Find a Labour

Final Year Project

Session 2017-2021

A project submitted in partial fulfillment of the degree of

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The Superior University, Lahore

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Type (Nature of project)	[✓] **D**evelopment [ ] **R**esearch [ ] **R&D**
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FYP ID	FYP-BCSM-S21-023

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*The candidates confirm that the work submitted is their own and appropriate credit has been given where reference has been made to work of others

Plagiarism Free Certificate

This is to certify that, I Hamza Umar S/D of Muhammad Muhammad Umar, group leader of FYP under registration no Bcsm-f17-101 at Computer science Department, The Superior University, Lahore. I declare that my FYP report is checked by my supervisor.

Date: **21-02-22** Name of Group Leader: Hamza Umar Signature: _____

Name of Supervisor: Mr. Fawad Naseem

Designation: Lecturer

Signature: _____

HoD: DR. Irfan-Ud-Din

Signature: _____

Find a Labour

Project ID: [FYP-BCSM-S21-023]

Project Team

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Project Report

Find a Labour

Change Record

Author(s)	Version	Date	Notes	Supervisor's Signature
	1.0		<Original Draft>	
			<Changes Based on Feedback from Supervisor>	
			<Changes Based on Feedback From Faculty>	
			<Added Project Plan>	
			<Changes Based on Feedback from Supervisor>	

APPROVAL

PROJECT SUPERVISOR

Comments: _____

_____

Name:_____

Date:_____ Signature:_____

PROJECT MANAGER

Comments: _____

_____

Date:_____ Signature:_____

HEAD OF THE DEPARTMENT

Comments: _____

_____

Date:_____ Signature:_____

Dedication

I dedicated this to my respectful professor "Sir Fawad Naseem" who give us so much motivation. I also dedicated this project to my parents.

Acknowledgements

First of all I am very thankful to ALLAH and bundle of thanks for sir Fawad Naseem who helps us in throughout the project.

Executive Summary

People face issues in finding experience Laborer and if they find laborer they have a lot of trust issues and security problems, sometime laborer not done their work on given time. We are making a website where users can easily find experience laborer by checking out their verified profiles .Laborers have opportunity to earn through online market place in the way that people hire registered laborers which have good star ratings and feedback. We are making a website where user can easily find experience labor and they can also check there availability, time slot, and work experiences of laborer on their verified profiles. This system become assist users in building trust for laborers, and also provide guidelines about constrution.And we also provide maid on monthly basis in our website, and we also build trust in our customer and provide ultimate security.

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Chapter 1

Introduction

Chapter 1: Introduction

Find a Laborer is the market place where workers and customer interact with each other. In the labor market, customer compete to hire the best, and the workers compete for the best satisfying job. With a proper labor management, the availability of labor will always sufficient to carry out all construction work and completed on time without any delaying of work. Thus, time and cost loses will be minimized. They are having different labor characteristic include their age, skill and experience of working. And we also provide maid on monthly basis in our website, and we also build trust in our customer and provide ultimate security.

1.1. Background

When people have to hire any laborer manually then there are the some trust and availability issues and when they hire then there is no guarantee of their work experiences in their specific work areas, and there is no guarantee they done their work on time, and the other problem is that people can face difficulties to find a home maid. If anyone find and maid then they have no idea about their background and they face loads of security and privacy issues.

1.2. Motivations and Challenges

We are making a website where user can easily find experience labor and they can also check there availability, time slot, and work experiences of laborers on their verified profiles. This system become assist users in building trust for laborers, and also provide guidelines about constrution.And we also provide maid on monthly basis in our website, and we also build trust in our customer and provide ultimate security.

1.3. Goals and Objectives

These are the following goals and objectives.....

1. Availability:

This website is available to user 24/7. User can easily perform his/her task whenever he wants.

2. Efficiency:

User just need to login in website and then he/she do tasks by few clicks like choose labor can done in less than 2 minutes.

3. Accessibility:

User can access this website while sitting at their home; they just need a internet connection and a laptop or pc.

4. Scope:

We plan to develop a website which helps the labor, stakeholders, and administration, this website will be beneficial for all stakeholders. Website is developed as an online website which show the records of labor in graphical form, stakeholders can easily access the website.

5. Objective:

The main objective is to replace paper work by information system, some objectives are following: -

- Efficient and errorless choose labor
- Maintain records of labor
- Generate reports from records
- Payroll

1.4. Literature Review/Existing Solutions

1. Mauqa online
2. Rozee.pk
3. Fori Mazdori

Mouqa.online

They provide house maids cleaners, cooks, babysitters & other services for your household and office work in Islamabad, Rawalpindi & Lahore. People can hire maid on hour basis. They have to hire different maid for different work as they need a maid for cooking they only can hire maid for one work for hour basis if hour increases and work is not done in that hour the charges also increases.

Rozi.pk

Rozee.pk bought Saudi employment website Mihnati.com for an undisclosed amount. In this website companies posting job ads. Recently they started to enroll labor on their platform. Rozee.pk received a $6.5 million investment from Vostok Nafta and Piton Capital, bringing the company's total venture capital funding to $8.5 million. It was the latest in a series of large venture capital investments in Pakistan over the last year and a

alf. Michael Porter of All World Network's, listed the company as one of Pakistan's fastest growing private companies

1.5. Gap Analysis

When people have to hire any laborer manually then there are the some trust and availability issues and when they hire then there is no guarantee of their work experiences in their specific work areas. This system shows the availability and work experiences of laborers on their verified profiles. This system become assist users in building trust for laborers, and also provide guidelines about construction.

1.6. Proposed Solution

We are making a website where user can easily find experience labor and they can also check there availability, time slot, and work experiences of laborers on their verified profiles. This system become assist users in building trust for laborers, and also provide guidelines about constrution.And we also provide maid on monthly basis in our website, and we also build trust in our customer and provide ultimate security. We overcome the trust issues with ultimate security by checking their criminal background and verified id-card through NDRA.

The following are the advantages of the proposed system:

- Easy to Find Labor Through their profile.
- Easy to manage.
- Can generate required reports easily.
- Easy to manage historical data in a secure manner.
- A centralized database helps in avoiding conflicts.
- We upload their previous experience for customers.

1.7. Project Plan

It was decided to use good Software engineering principals in the development of the system since we are assuming the user had a clear information about customer. and aiming to add new employees and will expand their operations in the near future. So, the following Project Plan was drawn up:

- Laborers have opportunity to earn through online market place in the way that people hire registered laborers which have good star ratings and feedback.
- And we also provide maid on monthly basis in our website, and we also build trust in our customer and provide ultimate security. We overcome the trust issues with ultimate security by checking their criminal background and verified id-card through NDRA.
- In the labor market, customer compete to hire the best, and the workers compete for the best satisfying job. With a proper labor management, the availability of labor will always sufficient to carry out all construction work and completed on time without any delaying of work.
- We are making a website where user can easily find experience labor and they can also check there availability, time slot, and work experiences of laborers on their verified profiles.

- The Architecture & Technologies will be decided as a part of the Analysis of the requirements.
- Once the Design is ready the Implementation & Testing strategy of the system will commence. Each will be independent of the other. The implementation of the system itself will be broken down into sub-systems following the Software Engineering principles for the development of robust software.

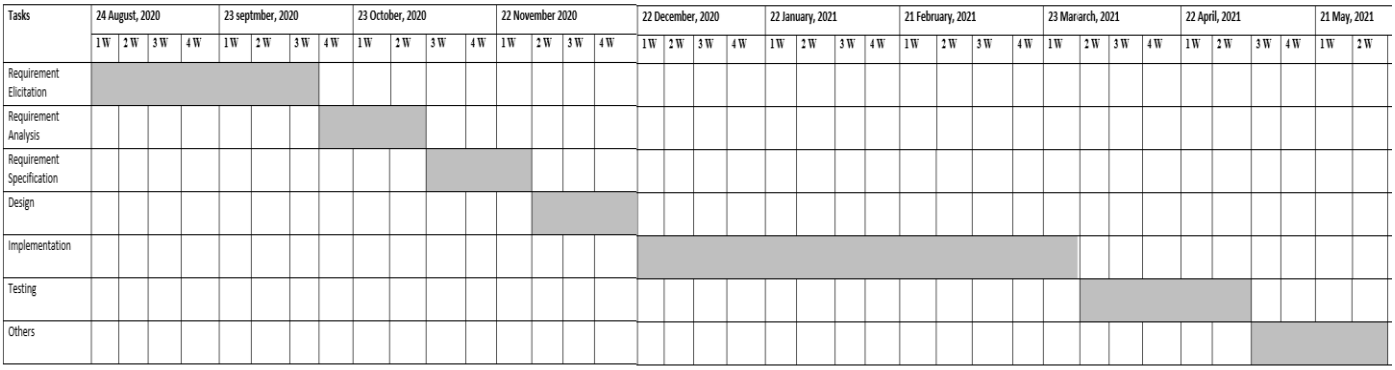
1.7.1. Work Breakdown Structure

2. TASKS	W w1	W w2	W w3	W w4	w1	W w2	W w3	W w4	W w1	W2	W W3	W4	W W1	W2	W3	W W4	hours	Percent
Requirements	w 10	12 12	77 7	89 13													44	22. 25%
Design			66 6	7 13	1 7	87 8						9			7		34	14. 16%
Code and Unit Test					84 5	77 8	47 8	2 12	4 7	6	4	8	2	6			50	13. 12&
Test and integrate					6	67 8	92 2	12 3	15 2	15 8	12 7	9	6	3			90 36	6.6 5%
User Manual Write								12	6	16 4	12 7	8	4				29	21. 20%
Report Writing				2 5	4 6	6	8 7	10				10	12 8	14 12	4		72 56	1.9 2%
Demonstrate																8 7	8 7	20. 20%
Hours	10	12 12	10 13	31	24	30	17	27	15	1 18	18	1 10	8	20 12	2 4	7	33 297	10 100.00%

2.1.1. Roles & Responsibility Matrix

WBS #	WBS Deliverable	Activity #	Activity to Complete the Deliverable	Duration (# of Days)	Responsible Team Member(s) & Role(s)
1	Requirements Gathering	1	Surveys, Questions, Interviews and Research	7	Hamza
2	Requirements Analysis	2		10	Hamza
3	Documentation	3	UML, SRS	20	Hamza
4	Designing	4	Frontend Development and Mobile Application Design	41	Hamza
5	Implementation	5	Back-end Development, REST Apis, Mobile Application Development	59	Hamza
6	Testing	6	Developer Testing, User Testing	30	Hamza
7	Deployment	7	Deployment on live Server	20	Hamza

2.1.2. Gantt Chart



2.2. Report Outline

Task 1:

- First of all we get together information and raw material about our project.

Task 2:

- ❖ We make labor and customer login.
- ❖ After that we work on website.

Task 3:

- Then we add all the features on website.
- After that we check the performance of website.
- Check that how much secure website it is.
- Also check the feedback of customer.

