1.INTRODUCTION

1.1PROBLEM STATEMENT

In the existing household management system, each task is carried out manually without he use of any software applications that could simplify the entire process for the common person. Unfortunately, this approach has a drawback as end users have to personally interact with employees to inquire about the status of their work and no documentation was store . This can be a tedious and tiring task for many individuals.

- It is fewer users friendly.
- Involves a lot of human efforts.
- Time consuming
- No documentations

1.2 PROPOSED SYSTEM

Nowadays, the field of household management is facing a shortage of skilled labour, making it challenging for homeowners to find reliable assistance, especially for specialized tasks. For instance, many homeowners struggle to find skilled workers for various household maintenance and repair jobs. To address this issue, a software application can be developed to automate and streamline the process of connecting skilled workers with homeowners in need of their services. This software application, specifically designed for household management, acts as an intermediary between homeowners and skilled workers. It maintains a database of skilled workers, categorizing them based on their expertise. Homeowners can use the application to search for specific services they require and view profiles of skilled workers available in their area.

The software allows homeowners to access information about the workers' experience, and feedbacks from previous clients. Homeowners can also view the nearby employees.

1.3 FEATURES OF THE PROPOSED SYSTEM

1.2.1 It is very users friendly
.

1.2.2 Involves a less of human efforts.

1.2.3 Time consuming is less

1.2.4 Documentation involved

2. FUNCTIONAL REQUIREMENTS

2.1 MODULE SPECIFICATION

• Login Module
• Registration module
• Select employee
• Select user
• give feedback
• Give tenders to users

Login Module: All users will be able to sign up by providing essentials and then sign to avail service. User want to enter username and password.

Registration module: All users are supposed to provide the details like name,age, phone number etc, for registration.

Select employee: The next functional module is to select employees by users

Select user: The next functional module is to select users by employees

Give feedback to admin: The next functional module is to give feedback to the admin by users

Employee can give tenders: The main functional requirement is to prepare tenders by employees and send it to the users

3.NON FUNCTIONAL REQUIREMENTS

- **Secure Transmission**

  The system will ensure that all the sensitive data of the customers are transmitted securely to the database.

- **Maintainability**

  Since it is a web-based application, live maintenance can be performed at ease without hindering the user experience and user data.

- **Security**

  The users will only be able to access only their information and not of any other users.

- **Availability**

  Since this application is a web-based application, it will be available to users 24x7 with the exception during server maintenance or upon site updates.

- **Scalability**

  This application is a scalable application as it could be incorporated with other websites that contains modules that perform public services.

- **Error Avoidance**

  At this stage care is to be taken to ensure that input data remains accurate from the stage at which it is recorded up to the stage in which the data is accepted by the system. This can be achieved only be means of careful control each time the

  data is handled.

- **Error Deduction**

  Even though every effort is made to avoid the occurrence of errors, still a small proportion of errors always likely to occur, these types of errors can be discovered

  by using validations to check the input data.

4. UML DIAGRAMS

4.1 USE CASES

4.1.1 REGISTRATION

Use Case for registration	
Use case id	001
Name Use Case	Registration
Created By	Garbin Scaria
Description	This use case allows users to register the site, with his personal details.
Primary Actor	User
Secondary Actor	None
Preconditions	1. The user has to be logged in to the web application.
Postconditions	1. After login , the user enter the home page. 2. After successful login the user have access the data entry option in website
Main Flow	1. User has enter the site 2. User submit details with respected fields
Alternative Flow	1.Not submit respected details go to first page 2.if enter the details are correct go to home page

4.1.2LOGIN

Use case for Sign In	
Use case id	002
Name Use Case	Log In
Created By	Garbin Scaria
Description	This use case defines the authentication of the user while registering inside the system.
Primary Actor	User
Secondary Actor	None
Preconditions	1. Enters the username and password
Postconditions	1. After successful login, the customer enters the home screen for performing further actions.
Main Flow	1. The customer can enter the system by entering his credentials to authentication purpose.
Alternative Flow	1a. If the customer is not yet registered, then he would be redirected to the sign in page until he registers and afterwards logs in with the correct credentials.

