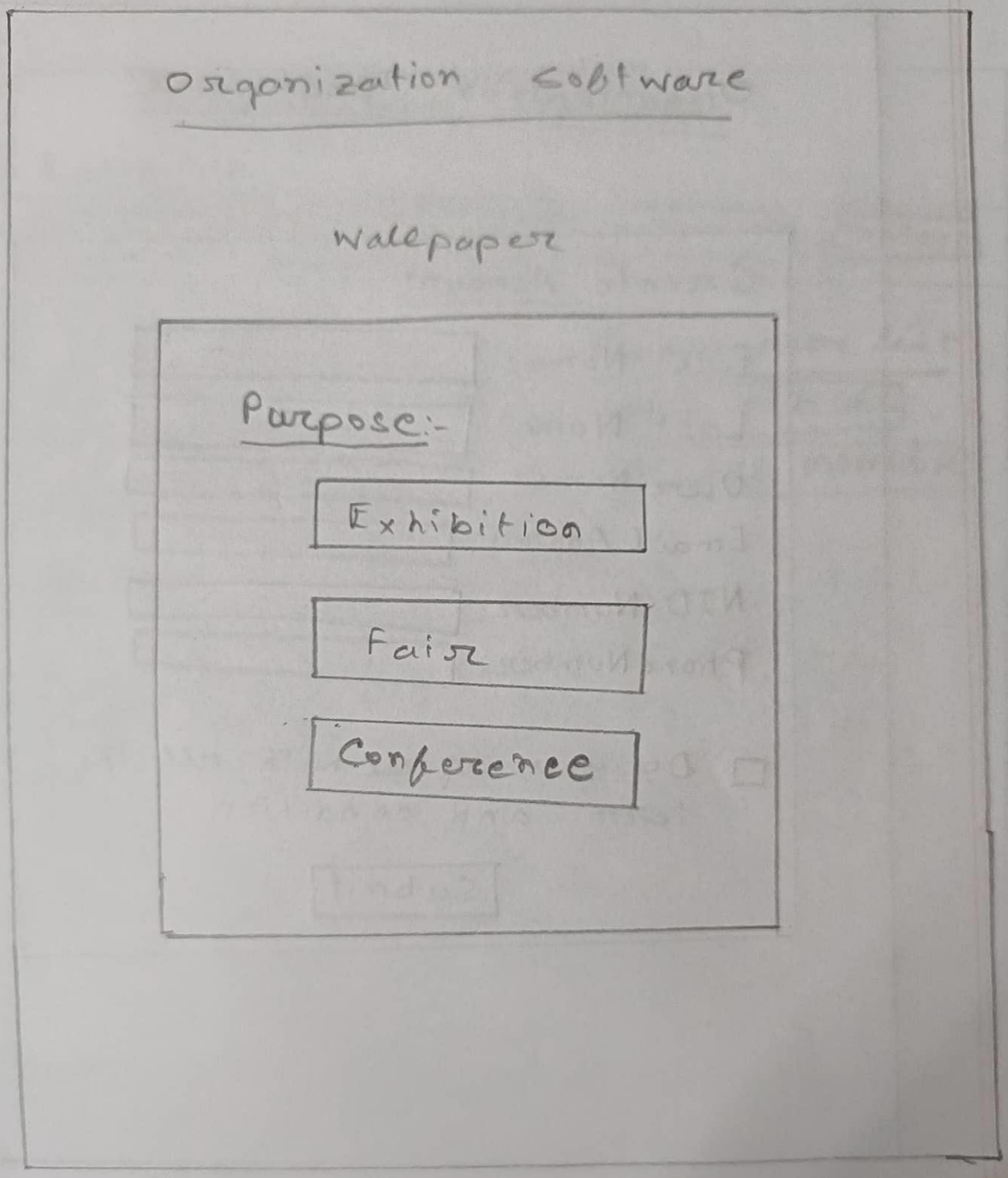