Task 4 : At last labor management is complete.

Chapter 2

Software Requirement Specifications

Chapter 2: Software Requirement Specifications

3.1. Introduction

3.1.1. Purpose

This document represents the general requirement of online labor management system. This website will use for ease of management, laborer and customer.

3.1.2. Document Conventions

In this document bold and italic text is used for main headings, size used for heading is 22 and Calibri font is used for text in whole document, size used for text is 18.

3.1.3. Intended Audience and Reading Suggestions

Intended audience of this document is user, website developer, tester and documentation writers and marketing staff. First of all read the Entity relationship diagram to understand the document easily.

3.1.4. Product Scope

This website is built to replace the existing paper work system, labor can do their registration through internet and manually. The main purpose of online labor management system is to simplify process of costumer. The system will be easy to use and available all the time by internet. The system will be very secure and have a login. This system will have three end users labor, customer, and administration. All the data will be stored on database server so there will be a data backup.

3.1.5. References

1. www.Slideshare.com.
2. www.Google.com.
3. www.Wikipedia.com.
4. www.scribd.com
5. www.studymode.com.
6. www.studytonight.com

7. https://en.Wikipedia.org /wiki/Software. Engineer

8. https://whatis.techtarget.Com/definition/ software-engineering.

3.2. Overall Description

3.2.1. Product Perspective

The online website will store data on web server and compatible with operating system like windows and Linux .User can perform task online because it will be an online labor management system. The information store in database is following: -

Labor registration: -

It contains information about labor first name, last name, address, phone number, city, work experience.

Maid registration: -

It contains information about labor first name, last name, address, phone number, city, work experience.

Customer registration: -

It contains information about labor first name, last name, address, phone number, city, work requirement.

Product Functions

The system will be available full time.

- Information of labor should be displayed on profile.
- Web page should be open in less than three seconds.
- This website allow any type of advertisements.
- User friendly interface
- There should be a menu bar and tool bar.
- Store the records of stakeholders in database.
- Interface should be user friendly and menu driven.
- Email notification
- Generate the reports
- Administration will have ability to add or drop labor accounts.

- Labor can enroll themselves.
- There should be a data backup after every transaction.

3.2.2. User Classes and Characteristics

There will be many stakeholders who will use this online university management system but there are three main stake holders: -

1. Labor
2. Customer
3. Administration

Characteristics of Administration are following: -

O Administration can update work experience of labor.

O Administration can change the password of labor accounts.

O Administration can add or remove any account.

Characteristics of customer are following: -

O customer can login.

O customer can select labor about their requirement and contact with him.

O customer can complain.

O cutover also gives the rating of labor.

Characteristics of labor are following: -

O labor can login.

O labor set a profile about their work experience.

3.2.3. Operating Environment

This university management system have following operating environment: -

O Operating system for this website would be Linux and windows.

O Structure query language for database.

O Client / server system.

O Platform for programming: - laravel

3.2.4. Design and Implementation Constraints

Customer will be pay for any increment in Labor management system.

- Compatible with only Mozilla and chrome browsers .
- Without login user can't do any task .
- There should be a centralized database management system .
- The website would have only 5 Gb space of server .
- This labor management system will be developed by using java language .
- User interface should be very simple .
- Interface must be in end language .
- Only panel web service server should be used .

3.2.5. User Documentation

This labor management system will give a help feature to stake holder on his account. This help feature will guide the user or stakeholder that how to use this system. After reading this help feature user can easily operate this software. It will explain the system and provide better usability to user.

3.2.6. Assumptions and Dependencies

We assume stakeholder have computer and internet.

- **o** Password only changed by administration .
- o We depend on laravel language to develop the software .
- o We depend on centralized database management system .

3.3. External Interface Requirements

This labor management system will support one or more than one interfaces like communication interface , hardware interface , user interface , software interface .

3.3.1. User Interfaces

Login page:-

User must enter his id and password on login page to access portal. Password and id should be accurate otherwise user can't access portal.

Home page:-

Customer will see the laborer profile and advertisement.

3.3.2. Hardware Interfaces

User Side: -

This labor management system based on web application, stake holders can use any browser to operate this system. They just need an internet connection and laptop or smart phone or tablet to use the software.

Server side: -

Data of this web system will be saved on panel server.

3.3.3. Software Interfaces

Data base server: - my SQL

Operating system: - Linux and windows.

Web server: - panel.

Development: - laravel using mvc pattern.

3.3.4. Communications Interfaces

Find a labor only use Mozilla Firefox and Google chrome browser for communication, labor management system will follow http rules for communication, but it required internet protocol

6 .1 Version.

3.3.5. System Feature 1

Sign up

Id	Sf-1
Requirement	Email, password, First name, last name, city.
Title	Sign up for online access.
Dependency	Dependent on tablet or mobile or computer.
Rational	System provide the security to the user When user register into the system.
Risk & restriction	carefully enter the valid data for sign up
Priority	Efficiency and safety.

3.3.6. System Feature 2

Login

Id	**1**
Requirement	First name and password.
Title	Login
Rational	The system provide the security to the user personal When user login into the system.
Dependency	Dependent on tablet or mobile or computer
Risk & restriction	Carefully enter the valid data for login.

Priority	Efficiency and safety.

Functional Requirements

Login: -

User have to enter id and password for login.

If user enter incorrect or invalid password then display an error message.

Registration: -

Customer and labor register himself and also admin register the labor.

Choose labor:-

Customer choose labor about their work requirement.

Complain:-

And customer also complain about the labor.

Feedback:-

Customers also give the feedback and rating about the labor.

3.4. Other Nonfunctional Requirements

3.4.1. Performance Requirements

Data should be stored on panel server.

- customer can access labor profile in few seconds .
- customers & labor can login in to their portal in less than 3 seconds
- Management can easily add or remove accounts without any time wasting .
- System should have less latency .
- Response time is most important for client .

3.4.2. Safety Requirements

There will be a database backup if system get failure or destroy at any point or due to any virus.

- Data of website should be stored on disk everyday on daily basis even on holidays .
- Records should be restore auto if there is any failure in system
- The system should be safe all the time .
- The labor management system should use http rules for make system more secure .
- Only authorized users can access to accounts .

- All accounts should be secured through passwords .
- one labor can't access each other's profile .
- labor cannot access to admin accounts .

3.4.3. Security Requirements

- user can only access to their own accounts .
- Each and every stake holders have their own logins .
- no one can access their own accounts without correct password .
- If user input is invalid or too long then it will be rejected .
- Just management can access other accounts but students could not allow to check other accounts .
- Computers should have static IP address for access accounts .
- Just management delete the records of others not others .
- make sure that accounts only access by authorized clients .
- There will be a secure database for find a laborer .
- The labor management software should add a role-based privilege to user which allows right to use to accounts in conditions of the part of the stake holder .
- right to use permissions will be according to labor management strategy .
- variations to safety permissions will be logged through information provided by online labor management system , also save the time of changes .
- find a labor should be access through database .
- Server should be maintained physically on another computer .
- Record of entire transactions should be maintain .
- IP address of local computers should be register on database and important thing is that all pcs have static IP address because system should be secure and not in the range of any hacker .
- Only allow valid inputs not invalid inputs .
- If there is any invalid SQL input it will be rejected , it will only accepted if it is correct .
- Input length of any user should be in limit and software does not allow any input if length is larger than the allowed limit. This reduce chances of attack.

- Online management system should not allow to save copy of data in database which is already present in database .
- so make sure that data should not be copied .

3.4.4. Software Quality Attributes

Software Quality Attributes: -

Database should be maintain enough that each and every stake holder can access records easily. Quality attributes affect the performance of software. System should fulfil the quality attributes. There is a list of software quality attributes are following: -

- **Reusability : -**

Components can reuse for another applications. If product's owner need another software related to this system then the system should be reuse.

- **Availability : -**

System should be available all the time. Make sure that system should be available.

- Manageability : -

Manage the performance and info.

- **Reliability : -**

It is the probability that a system will not fail to perform its operations. Make sure that system should be reliable.

- **Scalability : -**

Ability of a system to handle the load. If many users using the system then system can handle the load of users.

- **Maintainability : -**

Changes according to user specification. Developer can modify university management system according to the needs of sure. So make a system which can be main table after deployment.

- **Security : -**

Protect the assets of system and prevent from hacker or any unauthorized users. So make sure that system should be secure and information of company should be confidential.

- **Supportability : -**

Provide helpful info to user. There should be a help feature in web site portal which help user to perform his task.

- **Testability : -**

Test the system and its components that how reliable it is. So make a system which can test by users.

- **Usability : -**

User can easily use the software and its interface. Make sure that user will easily use the software without any difficulty.

- **Performance : -**

Latency of a system. How much time a system require to perform a task .Make sure that performance of university management system should be good.

- **Conceptual : -**

Defines the consistency and coherence of design .Ensure that online labor management system should be conceptual.

3.4.5. Business Rules

Business rules tells about that how a company works or operate its operations. The purpose of business goals are to make sure that company is meeting its main goals. So company should make business rules and follow them to get main goals and objectives of business.

3.5. Other Requirements

Labor management system ERD: -

This ERD represents the stakeholders of labor management system and their relations.

Chapter 3

Use Case Analysis

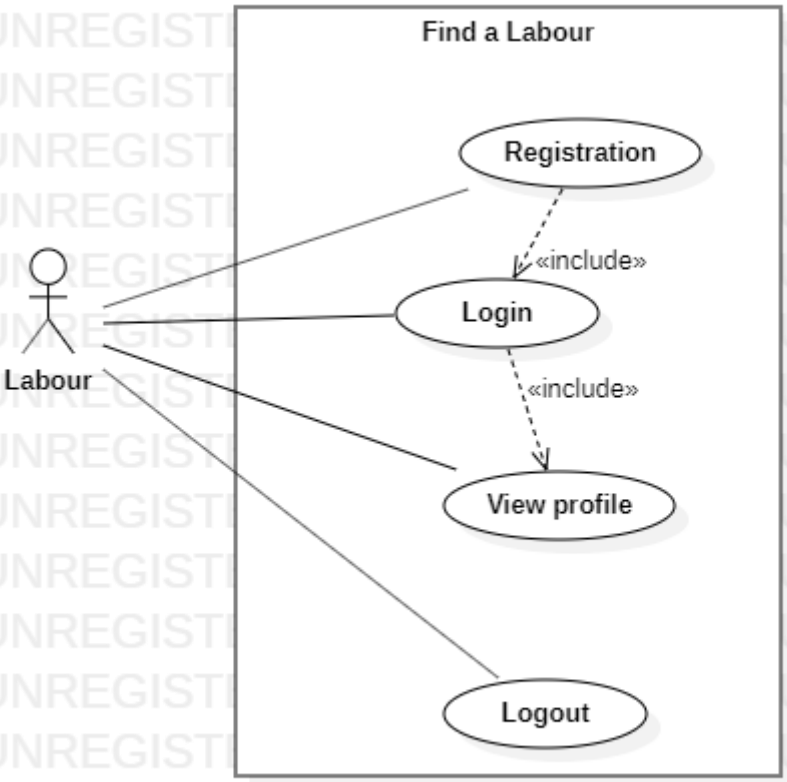
Chapter 3: System Analysis

This framework change the manual system to web based management system.cutomer can perform activities after login into web. Administration maintains records on database, labor can enroll himself through internet, and administration can add or drop any labor. Labor and customers have different web interface.