4.1.3Give Tenders

Use case for Give Tenders	
Use case id	003
Name Use Case	Give Tenders
Created By	Garbin Scaria
Description	The use case allow user to prepare tenders to access the relevant function according to users purpose
Primary Actor	User
Secondary Actor	None
Preconditions	1. The user have a valid employee account 2. Enter the data correctly
Postconditions	1. System display the relevant home page.
Main Flow	1. User redirect to the relevant page. 2. User use the view button 3. System verify the report 4. Display the report
Alternative Flow	1.check the missing entry

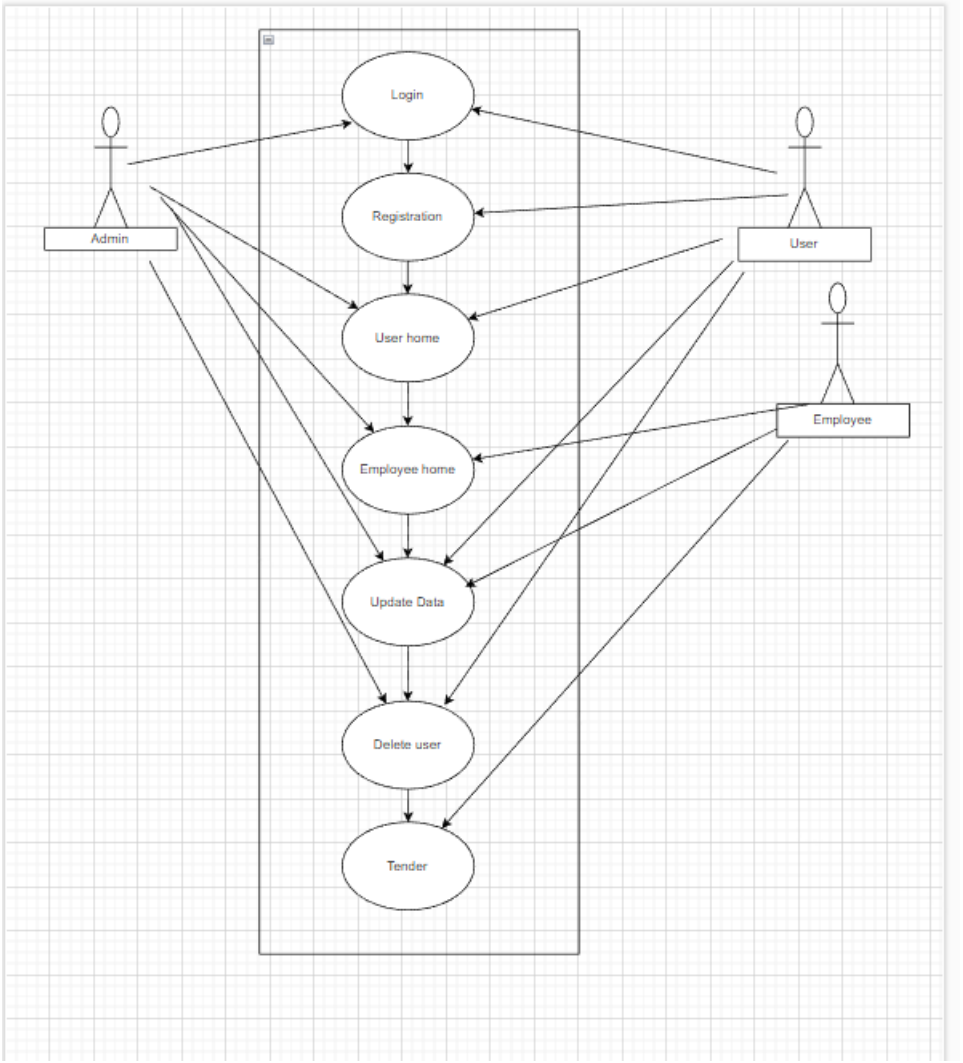
4.1.4 ENTER INCOME AND EXPENSES

Use case to Select Employees	
Use case id	004
Name Use Case	Select Employees
Created By	Garbin Scaria
Description	This use case allow the user to select employee
Primary Actor	User
Secondary Actor	None
Preconditions	1. Login as user
Postconditions	1. Enter the correct data
Main Flow	1. Go to the data user home page
Alternative Flow	None