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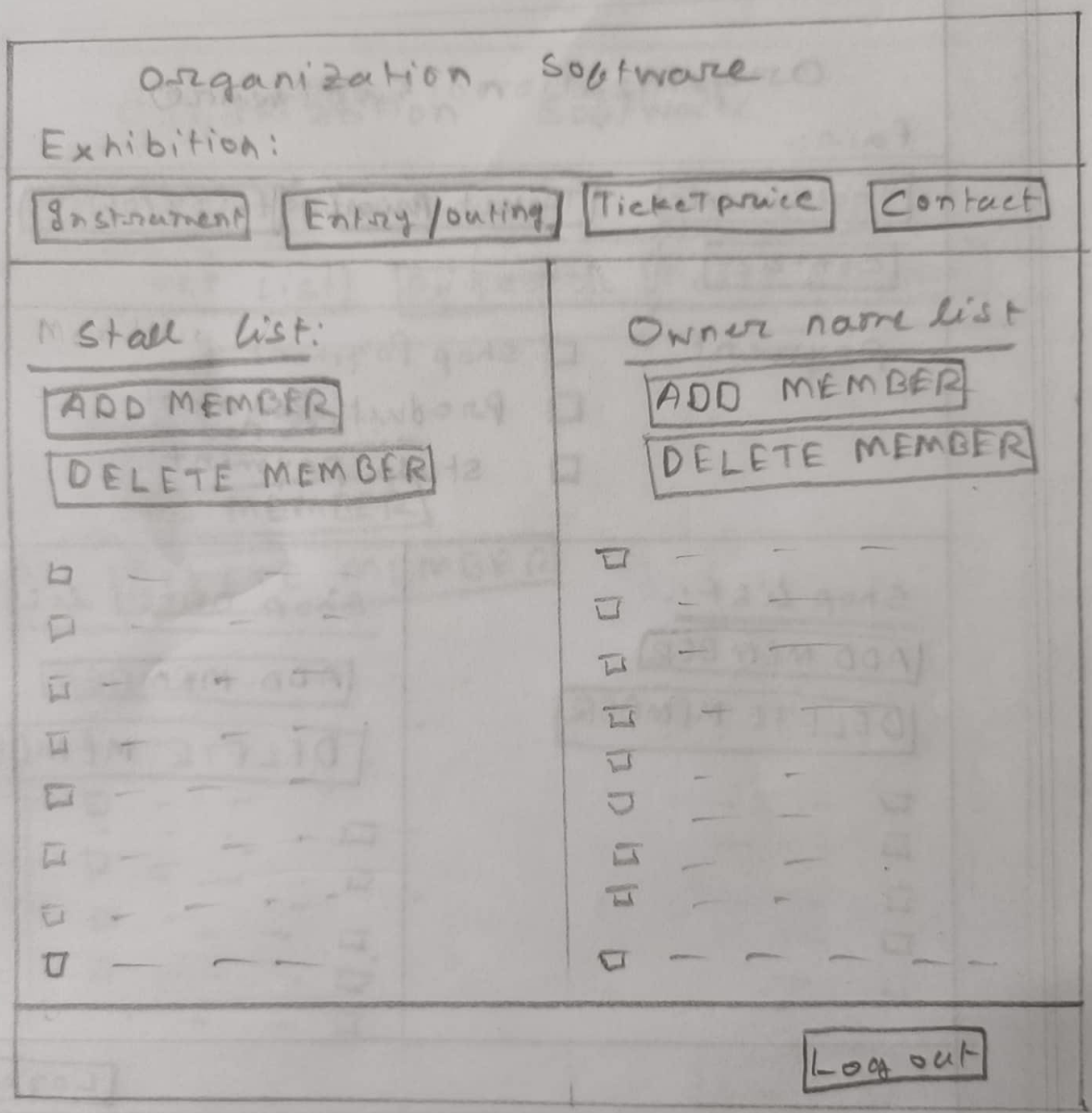