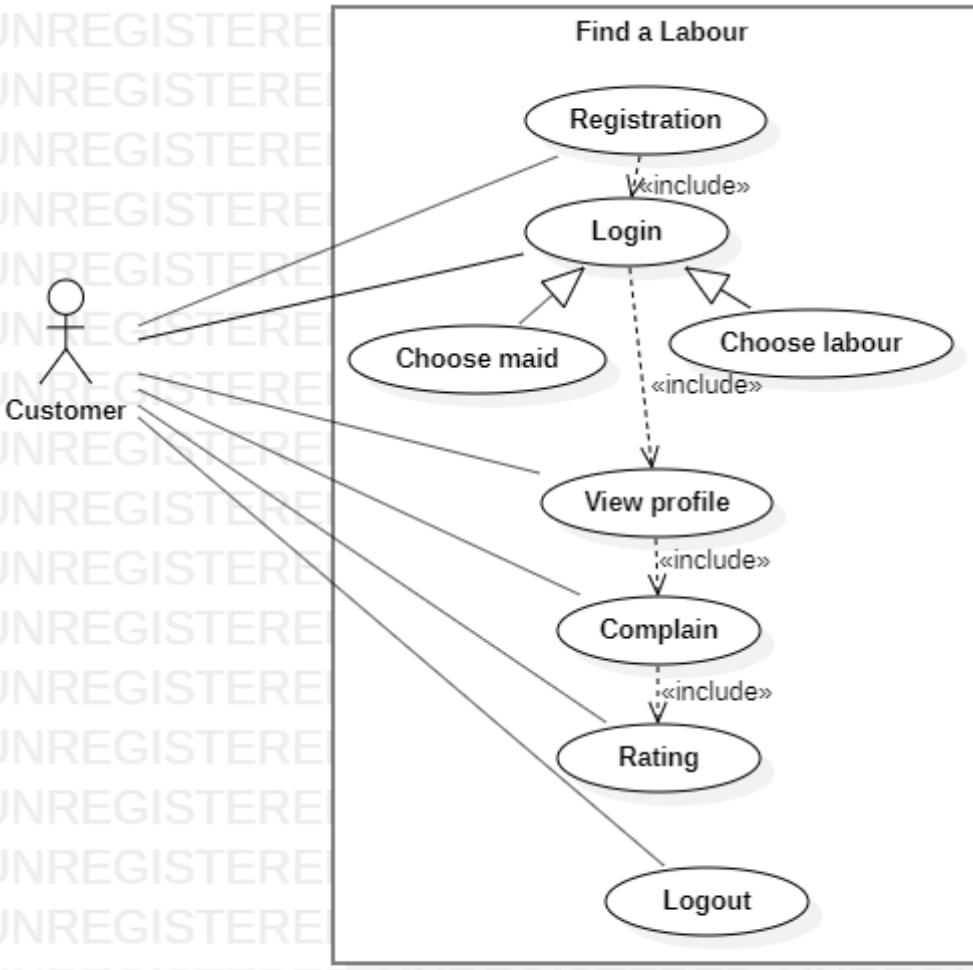
3.1. Use Case Model

3.2. Fully Dressed Use Cases

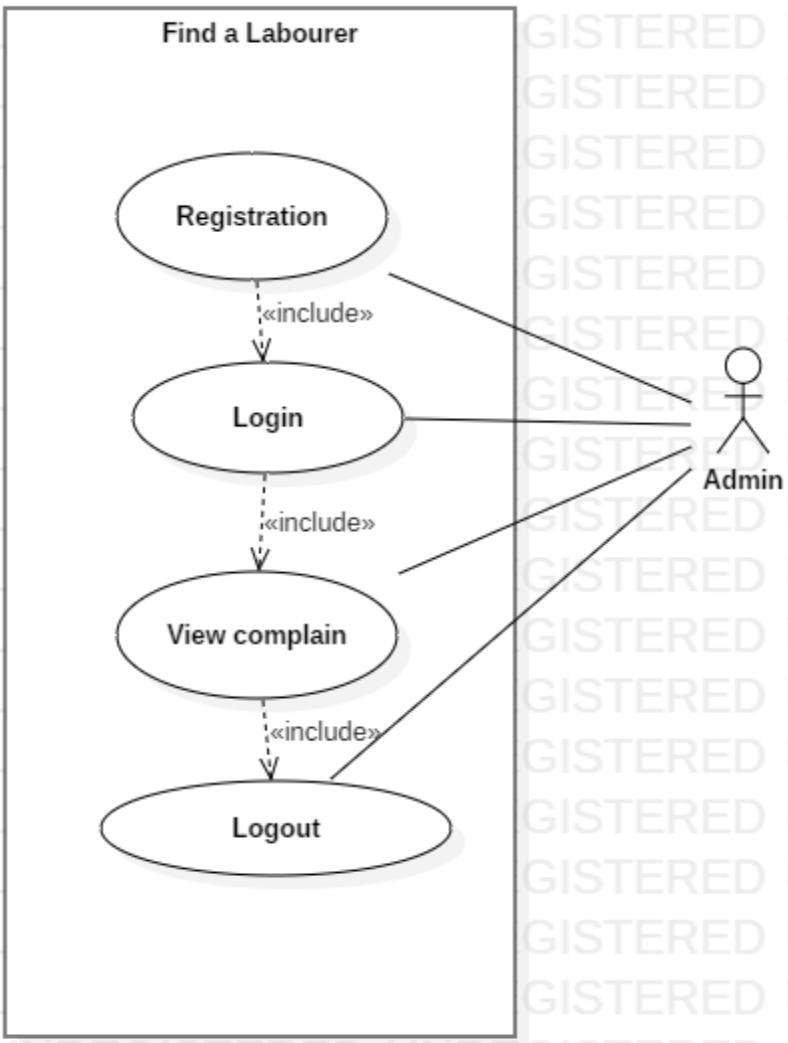
Labor:



Customer:



Admin:



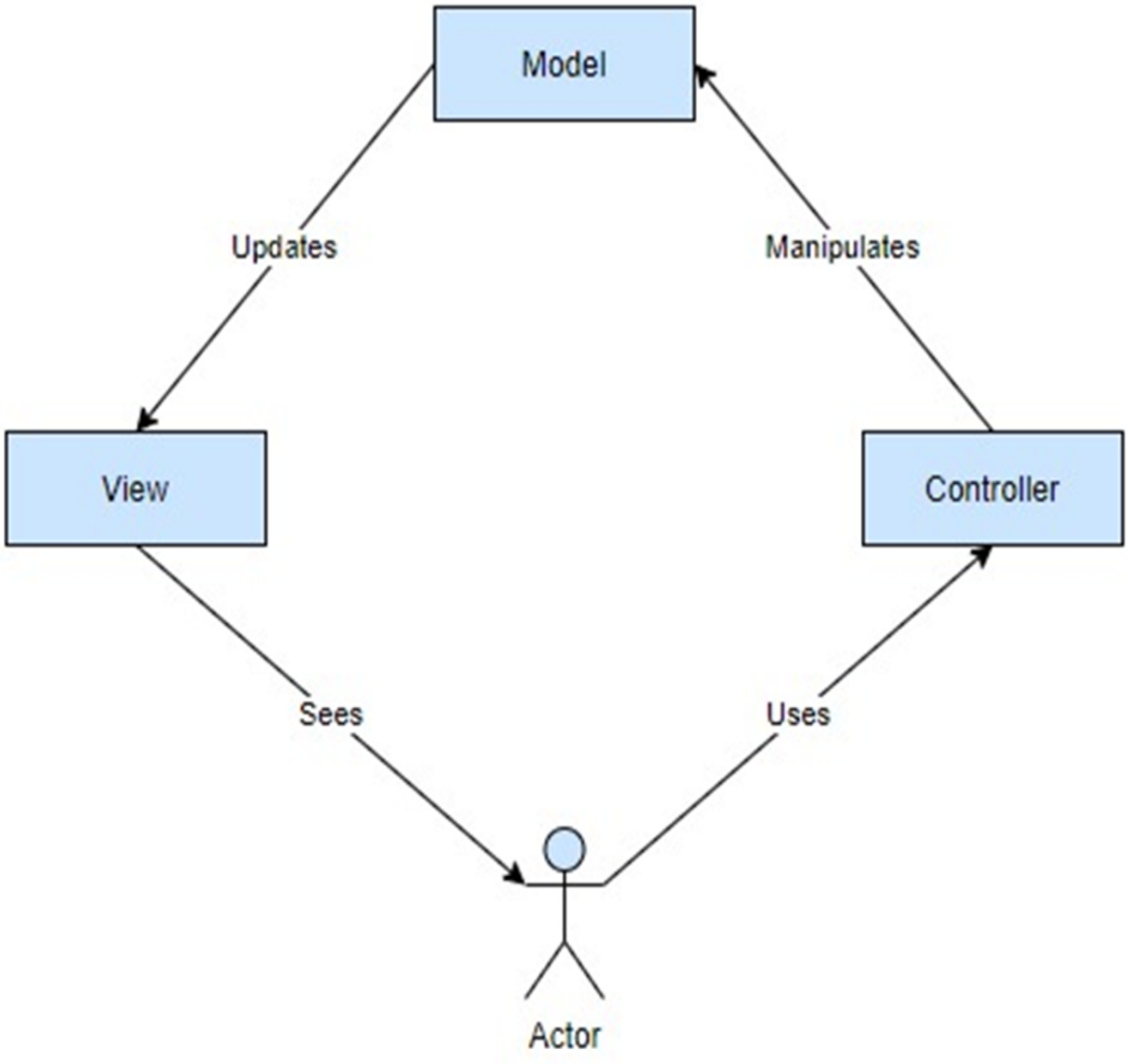
Chapter 4

System Design

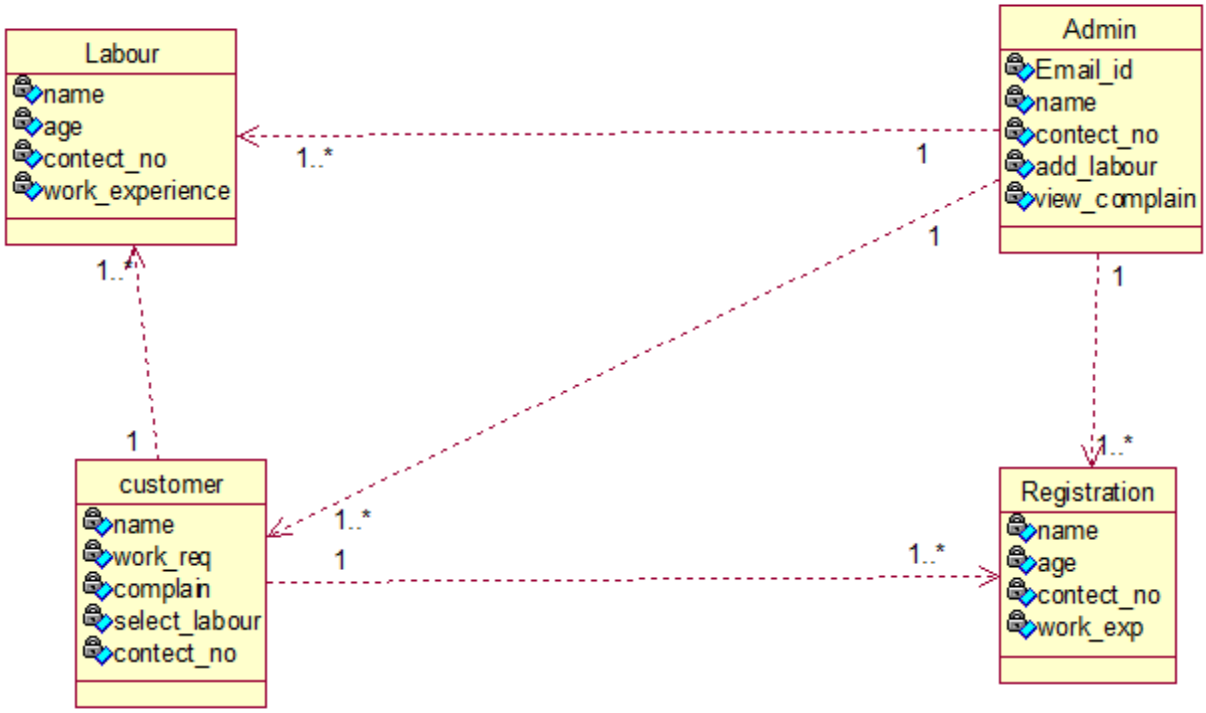
Chapter 4: System Design

This Labor management system is a web based application, application is connected to server. Web communicates with server through HTTP rules. Server is connected to database where all the records are stored.

