Software Requirements Specification

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TEAM CS-29

Index Number	Name	Signature
17000343	E.M.Y.D.Ekanayaka	
17000221	J.S.N. De Silva	
17000084	K.M.T.H.B. Ayagama	
17000688	R.D.Jayasooriya	

Project Supervisor

Mr. Kapila Dias

Project Mentor

Mrs.Thisarani Tharushika

INTRODUCTION

This section introduces the requirement specification document for the E-Bass.lk web platform. It provides the purpose and scope of the system any definition and references are listed on this section as well as an overview.

What is E-bass.lk?

When we are trying to find a problem to solve as the group project we identified that there are some major issues that people are facing. Among all of them, we figured out that find a worker for people's day to day works is an important problem to solve. In this website, we will create a place for workers to promote themselves and find new work to do. And also companies(who hire workers) can promote themselves and add vacancies from this website. The users can find the most appropriate workers for their work. Basically we are creating the bridge between workers and their clients. There are some websites tried to do this but most of them have some problems. So we will implement a better site for the workers and the users. In our systems, only the workers need to pay a registration fee for their profile extension.

Document Conventions

E-bass.lk	-	The web platform used to connect workers and their clients.
User	-	Someone who receives a service from the system. User can be a client or a worker or both simultaneously.
Client	-	A user that seeks the service of a worker.
Developer	-	A user who develops systems.

This document can be used by,

1. Developers of the system
2. Users
3. Testers
4. Document Writers

The SRS is contained all System Requirements including Interfaces, EER Diagram, Class Diagram, Sequence Diagram, Activity Diagram and Use case Diagram. For better understand start reading from Product Scope.

PROJECT SCOPE

When we need to do something like painting a house, Build a wall etc, we need workers(masons, painters etc). So we need to find them. Find a worker to do those things is not an easy task. There are reasons for that. Some of them are,

1. A busy schedule of workers.
2. No efficient way to contract workers.
3. No way to find the quality of the workers.
4. No way to check the worker's jobs that he already did.

So we are going to build a program to help the clients and the workers to connect with each other. From our app, people can find workers and contact them according to their essentials. And also workers can register in our app and promote their works and promote their capabilities from our app. It helps both workers and clients.

Background

We will design and develop a web application for clients to find workers for their day-to-day work. And also we will design this application to promote workers about them.
The website consists of several web pages. Some of them are,

- HOME
- ABOUT US .
- ADD SERVICE
- WORKING CATEGORIES
- TERMS AND CONDITIONS .
- CONTACT US

The home page will have a login, sign up, Search bar, Filter bar, Worker categories and description about our platform. The ABOUT US page will give a company history. The Worker categories will show you the different working areas. The page will contain a list of work types. The TERMS AND conditions page will contain our terms and conditions as well as our rules and regulations. The CONTACT US page will contain a form allowing website visitors to send a message to us. The website will be hosted on a server at E-BASS expense. The domain name(s) that will be connected to this website are the following: www.E-BASS.lk.

Before we start this project we need to know whether this website is feasible for the users or not. For that let's consider the social, operational, technical, economic, legal and ethical and schedule feasibility.

With this project scope, we have some goals and objectives to consider about. Some of them are given below.