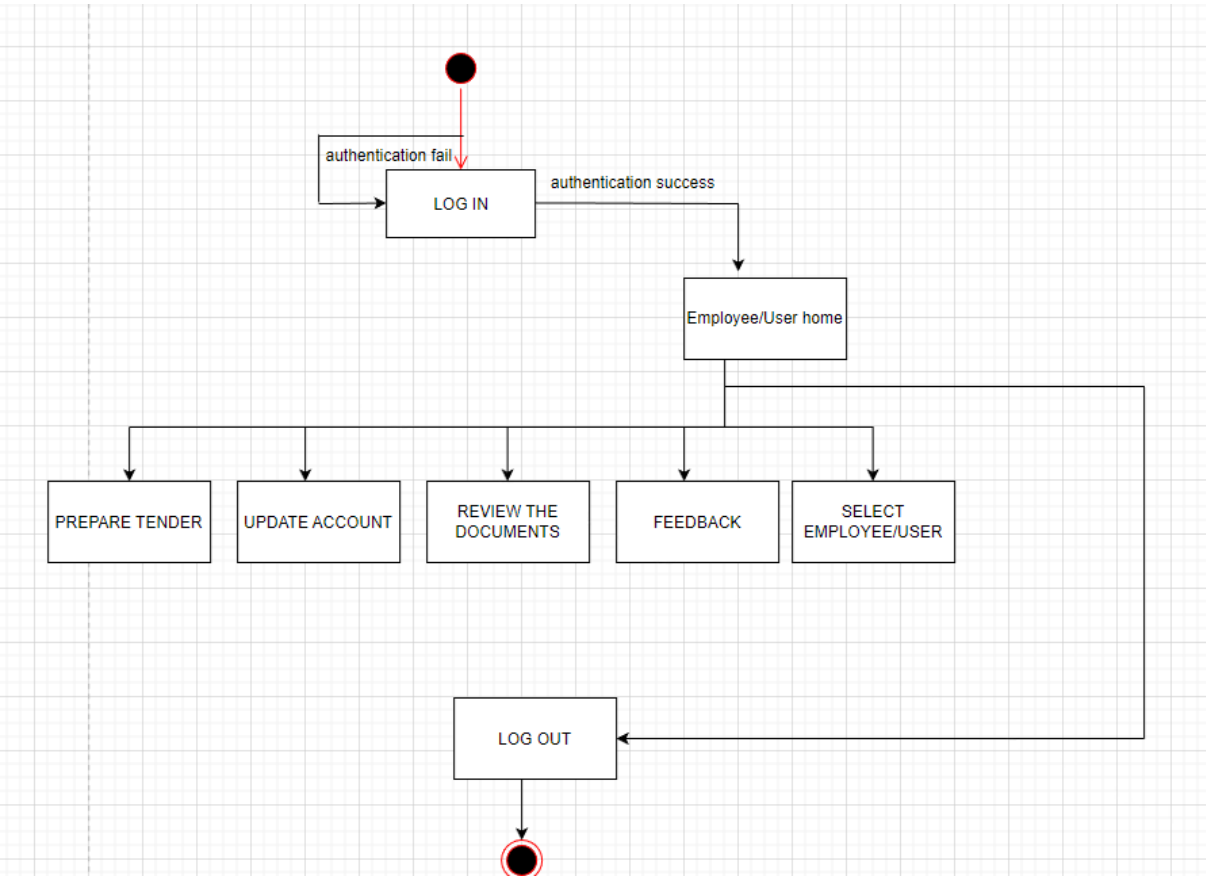
4.1.5. CALCULATION OF PROFIT

Use case for Select User	
Use case id	005
Name Use Case	Select user
Created By	Garbin Scaria
Description	This use case select user
Primary Actor	User
Secondary Actor	None
Preconditions	Login as employee
Postconditions	Make program to calculate it
Main Flow	1.select users from displayed users
Alternative Flow	nothing