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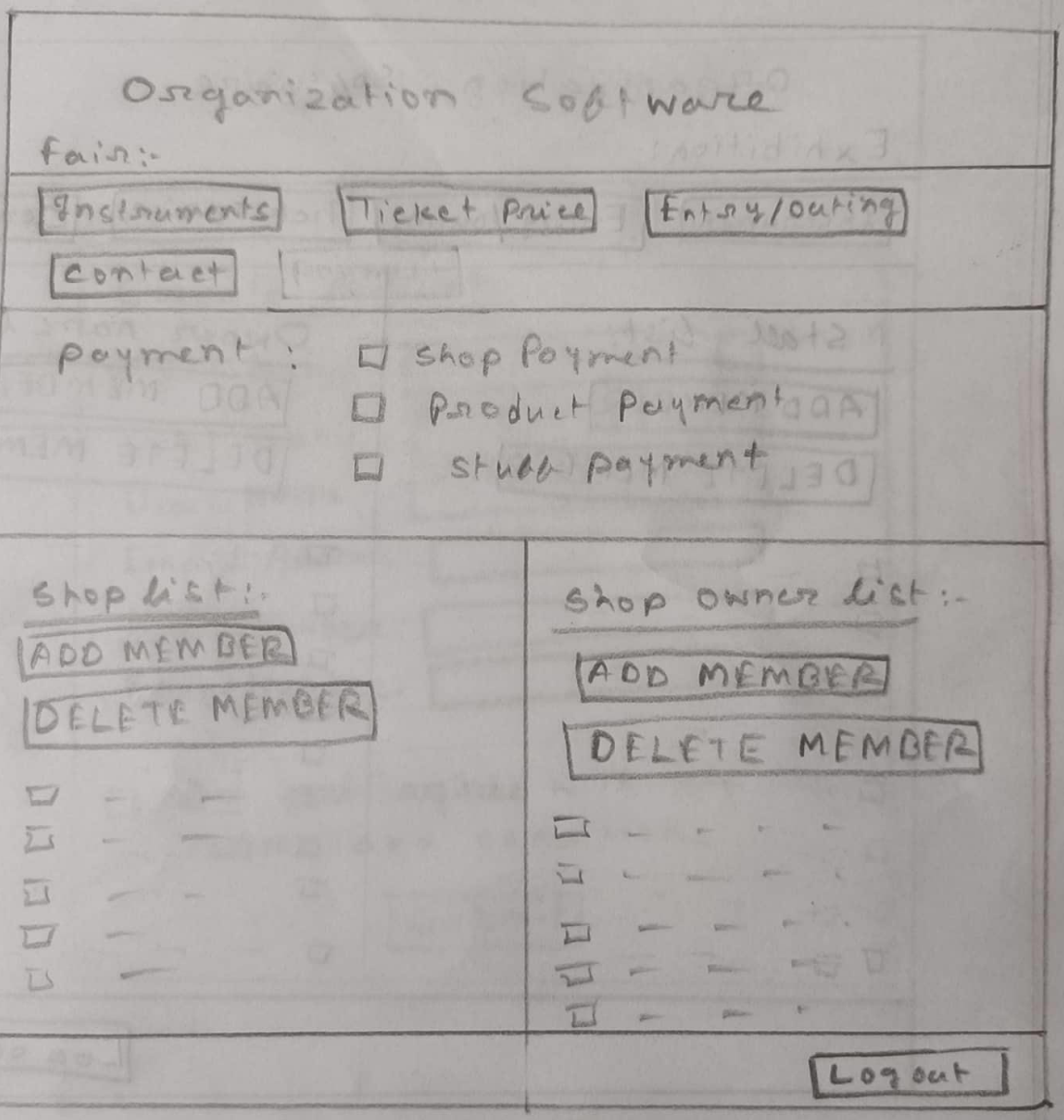