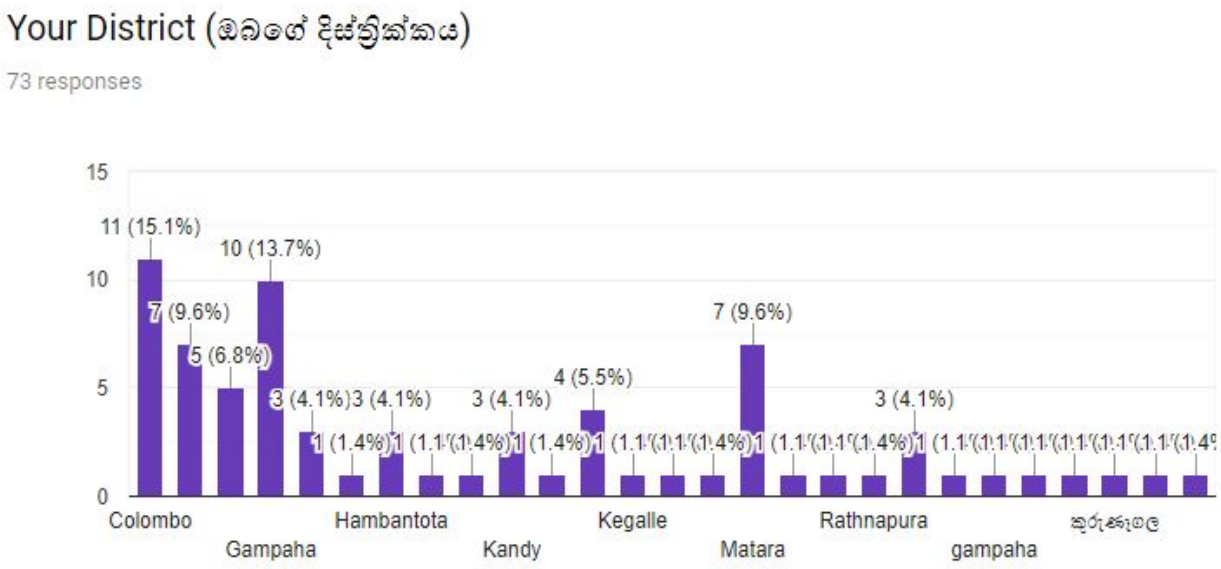
Objectives and goals

- Connect workers with the users without a middleman
- Allow workers to react quickly for the user's requests
- Allow users to find workers according to their essentials
- Allow workers and Companies to promote themselves

FEASIBILITY STUDY

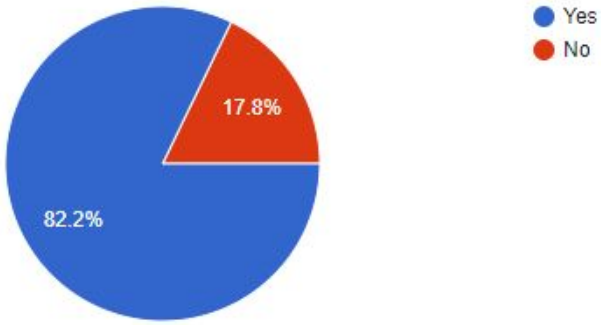
Social Feasibility

Social feasibility is a determination of whether a proposed project will be acceptable to the people or not. We get information from the people in the society



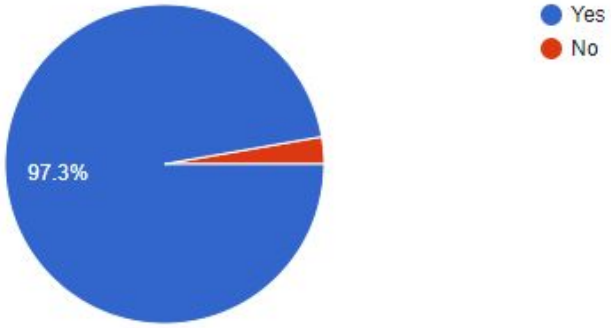
Do you think a web/mobile application about workers will help to find a worker for you?(ඔබට මෙම සේවකයන් සොයාගැනීමට ජංගම දුරකතන/ අන්තර්ජාල මෘදුකාංගයක් උපකාරී වේ යැයි සිතන්නේද?)

73 responses



Do you have a smartphone?(ඔබට ස්මාර්ට් ජංගම දුරකතනයක් තිබේද?)