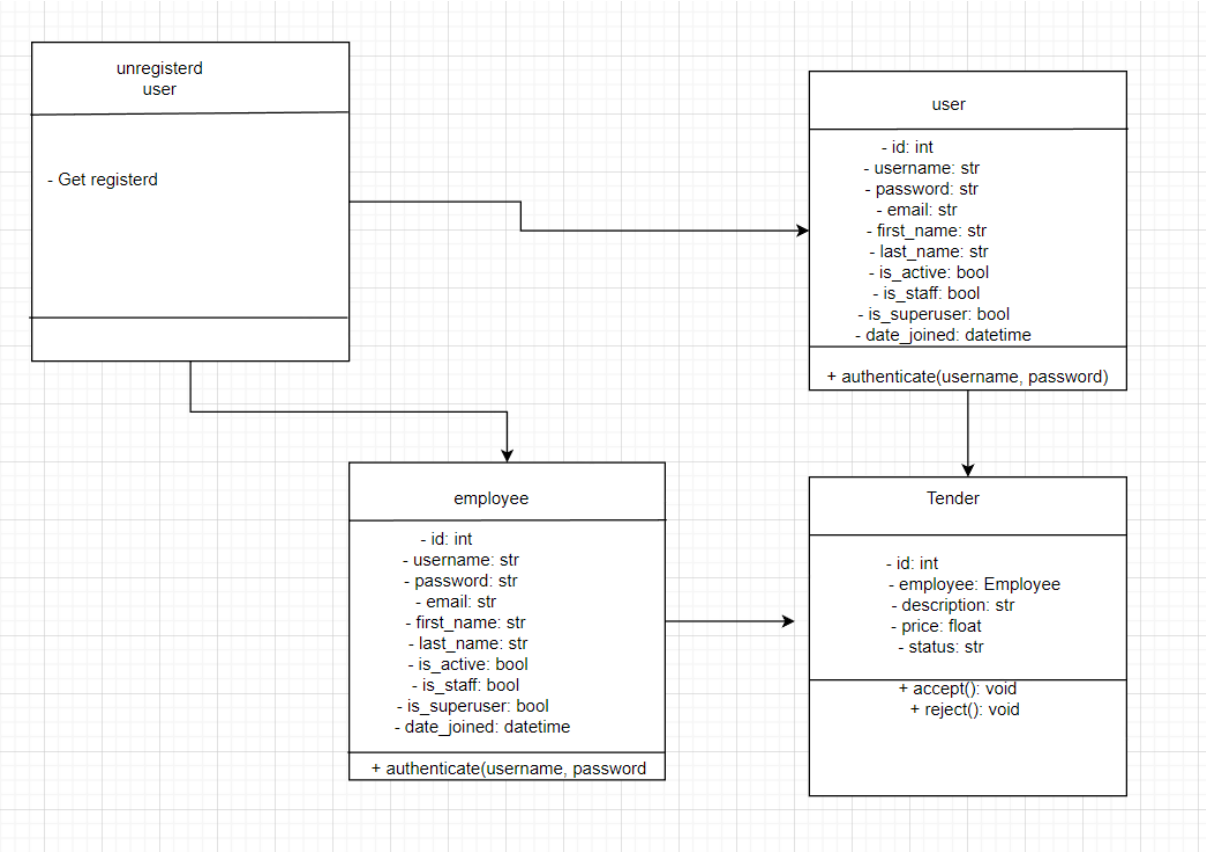
4.2 *USECASE DIAGRAM*



4.3 *ACTIVITY DIAGRAM*



4.5CLASS DIAGRAM



5. DATABASE DESIGN

DATABASE DESIGN

1. ***TABLE NAME: USER_DETAILES(USER REGISTRATION)***

***Primary* key: User id**

Sl.no	Field Name	Data Type	Constraints	Description
1.	Rid	Int	Primary key	Data id
2.	username	varchar	Not null	username
3.	DOB	date	Not null	Date of birth
4.	Phone	int	Not null	Phone
5.	Email	varchar	Not null	varchar
6.	password	varchar	Not null	password
7.	Gender	varchar	Not null	Male/Female
8.	city	varchar	Not null	City
9.	Address	varchar	Not Null	Address

2.TABLE NAME:WORK

Sl.no	Field Name	Data Type	Constraints	Description
1.	Rid	Int	Primary key	Data id
2.	Sheet	Int	Not null	username
3.	PIPE	int	Not null	Date of birth
4.	Phone	int	Not null	Phone
5.	Email	email	Not null	varchar
6.	Cost	int	Not null	int

2.TABLE NAME:FEEDBACK

Sl.no	Field Name	Data Type	Constraints	Description
1.	Rid	Int	Primary key	Data id
2.	Employee	varchar	Not null	username
3.	Feedback	int	Not null	Rivew