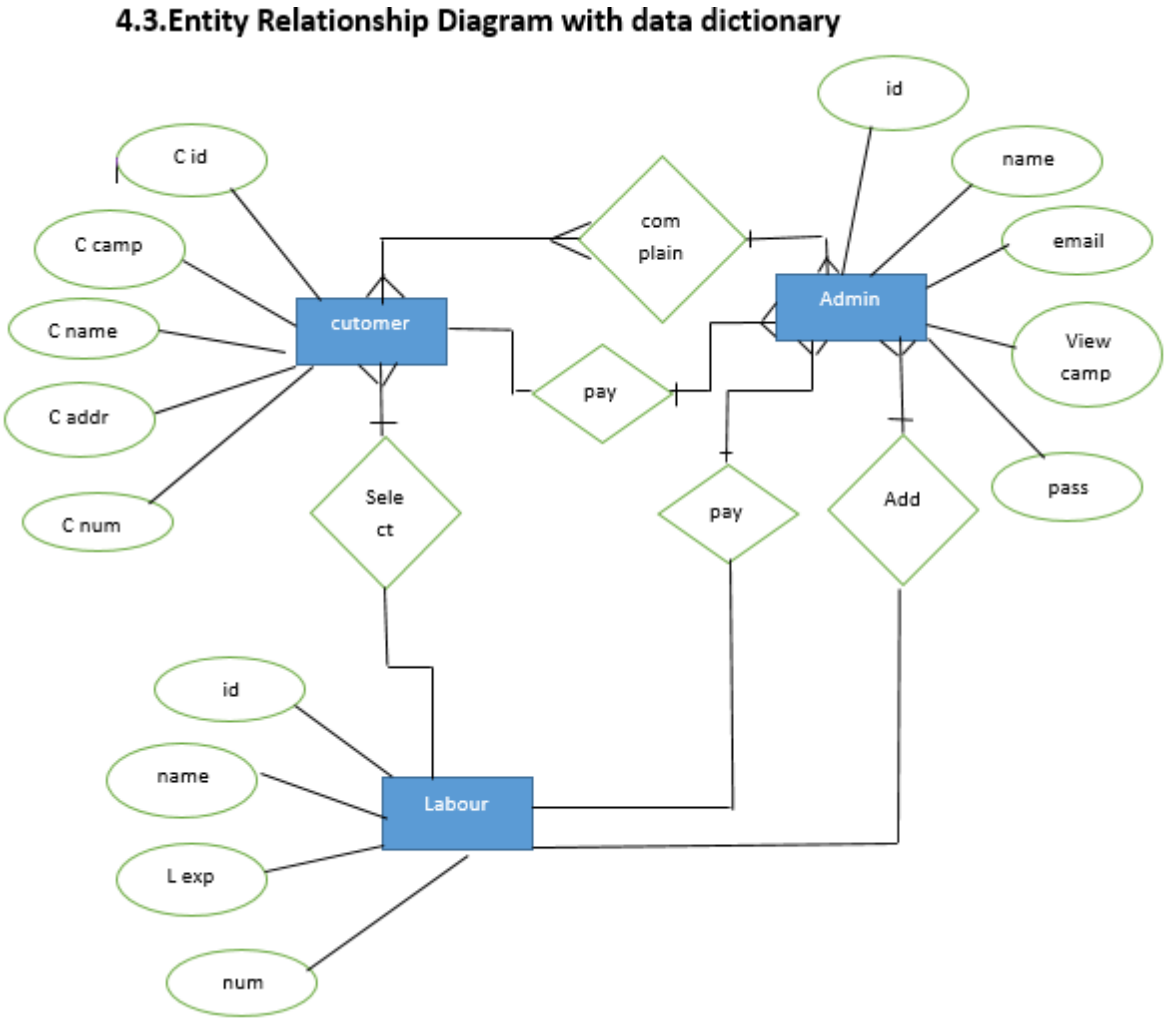
4.1. Architecture Diagram


Model
Updates
Manipulates
View
Controller
Sees
Uses
Actor

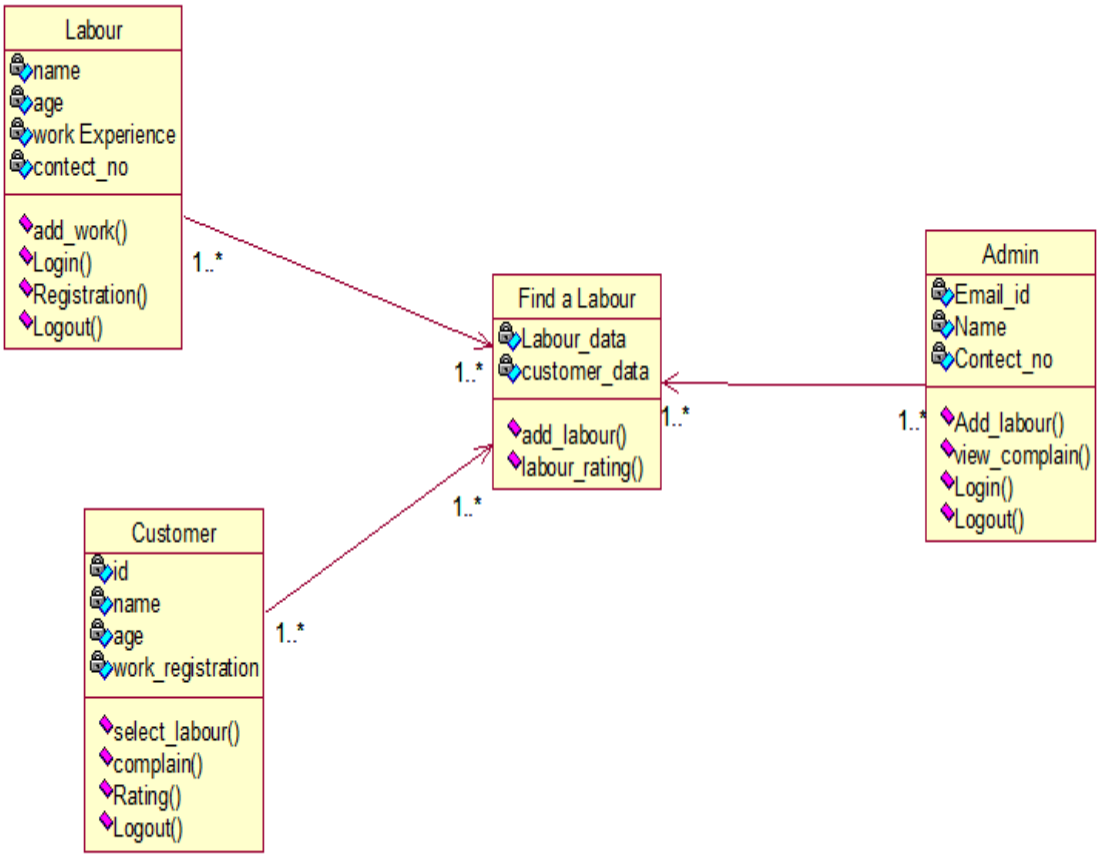
4.2. Domain Model



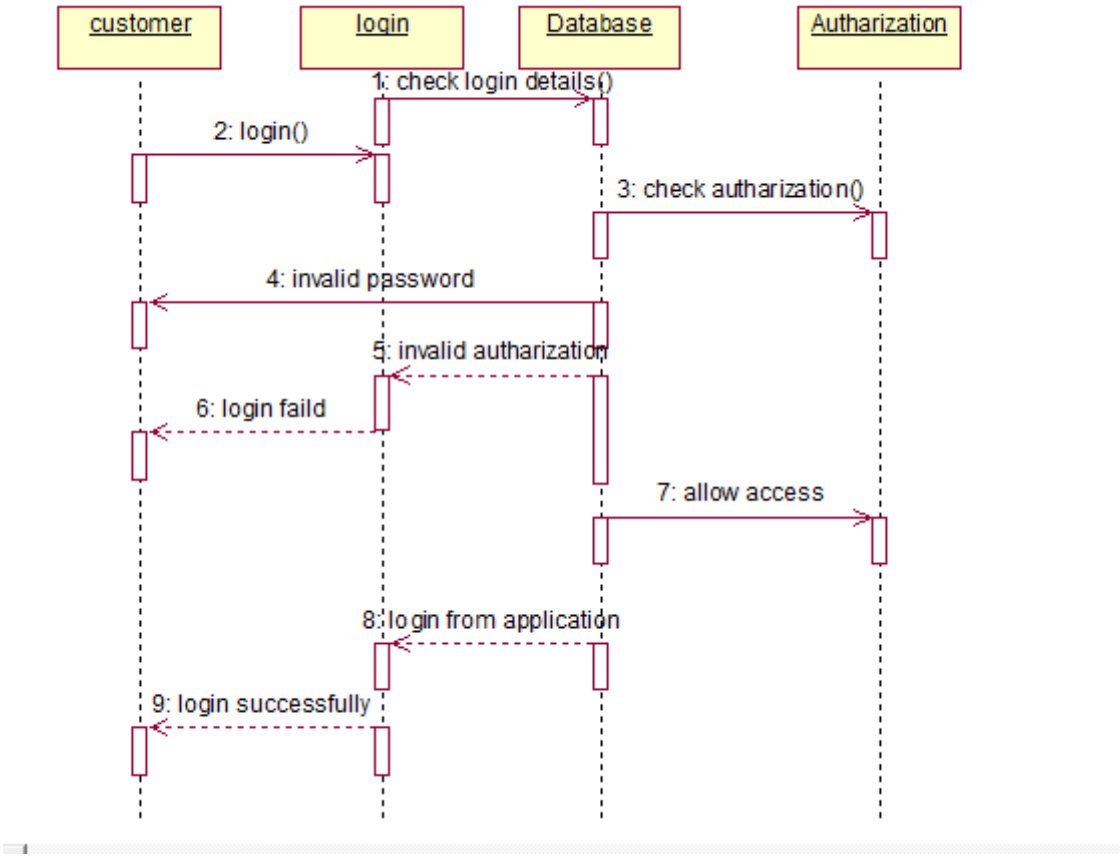
4.3. Entity Relationship Diagram with data dictionary

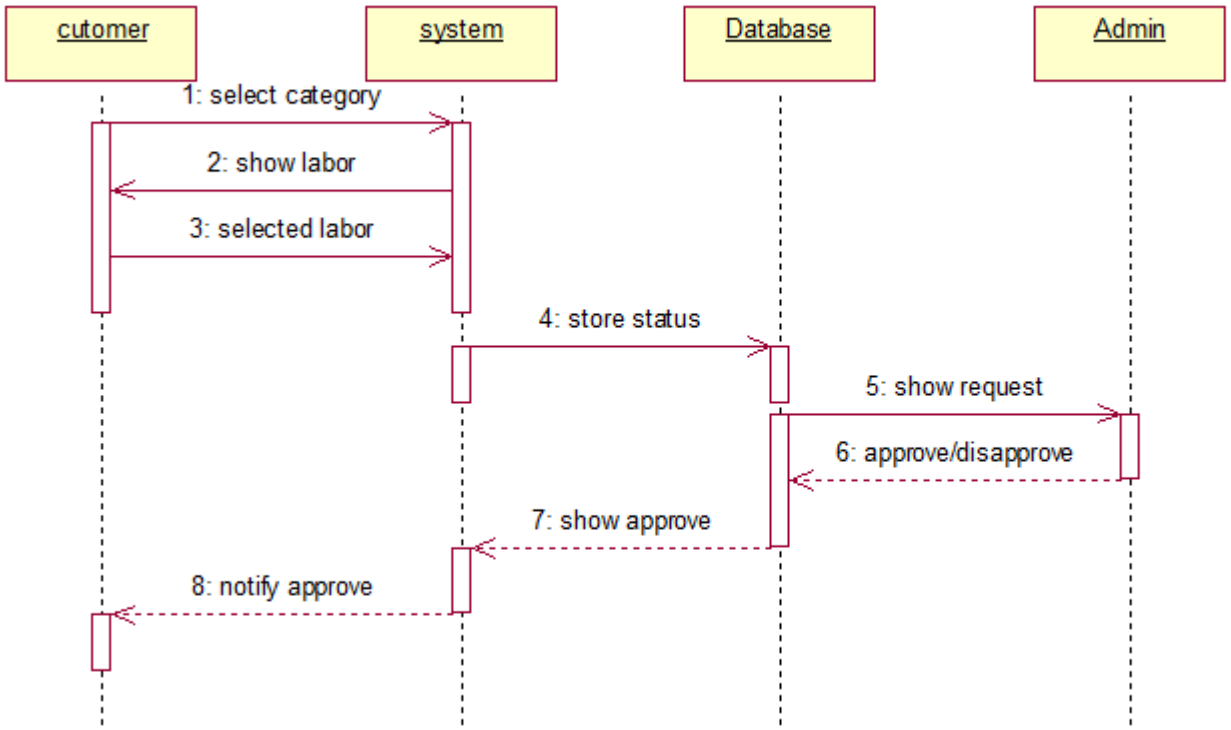


4.4. Class Diagram



4.5. Sequence / Collaboration Diagram



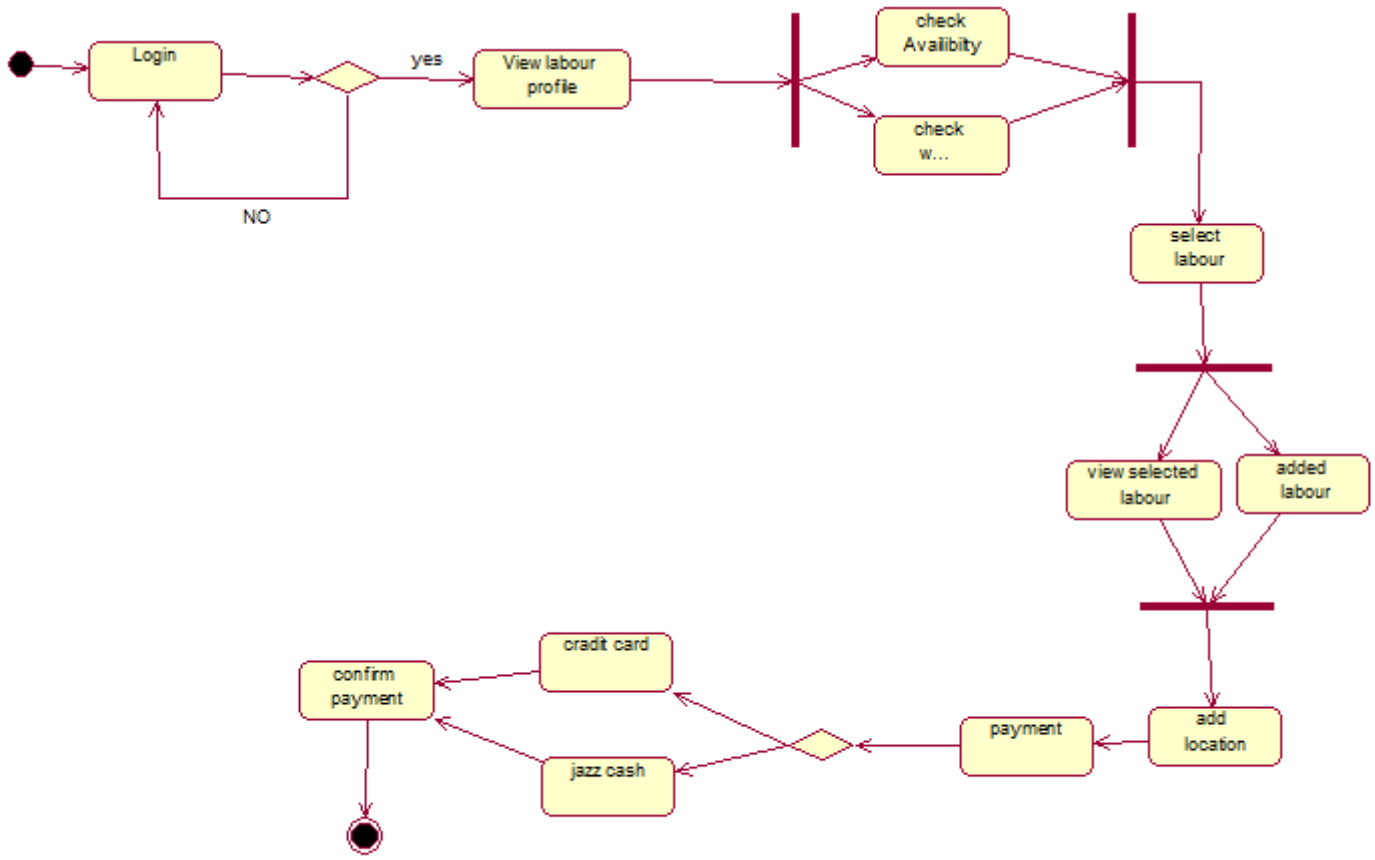


4.6. Operation contracts

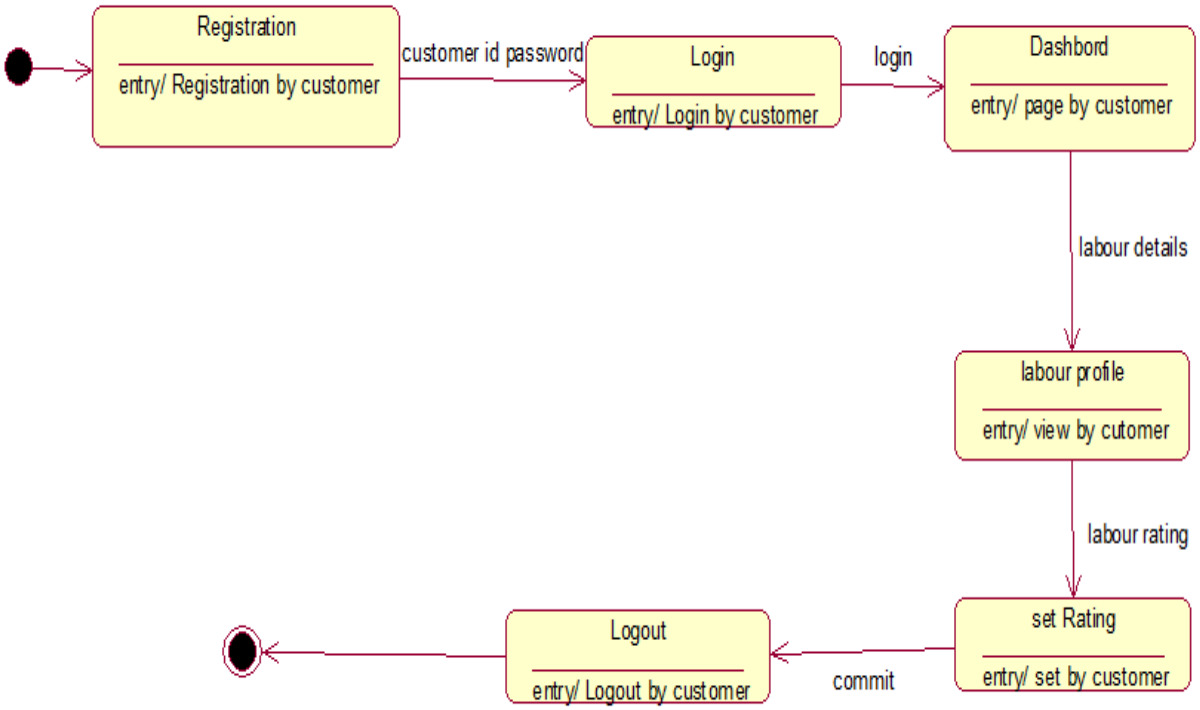
Project-based agreements can vary depending on the parameters of the work and how much of it has already been planned. Common types of agreements include:

Fixed fee contract: When the company and contractor agree on a fee for the entire project.
Cost-plus contract: When the contract includes payments for labor and materials, as well as a percentage for overheads.
Incentive-based contract: When payments are tied to the project achieving specified goals.