73 responses



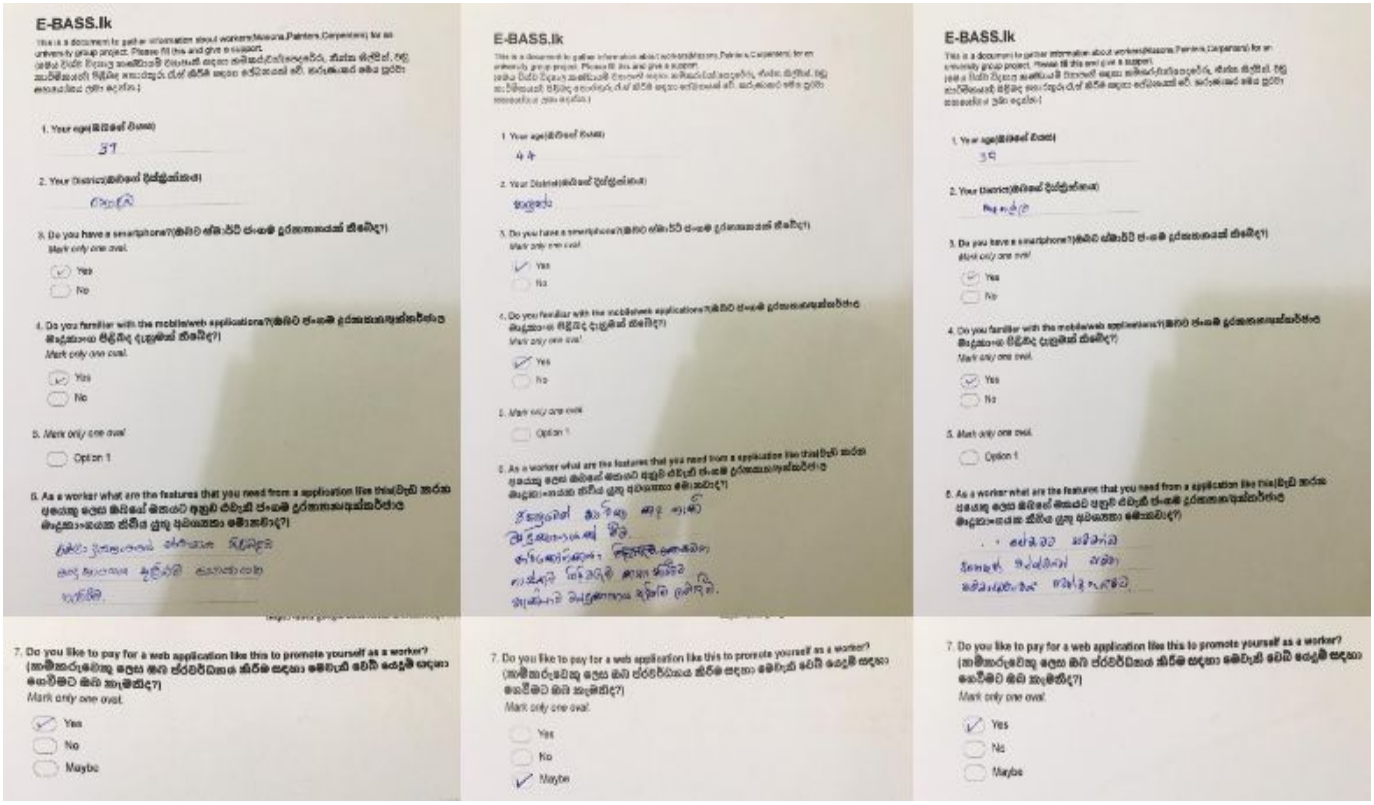
What are the features that you need from a application like this?(එවැනි ජංගම දුරකතන/අන්තර්ජාල මෘදුකාංගයක තිබිය යුතු අවශ්‍යතා මොනවාද?)

52 responses

Easy to use
Details of workers that we can hire for our requirements and the history or ratings of them
Direct contact facilities, correct cost approximations, Most suitable talent for the requirement
Dont know
Easy search
The price of the worker hos availability
To contact them easily
Must show location of the worker
ඔවුන් කලින් කරපු වැඩ පිළිබඳව දැනගැනීමට පුලුවන් වීම
To be able to find workers as soon as possible
I need to get a quick response for my request
Gurrentee about workers that they are professional enough to give us a good service
apita kerenna one de dammaaama eka accept karala wadeta ena ඉසඳෙරwek nattan baas kenekwa sambanda karanna puluwn wenna one
None
a way to find whether a worker is actually good or bad. maybe his past works + reviews etc.
Location of the worker Payement
Ratings for previous work
Find a good worker easy and fast
Contact details
Proper communication system(Contact system)
Ratings, Recommendations, Average charges of the workers, their contact numbers
Should be able to match the nearest Worker and should confirm the match at most with in one day..

Almost all the requirements that we took from the answers were similar to our functionalities that we are going to insert. So our site is a social feasible one. And also this

website able to connect workers with their users according to the worker's corner also. These are some of the answers given by the workers.



From the worker’s and their client’s ideas we can confirm that this site is a social feasible one.

Operational Feasibility

If a client needs to find a worker they can visit our website and filter the workers according to their requirements. Then they can search for workers and select one from according to the ratings, schedules and other information. Then they can contact them, and also they can rate workers. Workers need to create an account to join our system.

After they registered on our website they need to verify their account from the E-mail. After that, they can update their account. They can add their working details, working schedule etc. The proposed system will provide a better platform to connect the clients with the workers. As this is mainly related to the Sri Lankans the main point to be considered is the user-friendly interface and the data security as well as reliability.

And also the companies who will register in our system they can add vacancies from their profiles for their companies. In this operation they should log-in as a company and need to select the add vacancy option.

Also when a customer adds a booking it lasts only 48 hrs so after that worker should accept or cancel it. Then a notification will be sent to the client and to the admin.

Technical Feasibility

Technical issues involved are the necessary technology exists, technical guarantees of accuracy, reliability, ease of access, data security, aspects of future expansion. exists to develop a system. The proposed system is capable of holding the data to be used securely. The proposed system is capable of providing adequate response and regardless of the number of users. The proposed system is a web-based system so that everyone with an internet connection and any device can enrol with the system. The proposed system is completely liable with proper backup and security. As the system is a web-based system can be expanded in easily. Hence, we can say that the proposed system is technically feasible.