6. TEST CASES

7.1 *REGISTRATION*

Sr No.	Test cases	Feature	Description	Steps to Execute	Expected Results
1	Tc-001	Required fields	Check the required fields By not filling any data	1.Do not enter any value in the field 2.click on the register button	It should show a mandatory symbol (*) on mandatory fields.
2	Tc-002	Required fields	Check user should Register by filling all the required fields	1. Enter valid values in the required fields. 2. Click the Register button.	1. Users should be registered successfully. 2. A successful registration message should show. 3. Mail should send to the user
3	Tc-003	Optional Fields	Check all the optional fields when do not fill data	1. Do not enter any detail in optional fields 2. Enter valid data in required fields 3. Click on the Signup button	1. It should not ask to fill the optional fields 2. User should be registered successfully 3. A successful registration message should show 4. Mail should send to the user
4	Tc-004	Email validation	• Check the Email text field that has an Email address without @ symbol • Check the Email text field that has a random string instead of a real email. • Check the Email text field that has a missing dot in the email address.	1. Enter Invalid Emails 2. Click on the Register Button.	It should show the validation message for valid email

5	TC-007	Email validation	Check all the valid emails	1. Enter valid Emails 2. Click on the Register Button.	It should not show any validation message
6	Tc-006	Phone Number validation	Check the phone number when passing alphanumeric data	1. Enter alphanumeric data in phone field 2. Click on Register button	It should show the validation message 8 for Phone Number
7	Tc-007	Phone Number validation	Check the phone number when not pass country code	1. Enter valid phone number without country code 2.Click on Register button	It should show the validation message for country code is required
8	TC-08	Password Validation	Check the password limit when enter value less than min	1. Enter value which is alphanumeric but less than 8. 2.Click on Register button	It should show validation message

7.2 *LOGIN*

Sr No .	Test cases	Feature	Description	Steps to Execute	Expected Results
1	Tc-01	Required fields	Check the required fields By not filling any data	1.Do not enter any value in the field 2.click on the login button	It should show a mandatory symbol (*) on mandatory fields.
2	Tc-02	Required fields	Check user should login by filling all the required fields	1. Enter valid values in the required fields. 2. Click the login button.	1. Users should be login successfully. 2. A successful login message should show.
3	Tc-03	Password Validation	Check the password limit when enter value less than min	1. Enter value which is alphanumeric but less than 8. 2.Click on Login button	It should show validation message
4	Tc-04	Username Validation	It should be a character Which is in the database	1.Enter a name 2.Enter Password	Log into the account

7.3 *WORK*

Sr No .	Test cases	Feature	Description	Steps to Execute	Expected Results
1	Tc- 001	Required fields	Check the required fields By not filling any data	1.Do not enter any value in the field 2.click on the Add button	It should show a mandatory symbol (*) on mandatory fields.
2	Tc-002	Required fields	Check user should login by filling all the required fields	1. Enter valid values in the required fields. 2. Click the add button.	1. Users should be add successfully.
3	Tc-003	Optional Fields	Check all the optional fields when do not fill data	1. Do not enter any detail in optional fields 2. Enter valid data in required fields 3. Click on the add button	1. It should not ask to fill the optional fields
4	Tc-004	Estima ted cost in kg	Check whether the entry is correct or not	1. Click on the button.	Not add to the database
5	Tc-005	Add items	Check whether the entry is correct or not	1. Click on the button.	Not add to the database
07	Tc-007	Wage	Check whether the entry is correct or not	1. Click on the button.	Not add to the database

08	Tc -008	Other expens es	Check whether the entry is correct or not	1. Click on the profit button.	Not add to the database
09	Tc-009	expens es	In a java script the value fetch on this field (wage + other expenses)	1.Click on profit button	A successful Entry is made
10	Tc-010	Profit	In a java script the value fetch on this field (income – expenses)	1.Click on profit button	A successful Entry is made in a message and it get into the database

7.INPUT AND OUTPUT DESIGNS

7.1 *INPUT DESIGN*

The user interface design is very important for any application. The interface design describes how the software communicates with itself, to system that interpreted with it and with humans who use it. The input design is the process of converting the user- oriented inputs into computer-based formats. The data's feed in to the system using simple interactive forms. The forms have been supplied with messages so that user can enter data without facing difficulties. The data is validated wherever it requires in the project. This ensures that only the correct data have been incorporated into the system. The goal of designing input data is to make the automation as easy and free from errors as possible.