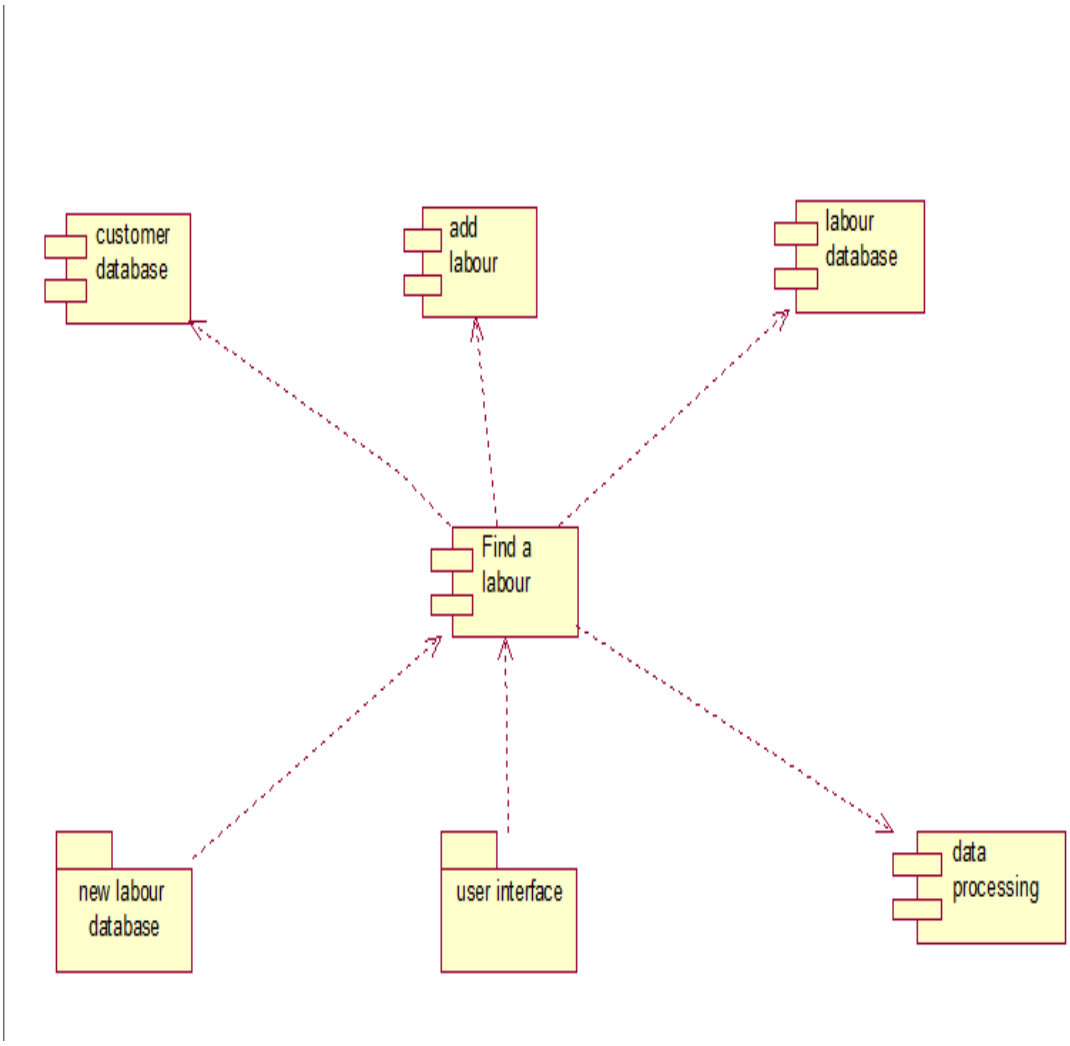
4.7. Activity Diagram



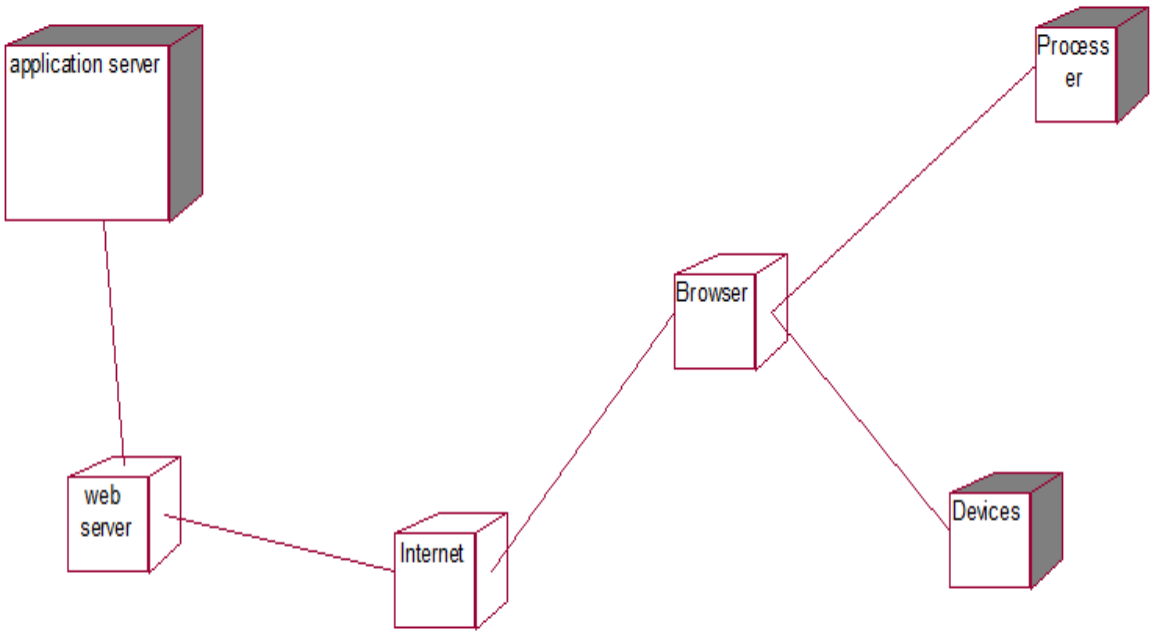
4.8. State Transition Diagram



4.9. Component Diagram

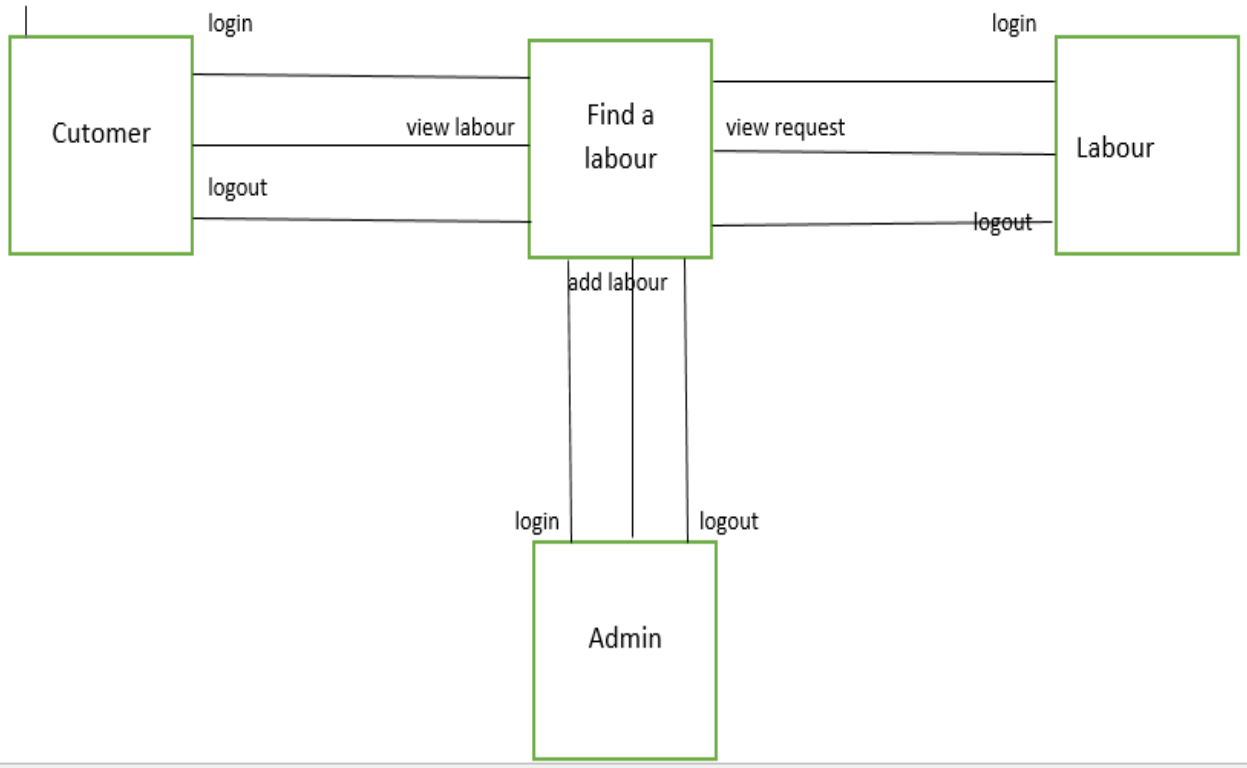


4.10. Deployment Diagram

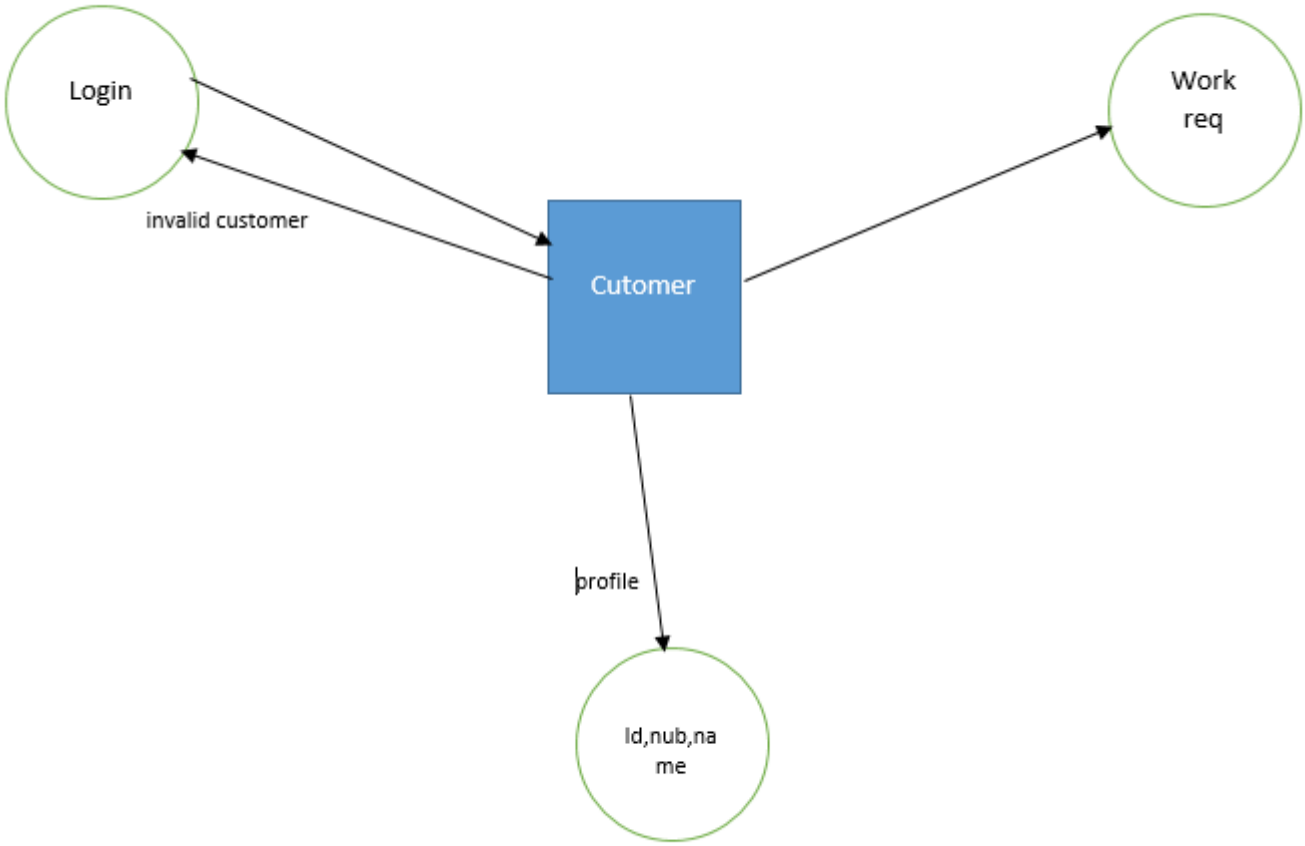


4.11. Data Flow diagram [*only if structured approach is used - Level 0 and 1*]

Level 0



Level 1


Login
invalid customer
Cutomer
Work
req
profile
Id,nub,na
me

Chapter 5

Implementation

Chapter 5: Implementation

The main goal of this project is to make a website which helps labor to maintain all the records and helps people to perform their tasks online, this documentation describes the advances of labor management system.

5.1. Important Flow Control/Pseudo codes

There are three types of flow of control

Sequential flow
Selection or Conditional flow
Iterative flow

Selection or Conditional Flow

Selection flow are of three types

Single Alternative
Double Alternative
Multiple Alternative

Iterative Flow

Iterative flow are of three types

For loop
While loop
Do-while loop

5.2. Components, Libraries, Web Services and stubs

Web services: -

- 24 hour access to user
- User can do enrollment through web
- Efficient
- Less error in data entry

- Consistency

Properly structured website: -

Website have many feature like if person want to view labor than he/she can easily view it, website is user friendly and has a simple structure.

5.3. Deployment Environment

Domain is required for Find a labor website, user access application through domain. User can download app from Google store and app store and then they simply use find a labor.

5.4. Tools and Techniques

- VS CodeEditor.
- PHP.
- Laravel.
- Bootstrap.
- HTML/CSS.
- XAMPPwebserver.
- MySQLDatabase.

5.5. Best Practices / Coding Standards

Uses comments in every function

No Syntax error

No logical error

No run time error

5.6. Version Control

Deals with the development of a generalized model for version control systems application as a support in a range of project-based learning methods. The model is given as UML sequence diagram and described in detail.

Chapter 6

Testing and Evaluation

Chapter 6 Chapter 6: Testing and Evaluation

A good test is one that has high probability of finding the yet undiscovered error. Testing should systematically uncover different classes of errors in a minimum amount of time with a minimum amount of efforts.

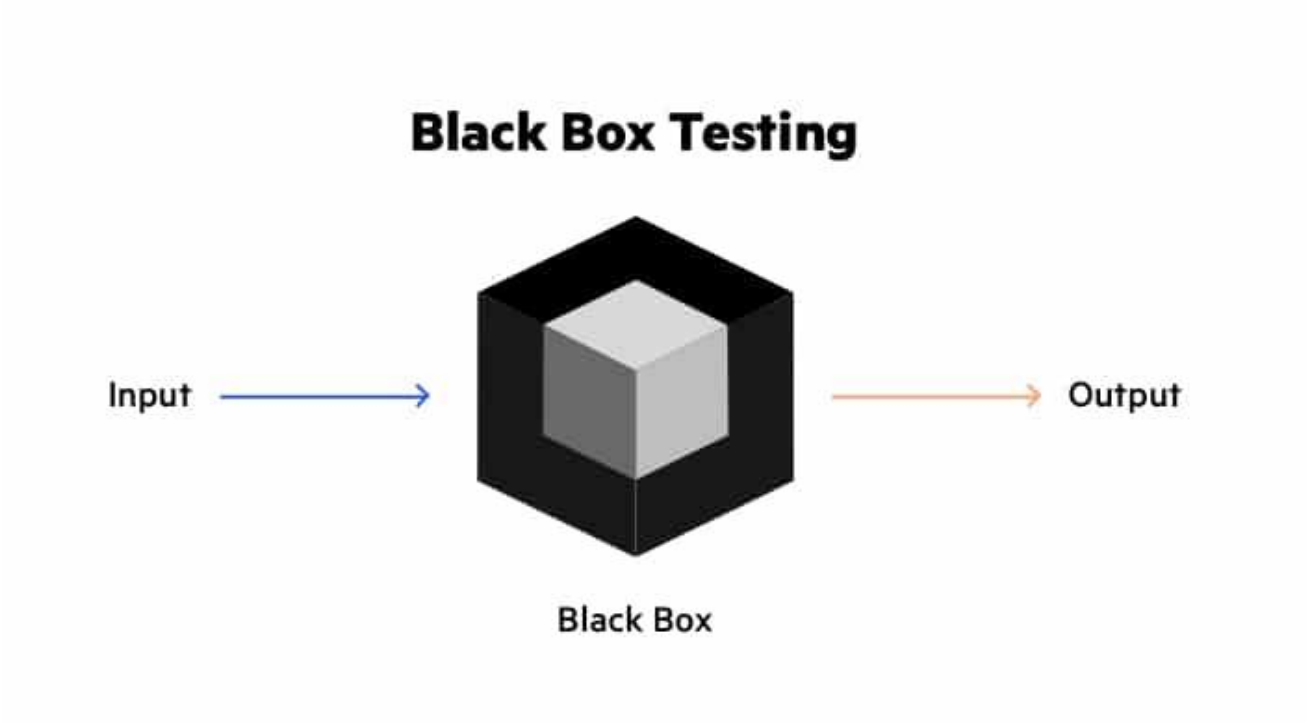
Two classes of inputs are provided to test the process

- A software configuration that includes a software requirement specification, a design specification and source code.
- A software configuration that includes a test plan and procedure, any testing tool and test cases and their expected results. Testing is divided into several distinct operations:

6.1. Use Case Testing:

Use Case Testing is a functional black box testing technique that helps testers to identify test Scenarios that exercise the whole system on each transaction basis from start to finish.

6.1.1: Black Box Test Cases:



Black box testing also known as Behavioral Testing, is a software testing method in which the Internal structure/ design/ implementation of the item being tested is not known to the tester. These tests can be functional or non-functional, though usually functional.
This method is named so because the software program, in the eyes of the tester, is like a black Box; inside which one cannot see. This method attempts to find errors in the following Categories:

- Incorrect or missing functions
- Interface errors
- Errors in data structures or external database access
- Behavior or performance errors
- Initialization and termination errors

6.2. Equivalence partitioning

Equivalence class partitioning (EP) is a very widely used method to decrease the number of Possible test cases that are required to test a system. Let see the example of Equivalence Partitions for login Authentication.

Variables	**Valid Classes**	**Invalid Classes**
Username	1. Only username “admin”. 2. Case in-sensitive. 3. Compulsory field.	1. Alphabets, digits and symbols Other than “admin”. 2. Empty Field.
Password	1. Length should be greater than 5 Characters. 2. May contain symbols, alphabets [a-z A-Z] and digits [0-9].	1. Length less than 5 characters. 2. Empty field.

For order sending

Attributes	Valid partition	Invalid partition
Name	Characters between 1 to 50	below 1 or above 50 invalids
E-mail	Must write in "@gmail.com"	numbers invalid
Password	text between 1 to 50	below 1 or above 50 invalids
Phone number	Must write 11 numbers	below 11 or above 11 invalids

6.3. Boundary value analysis

For confirming packages

Attributes	Invalid partition	Valid partition	Invalid partition
Name	Below 1 char invalid	Between 1 to 50 char	Above 50 char
Password	Below 6 char invalids	Between 6 to 50 char	Above 50 char
E-mail	No @gmail.com	Must in @gmail.com	No @gmail.com
Phone number	Below 11 char	Must write 11 char	Above 11 char

For adding labor

Attributes	Invalid partition	Valid partition	Invalid partition
Name	Below 1 char invalid	Between 1 to 50 char	Above 50 char
Password	Below 6 char invalids	Between 6 to 50 char	Above 50 char
E-mail	No @gmail.com	Must in @gmail.com	No @gmail.com
Phone number	Below 11 char	Must write 11 char	Above 11 char

For sending massage

Attributes	Invalid partition	Valid partition	Invalid partition
Message	Below 1 char	Must in 1 <=500	Above 500 char

For admin sign-in

Attributes	Invalid partition	Valid partition	Invalid partition
E-mail	no @gmail.com	Must in @gmail.com	no @gmail.com
Password	Below 6 char	Between 6 to 50 char	Above 50 char

6.4. Unit testing:

Test Case	Step Details	Test Data	Expected Result	Actual Result	Pass/Fail
Sign In admin	• Add labor name • Add labor rate • Add labor description	Username: admin1@admin.com Password: admin123	admin will be loggedin successfullily	admin loggedin	Pass

Add labor	• Add labor name • Add labor rate • Add labor experience • Add description	Message= Labor add successfully	Labor added to database	Labor added	Pass
Add packages	• Select package name and category	Package is created	Package is created	Package is created	Pass
Select labor by customer	• Write name • Add address • Add phone number • Add working hour	Message is sent to backend	Labor is selected	Labor is selected	Pass

6.5. Integration testing:

Integration testing is a system technique for constructing the program structure while at the same time conducting tests to uncover errors associated with interfacing. The objective is to take unit tested modules and build a program structure that has been dictated by design. Bottom-up integration is the traditional strategy used to integrate the components of a software system into functioning whole. Bottom-up integration consists of unit test followed by testing of the entire system. A sub-system consists of several modules that communicated with other defined interface.