Economic Feasibility

Economic feasibility is the most frequently used method for evaluating the effectiveness of the proposed system, outweighs the cost then the decision is made to design and implement the system. The cost of hardware and software is affordable and cost of the server as well. The proposed system will earn by workers payments. The proposed system is earned by posting advertisements in the system as well. More ads will earn more. Hence, the proposed system is economically feasible. Also, the users(clients) can view and order the workers for free so this project can promote very easily.

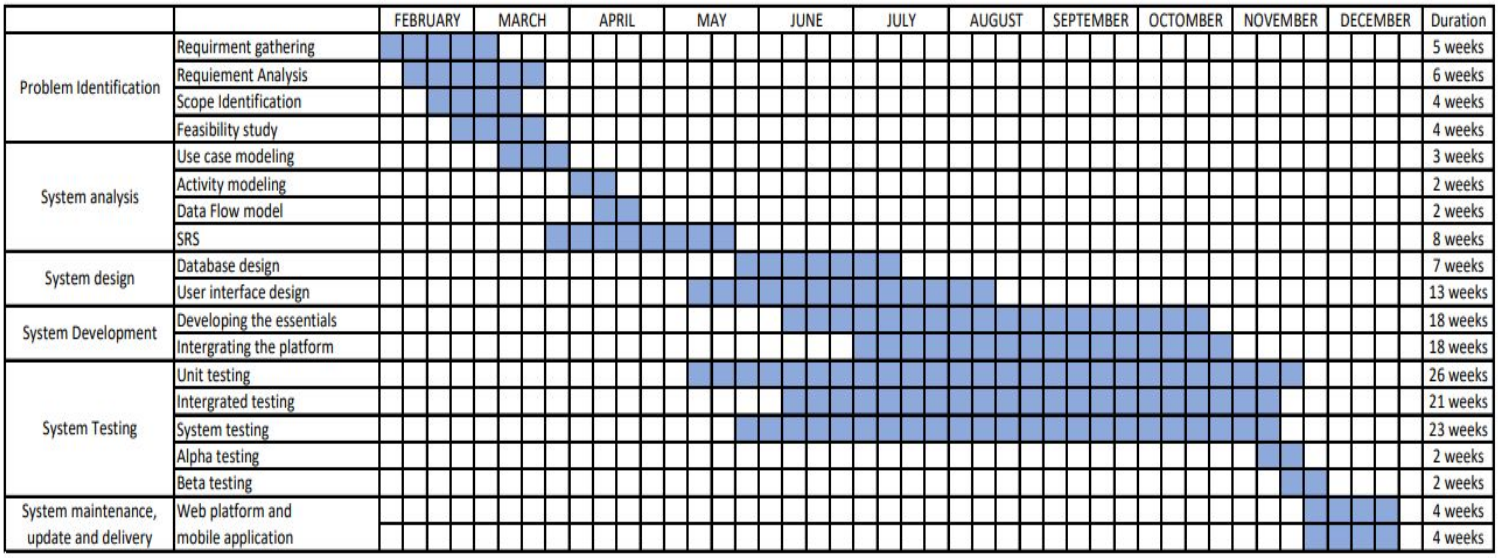
Legal and ethical feasibility

We will not be published the Sensitive information to the outside world by the system (ex: NIC number). User can select what they share and with whom the provided information stored. And also things like password will be saved as an encrypted one. We will show all the terms and conditions that customers need to allow in the website. So our system is legally feasible

Schedule Feasibility

The E-Bass.lk expected to take eleven months from project approval to launch the system. Many of the foundations for this system, such as high-speed internet and web server capability, are already available. Since we are creating this site with incremental development method we are doing all the implementation, testing, Designing parts together.

We inserted our delivery plan below to get a better idea about the schedule feasibility. First of all we did the requirement gathering and documentation parts.



OVERALL DESCRIPTION

The Overall Description section of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in this chapter.

The Requirements Specification section of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.
Website will only be the interface for the user data and the execution of provided functionalities. To use the product, users are required to register through the web interface.

Whenever a new user registered, all the required data will be created in the database and a predefined workspace will be assigned for the user. Later, the user will be able to log in and logout the system anytime he wants. Since every operation that user perform reflected our database, the user will find his workspace however he leaves last time.

Product Perspective

E bass.lk is mainly web-based system which is eventually intended for the workers and the clients who are looking for workers. will be deployed to the web site and all users of the product will access by use of the website. Website will be the main user interface where users can operate all the provided functionality.