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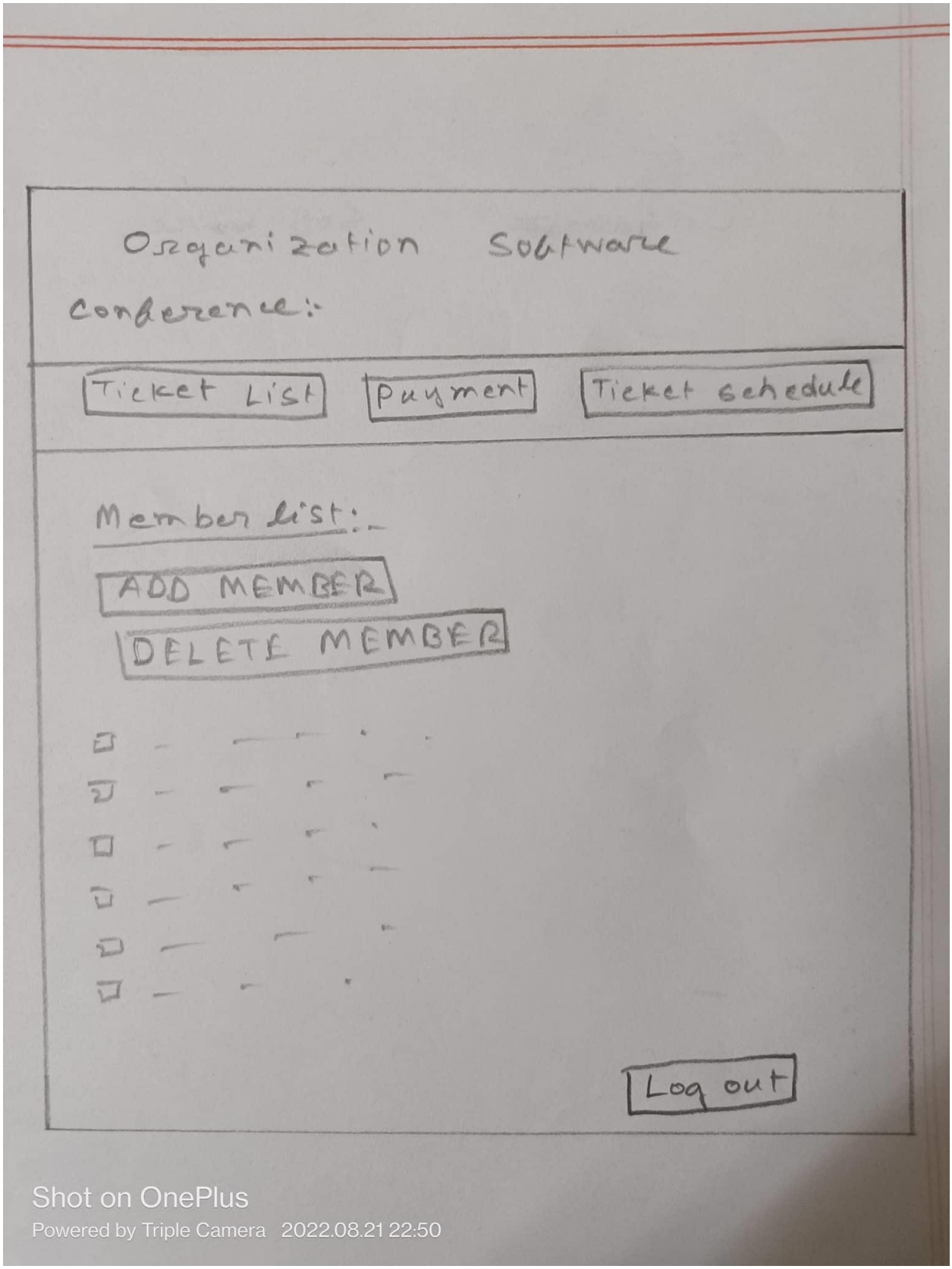

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Test Automations:

Project Name: Organization Software			Test Designed by:Hiya	
Test Case ID: FR_1			Test Designed date:1.05.2022	
Test Priority (Low, Medium, High): Medium			Test Executed by:Hiya	
Module Name: Login Session			Test Execution date:3.05.2022	
Test Title: verify login with valid username and password and create account				
Description: Test website login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Enter username 3. Enter password 4. Click submit	Username: 99999999999 Password: 321	User should login into the application	As expected,	Pass
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

Project Name: Organization Software	Test Designed by:Hiya
Test Case ID: FR_2	Test Designed date:22.05.2022
Test Priority (Low, Medium, High): Medium	Test Executed by:Hiya
Module Name: Registration	Test Execution date:24.05.2022
Test Title: Registration for creating account	
Description: Test website create account page	
Precondition (If any): All information should be typed correctly	

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Enter all information 3. Click submit	First Name: Last Name: Username: NID Number: Phone Number: Password: Confirm Password:	User should Typed their correctly into the application	As expected,	Pass
Post Condition: User is validated with database and successfully created a account. The account details are logged in the database.				