The system was done the integration testing. All the modules were tested for their compatibility with other modules .They test was almost successful. All the modules coexisted very well, with almost no bugs. All the modules were encapsulated very well so as to not hamper the execution of other modules.

6.6. Data flow testing:

Modules no:	**Module's description**	**Expected result**	**Actual result**	**Status**
01	Admin Sign in	Validate credential from server	Data validate	Pass
02	Add packages	Store user Information in DB	Data stored	Pass
03	Costumer login	Validate data from server	Data validate	Pass
04	Send massage	Message float over server between sender and receiver	Message Stored	Pass
05	Check order	Data store on server and fetched on runtime	Data Stored and fetched	Pass
06	Confirm order	Validate credential from server	Data validate	Pass
07	Delete package	Package is deleted	Data changed	Pass
08	Edit package	Package will be updated	Data updated	Pass

6.7Performance testing:

- Maximum Response time is less 5 sec
- Average response time 2 sec
- Peak number of requests 10000

Constraints	Response Time
website Startup	Less than 2 sec
Data fetching	Less than 2 sec (Sometimes depend on internet Speed)
website state update	Less than 1 sec
Transition in website	0.5 sec
Redirecting between inner pages of app	Less than 1 sec

6.6. Stress Testing:

Stress testing a Non-Functional testing technique that is performed as part of performance Testing. During stress testing, the system is monitored after subjecting the system to overload to ensure that the system can sustain the stress. The recovery of the system from such phase (after stress) is very critical as it is highly likely to happen in production environment.

Chapter 7

Summary, Conclusion and Future Enhancements

Chapter 7: Summary, Conclusion & Future Enhancements

7.1. Project Summary

People face issues in finding experience Laborer and if they find laborer they have a lot of trust issues and security problems, sometime laborer not done their work on given time. We are making a website where users can easily find experience laborer by checking out their verified profiles .Laborers have opportunity to earn through online market place in the way that people hire registered laborers which have good star ratings and feedback. We are making a website where user can easily find experience labor and they can also check there availability, time slot, and work experiences of laborers on their verified profiles. This system become assist users in building trust for laborers, and also provide guidelines about constrution.And we also provide maid on monthly basis in our website, and we also build trust in our customer and provide ultimate security.

7.2. Achievements and Improvements

In this website we achieve our main goals that are security and user-friendly interface. We provide modern UI design with attractive color that attract user attention and make him/her feels good. And with different coding techniques we try to overcome all the privacy drawbacks that's present in other related website. Although this project need lots of improvements that will accommodate in the next version of this website, primary aim of this version is to focus on main functional requirements of this product.

7.3. Critical Review

This project provides extremely user-friendly and secured platform for chat, moreover we use Ai techniques to detect spam message in order to keep our user safe from any kind of harm and fraud.

7.4. Lessons Learnt

During the Development phase of this project, we learnt a lot:

- We learn different coding standards.
- We learn architectural importance in developing
- We learn different coding patterns
- We learn how to manage time and skills together.

7.5. Future Enhancements/Recommendations

Following functionalities will be recommended in future in this project:

- plumber for users
- Electrician for Users
- Painter for Users

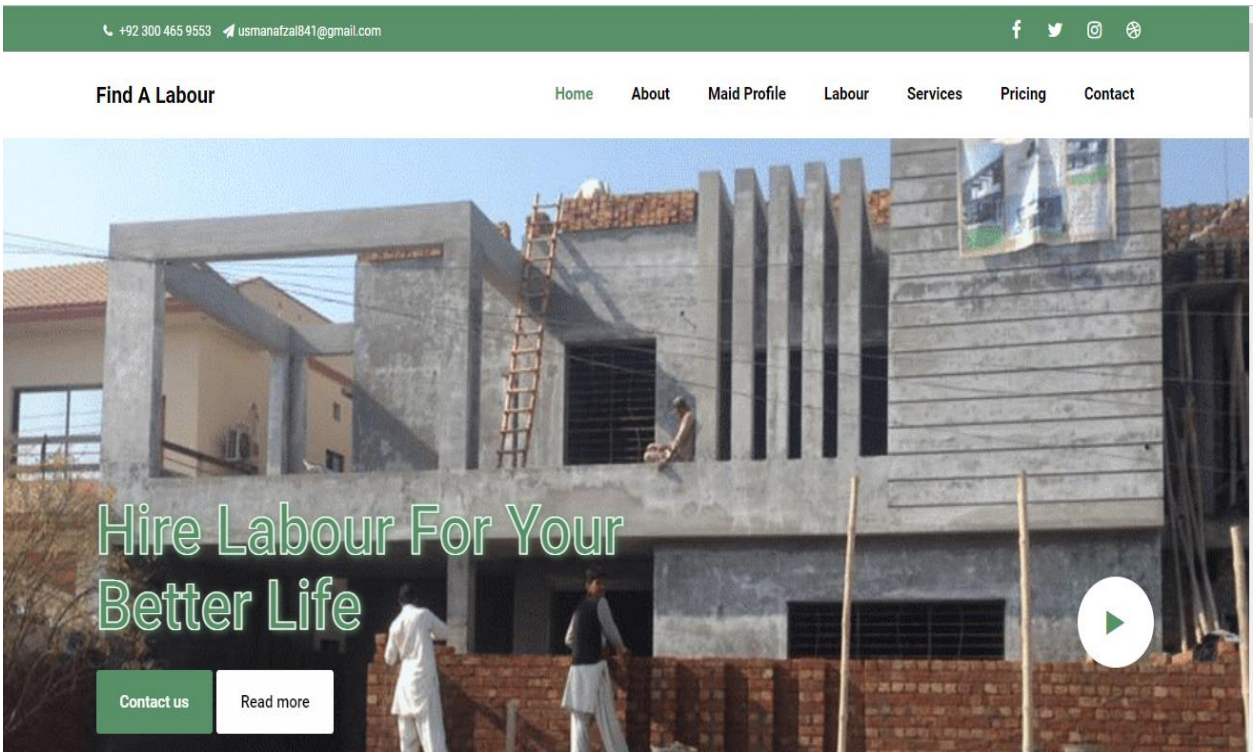
Appendices

Appendix A: User Manual

This section provides application guideline for the convenient of our users

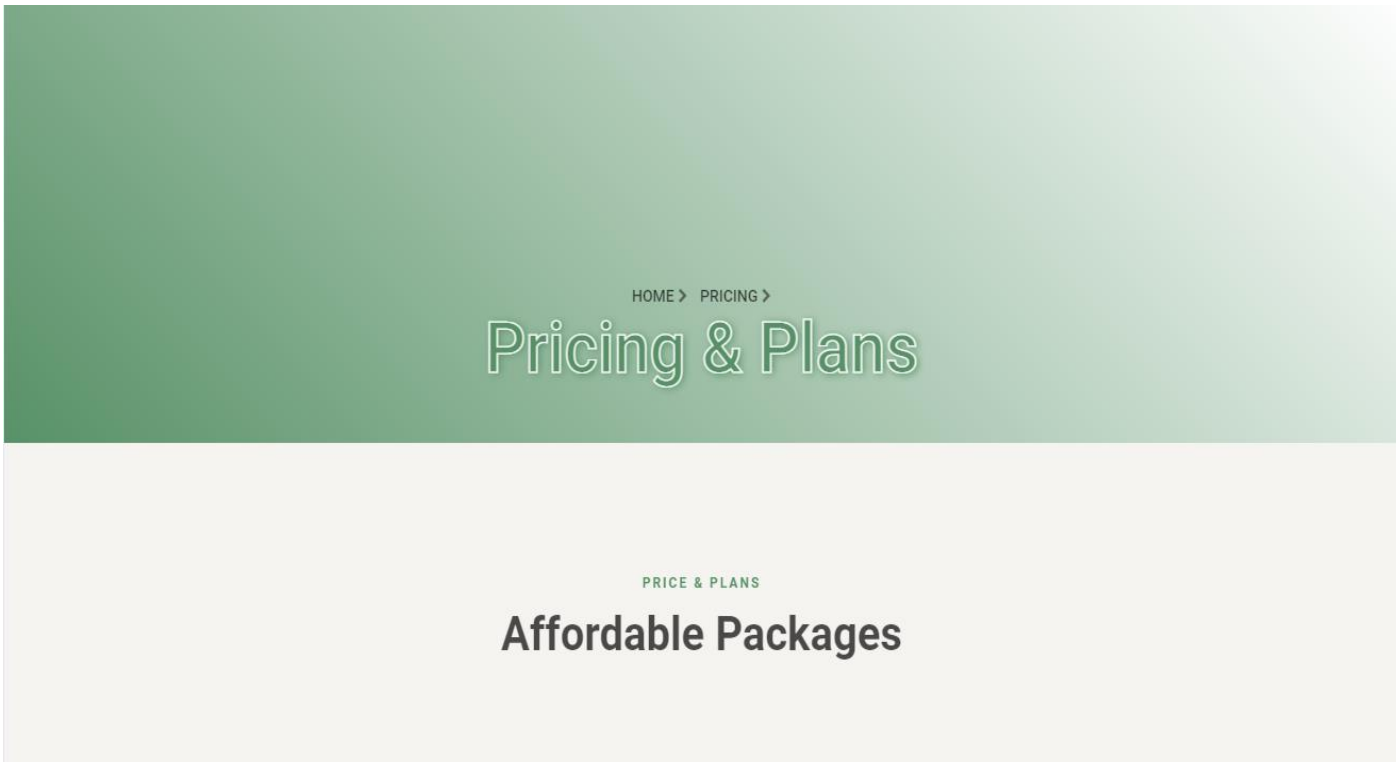
Appendix A:

A.1. Home page Screen



1) If User clicks on contact Activity.	Application will show the Activity.
2) If User will fill therequired fields.	Application will validatewhether the fields are Correctly filled.
3) If User clicks on send message	The message send successfully.

A.1.1. Maid profile



1) If User clicks on Maid profile Activity.	Application will show the Activity.
2) If User will fill therequired fields.	Application will validatewhether the fields are Correctly filled.
3) If User clicks on send message	The message send successfully.