Website will only be the interface for the user data and the execution of provided functionalities. To use the product, workers are required to register through the web interface. Whenever a new user registered, all the required data will be created in the database and a predefined workspace will be assigned for the user. Later, users will be able to log in and logout the system anytime he wants. Since every operation that user perform reflected our database, the user will find his workspace however he leaves last time.

Product Functions

Functional Requirements

- Single Worker
    - Register
    - Login/logout
    - Accept/cancel booking
    - Edit profile
    - Add Schedule
    - Edit Schedule

- Company
    - Register
    - Login/logout
    - Add/Edit vacancy
    - Edit profile

- Client
    - Add/cancel booking*
    - Search worker
    - Add complain
    - rate worker
    - report(filing complaints)*
    - ask help/support*

- Admins
    - handling reports/complaints
    - inquiries and banning
    - generate statistical reports *

USER CLASSES AND CHARACTERISTICS

There are three kinds of people who can interact with this system. Clients, Workers and Company.

Clients

The client is someone who is looking for a worker when they needed one. They are looking for a different kind of workers according to their essentials. Clients don't need to register on the system. When they want to book a worker they can give their details and book one. They will play a major role in this system.

Workers

There are two types of workers in the system. One is a single worker and the other one is a company. Companies can post a vacancy and promote themselves. Major role in the system is Single Worker. They need to register in the system. And they can do several things with the system.

Admins

Admins oversee the general status of the system. They will also be handling user reports /complaints about other users and proceeding to inquiries if blacklist users after an inquiry depending on the outcome, generating statistical reports about system.

OPERATING ENVIRONMENT

Being a web-based system E-Bass operates on a cloud server platform. The cloud service provider manages the infrastructure and platform that system and database run on.

Design and Implementation Constraints

`

The system fetches data from the database over the Internet, it is crucial that there is an Internet connection for the system to function. The fundamental necessity for accessing the E-bass system is a stable internet connection. Since the product is on a cloud platform, all user information and data will be kept on the cloud service provider's servers. Hence, the privacy and protection of user's information will depend on service providers stability. Since the system will be running on a third party environment as a precaution we have to have a backup of user information and transaction details. If we speculate that the client has no idea about the designing process of the product and necessary technologies, defining milestones by the client himself could be impractical from a developers perspective. The amount of traffic the cloud platform can handle is determined by the speed of the server or the speed of the network. The higher bandwidth is necessary if the number of calls the system receives on average is very high.

Assumptions and Dependencies

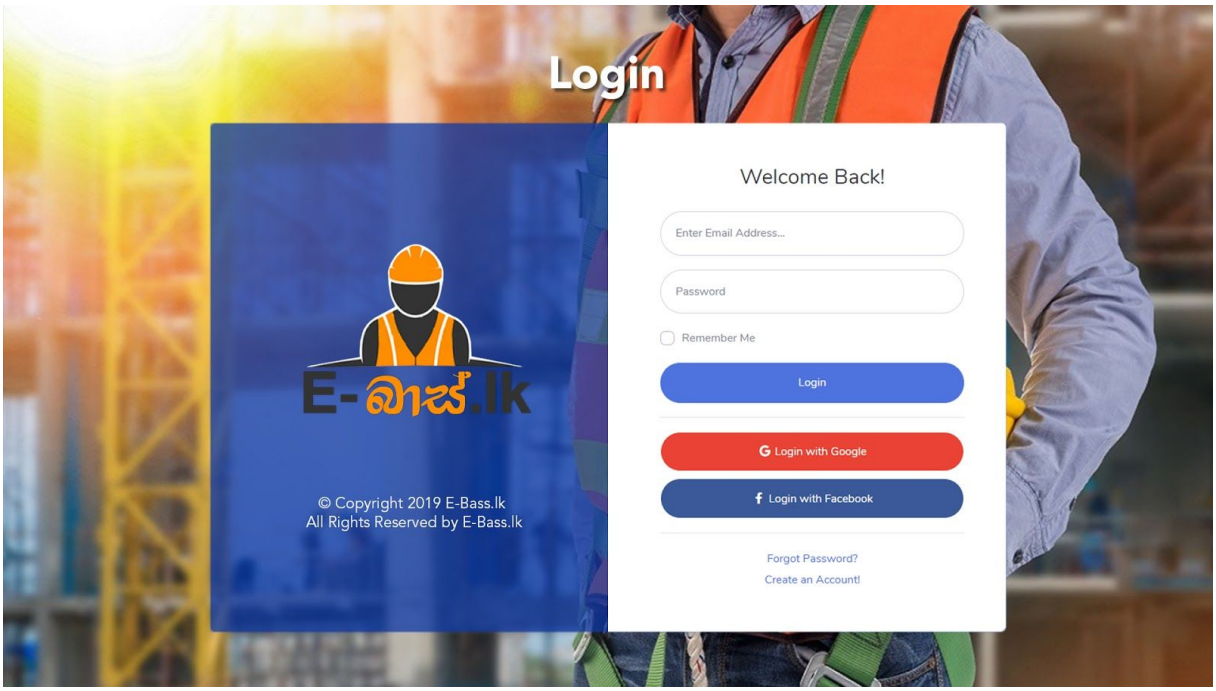
It is assumed that:

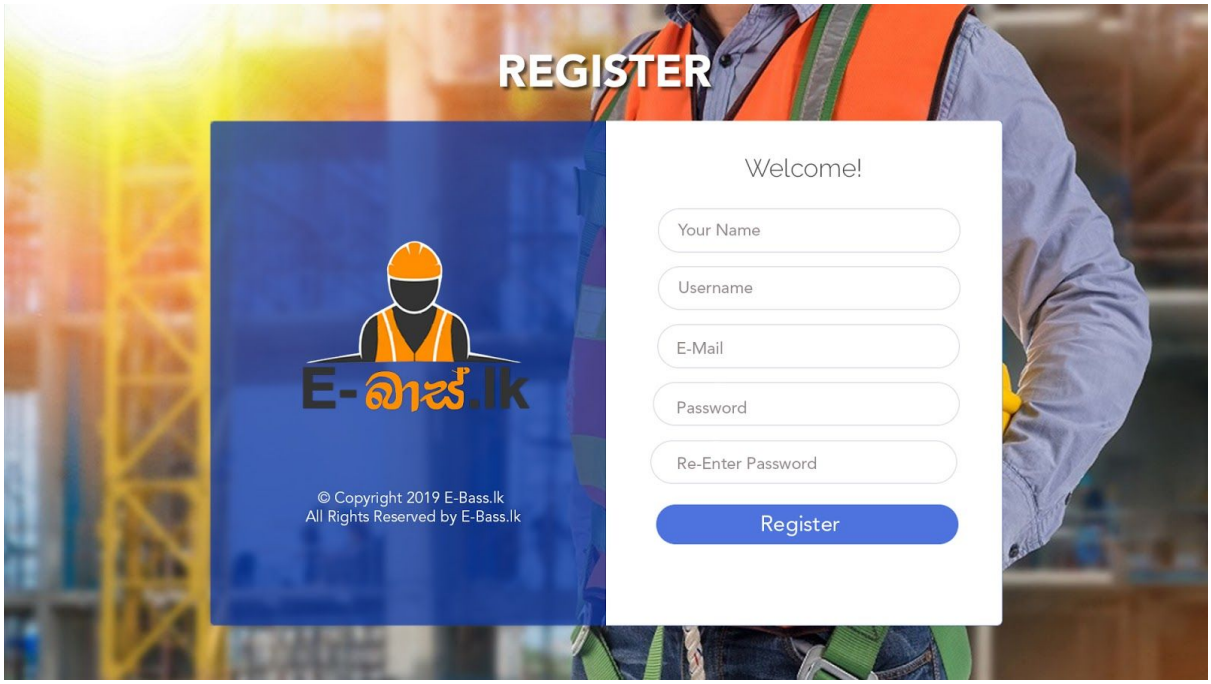
- The user who interacts with the system has a stable internet connection at the time he/she performing in system.
- The user has knowledge to interact with the user interface of the system.
- As the worker doesn't have a way to share their workload they would use the scheduling system of the E-Baas.lk