For providing a good input design for the application easy data input and selection features are adopted. The input requirements such as user friendliness, consistent format and interactive dialogue for write messages are also considered for the development of the project. The following are the main input forms in the portal:

- Registration Form –user module is responsible for filling this form. user enters his details through this form and it is then stored in database and used further.
- Login Form- Form used for login and it is used by user and
- Profile manager form- Student could edit his profile details through this form.

7.2 OUTPUT DESIGN

A quality output is one, which meets the requirements of the end user and presents the information clearly. In any system the result of the processing is communicated to the user and to the other system through output. In the output design it is determined how the information is to be displayed for immediate need, it is most important and direct source information to the user. Efficient and intelligent output design improves the system relationship with the user and helps in decision making. The objective of the output design is to convey the information of all past activities, current status and to emphasis the important events.

The following are the main output forms in the portal:

- View All Services- This module is responsible to show all the services availed by a user.
- View Services- This module is used to show all the services availed by users to the admin.
- View All Users- This module is used to view all the registered users within this application.

8. FUTURE ENHANCEMENTS

FUTURE ENHANCEMENT

In the future, the "Household Management" project can be further enhanced to provide an even more comprehensive solution. One potential enhancement is the integration of smart home devices, enabling users to control and monitor their home systems directly from the management system. Additionally, no of job are to be added, Managing household works can be improved by sending alerts for low stock and generating shopping lists. Task scheduling and reminders can help users stay organized and ensure timely completion of household tasks. Monitoring energy consumption and integrating with financial management tools can provide valuable insights for energy conservation and financial planning. Moreover, including a home maintenance and repair tracking module, along with a shared family calendar, can further streamline household management and coordination. These enhancements will make the system even more efficient and user-friendly, catering to the evolving needs of households.

CONCLUSION

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In conclusion, the "Household Management" project offers key features aimed at providing an efficient and streamlined experience for users. The system caters to two types of users, allowing for personalized interactions and specific functionalities. By implementing a feature where employees can be selected by users based on their postal code, the project enhances convenience and ensures proximity-based services. Similarly, users can select employees according to their postal code, enabling them to find suitable professionals within their vicinity. Additionally, the system facilitates communication between employees and users by allowing employees to give tenders to users, promoting a competitive and transparent environment. These key features enhance user experience, optimize resource allocation, and foster effective collaboration within the household management system.