Project Name: Organization Software			Test Designed by: Romij	
Test Case ID: FR_3			Test Designed date:13.06.2022	
Test Priority (Low, Medium, High): Medium			Test Executed by: Romij	
Module Name: Purpose			Test Execution date:15.06.2022	
Test Title: Option for choosing purpose				
Description: Test website for create account page				
Precondition (If any):				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Click the Option Where you want to go	Purpose: Exhibition Fair Conference	Button should be Worked Properly	As expected,	Pass
Post Condition: User is success to chose their option purpose and All button worked properly.				

Project Name: Organization Software	Test Designed by: Pranto
Test Case ID: FR_4	Test Designed date:25.06.2022
Test Priority (Low, Medium, High): Medium	Test Executed by: Pranto
Module Name: Exhibition	Test Execution date:27.06.2022
Test Title: A Organization webpage for Exhibition	
Description: Test all function of a page of Exhibition	
Precondition (If any):	

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Check the Buttons and all function of this page Should be checked	Instruments Entering/Outing Ticket Price Contact	All function should be worked properly	As expected,	Pass
Post Condition: User use this webpage and success to use all functions.				

Project Name: Organization Software			Test Designed by: Shamira	
Test Case ID: FR_5			Test Designed date:.17.07.2022	
Test Priority (Low, Medium, High): Medium			Test Executed by: Pranto	
Module Name: Fair			Test Execution date:19.07.2022	
Test Title: A Organization webpage for Fair				
Description: Test all function of a page of Fair				
Precondition (If any):				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Check the Buttons and all function of this page Should be checked	Instruments Entering/Outing Ticket Price Contact Payment:	All function should be worked properly	As expected,	Pass
Post Condition: User use this webpage and success to use all functions.				

Project Name: Organization Software	Test Designed by: Romij
Test Case ID: FR_6	Test Designed date: 9.08.2022
Test Priority (Low, Medium, High): Medium	Test Executed by: Pranto
Module Name: Conference	Test Execution date: 11.08.2022
Test Title: A Organization webpage for Conference	
Description: Test all function of a page of Fair	
Precondition (If any):	

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Check the Buttons and all function of this page Should be checked	Member List Add Member Delete Member	All function should be worked properly	As expected,	Pass

Post Condition: User use this webpage and success to use all functions.

Constructive Cost Model:

Effort = PM = Coefficient<EffortFactor>*(SLOC/1000)^P

= 2.4*(1500/1000)^1.05

= 41.22

Development time = DM = 2.50* (41.22) ^0.38

DM=10.27

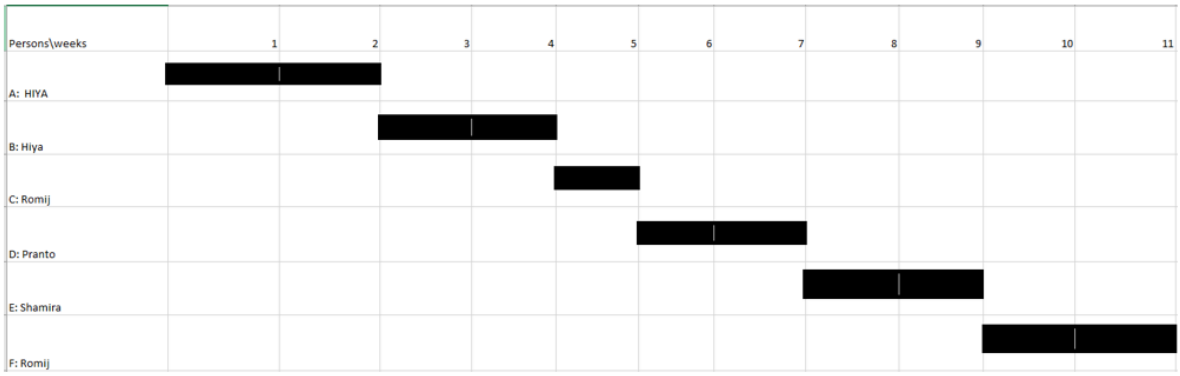
Required number of people

ST = PM/DM

= 41.22/10.27

= 4.01

Timeline Charts:



Activity Key: A : Login (Design and Code implementation)

B : Create Account (Design and Code implementation)

C : Purpose page (Design and Code implementation)

D : Exhibition Page (Design and Code implementation)

E : Fair page (Design and Code implementation)

F : Conference Page(Design and Code implementation)