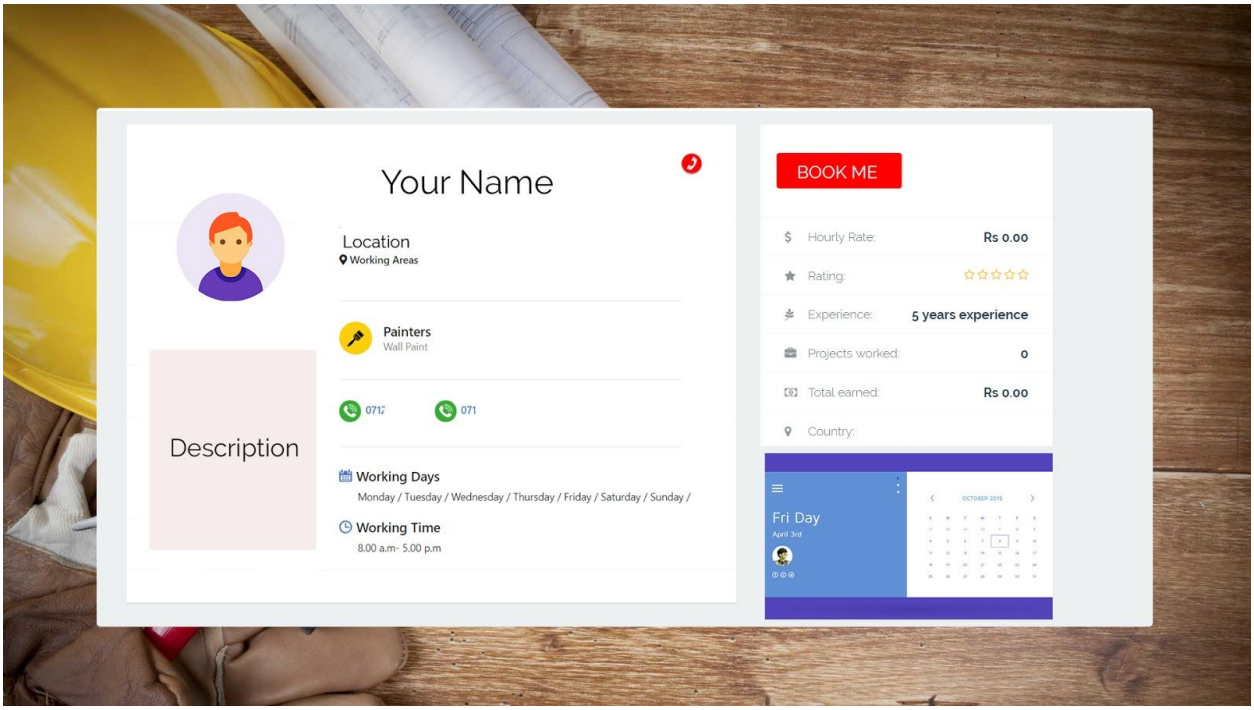
External Interface Requirements

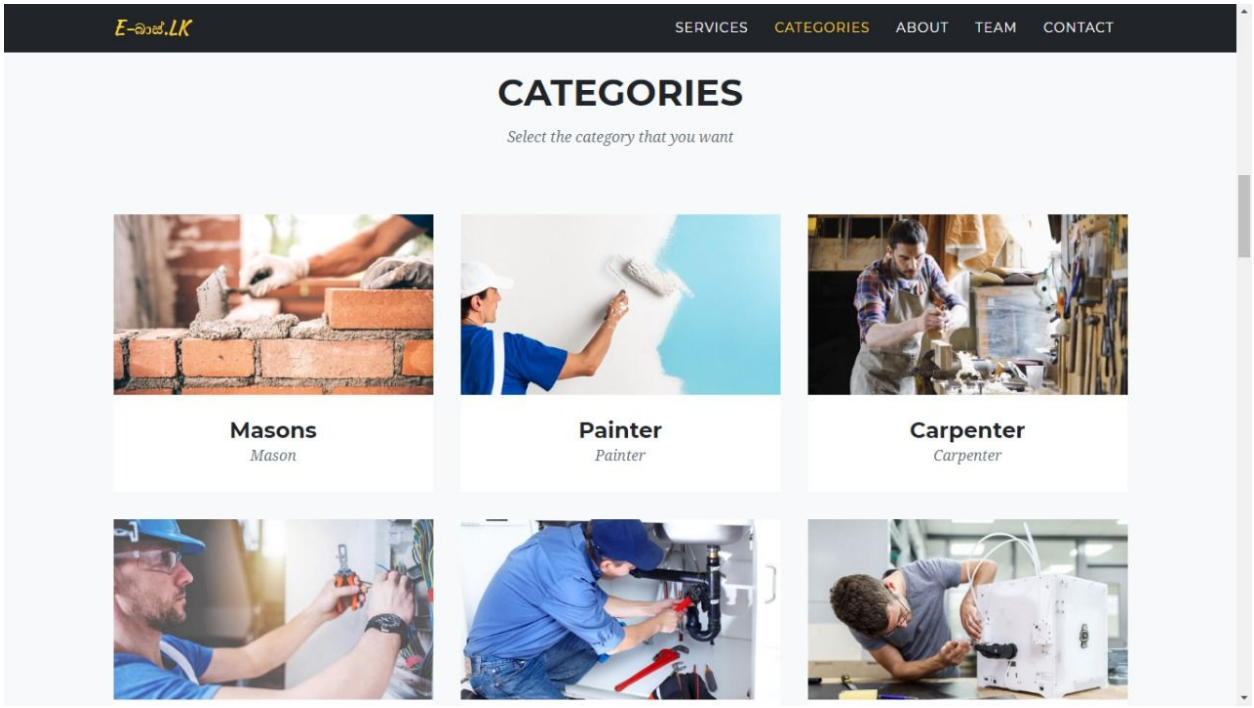
This section shall describe the interface requirements for the E-Baas.lk. They specify the way user shall interact with the systems well as defined the necessary hardware/software community interfaces required by the system to store and retrieve data and information.