10. REFERENCES

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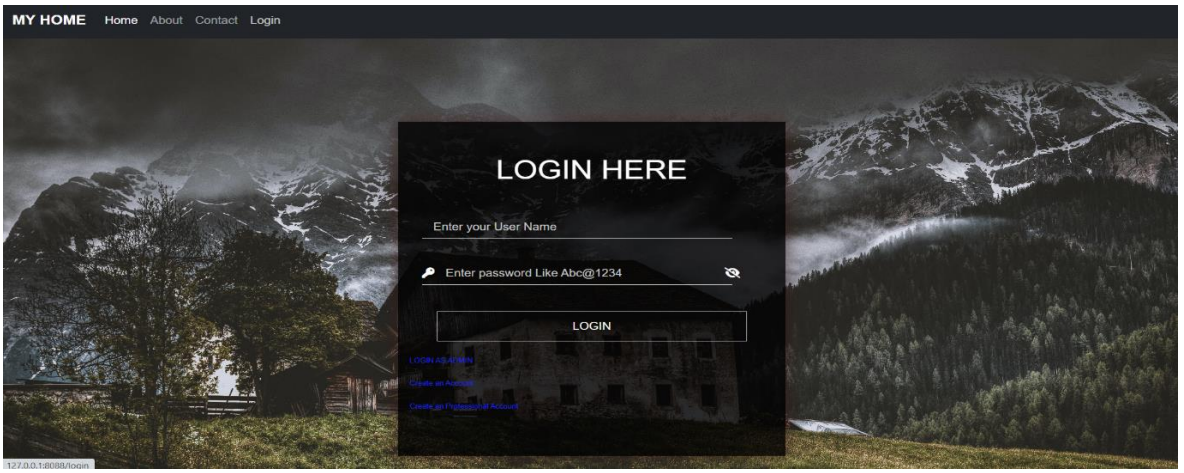
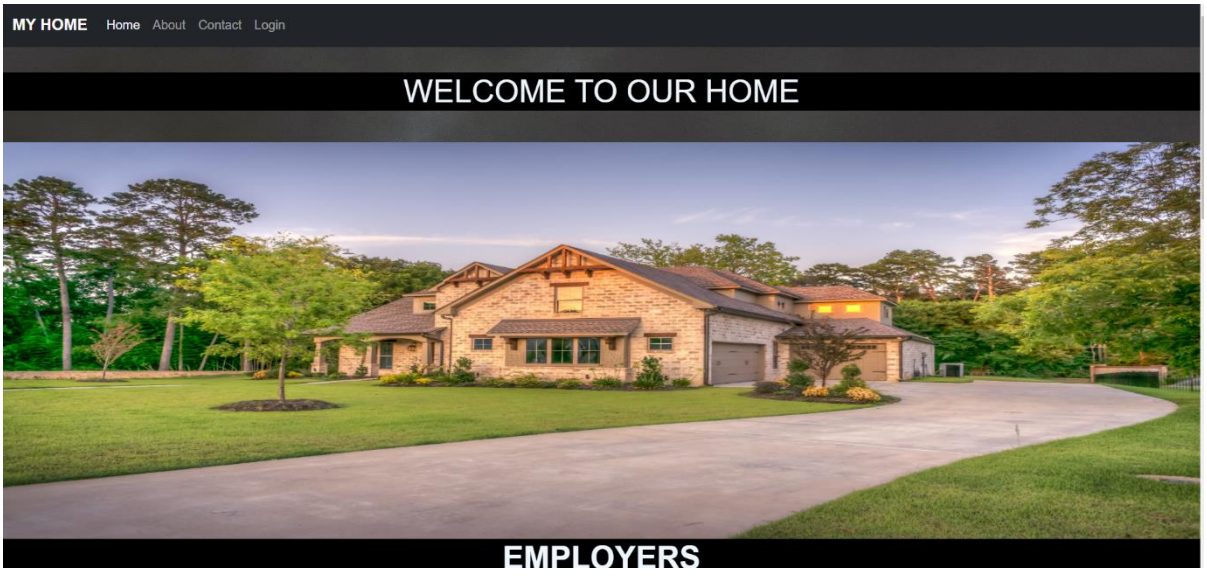
2. A. Stevens, C++ Database Development, MIS Press, New York, 1992, p.34.
3. J. Martin, Computer Database Organization, Prentice-Hall, Englewood Cliffs, NJ, 1977, p. 53.
4. https://www.softwaretestinghelp.com/login-page-test-cases/
5. https://artoftesting.com/login
6. Django documentation

11. ANNEXURE

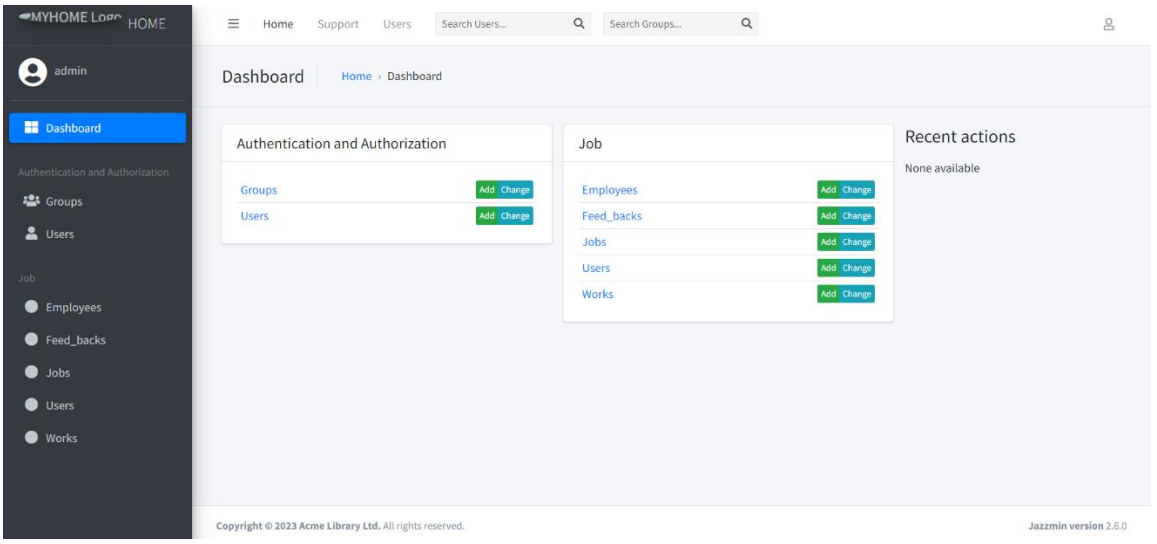
LOGIN PAGE



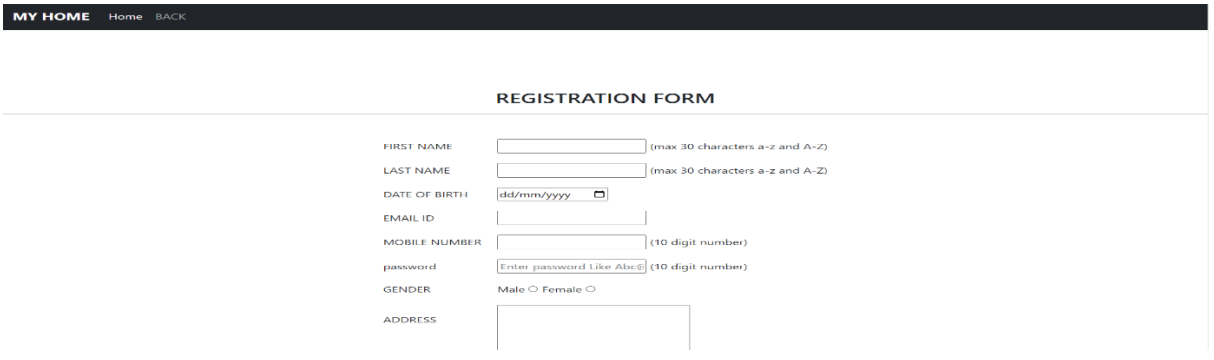
HOME PAGE

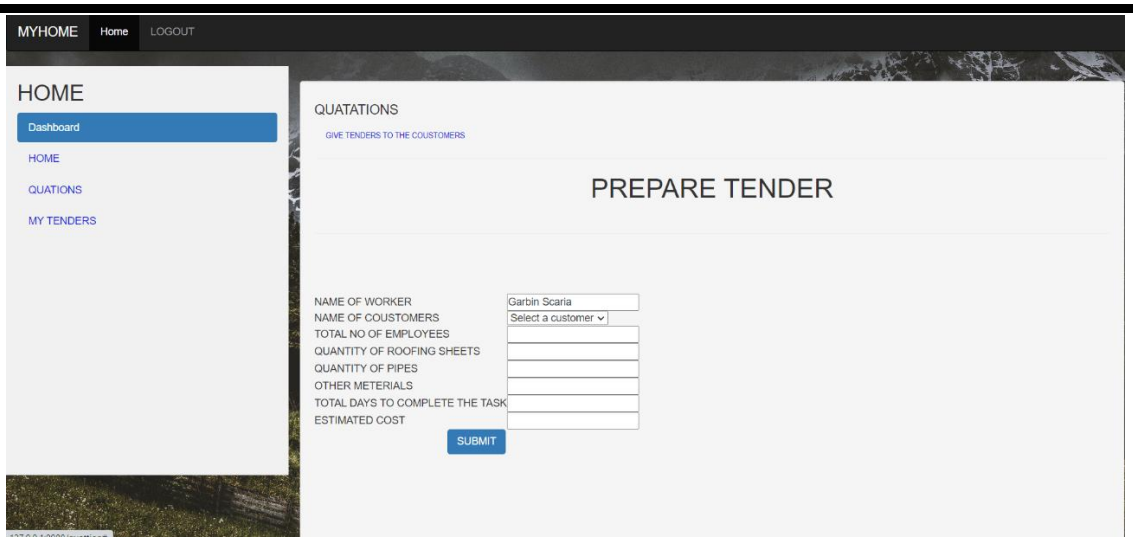


ADMIN INTERFACE



REGISTRATION PAGE





FEEDBACK FORM