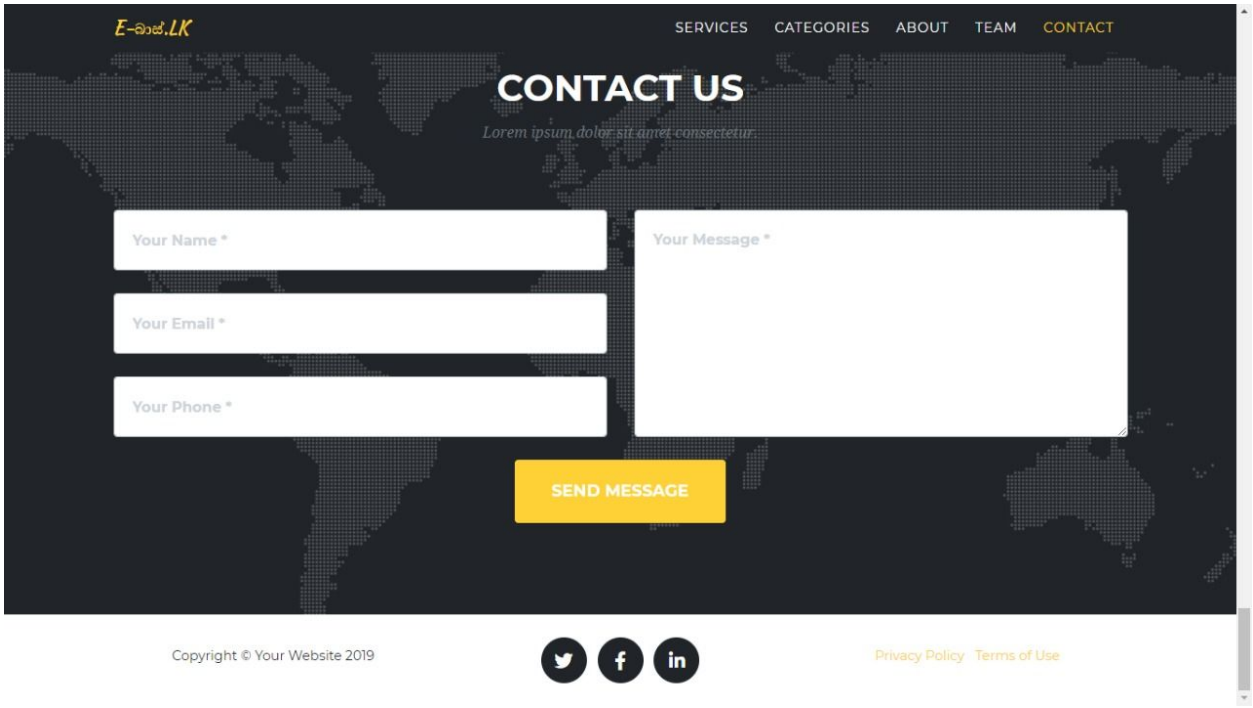
INTERFACE MOCKUPS






Your Name
Location
Working Areas
Painters
Wall Paint
0712
071
Description
Working Days
Monday / Tuesday / Wednesday / Thursday / Friday / Saturday / Sunday /
Working Time
8.00 a.m- 5.00 p.m
BOOK ME
Hourly Rate:
Rs 0.00
Rating:
Experience:
5 years experience
Projects worked:
0
Total earned:
Rs 0.00
Country:
Fri Day
April 3rd


E-කාර්.LK
SERVICES
CATEGORIES
ABOUT
TEAM
CONTACT
CATEGORIES
Select the category that you want
Masons
Mason
Painter
Painter
Carpenter
Carpenter


E-බාස්.LK
SERVICES
CATEGORIES
ABOUT
TEAM
CONTACT
CONTACT US
Lorem ipsum dolor sit amet consectetur.
Your Name *
Your Email *
Your Phone *
Your Message *
SEND MESSAGE
Copyright © Your Website 2019
Privacy Policy
Terms of Use

SYSTEM FEATURES

Functional Requirements

Use-Case Name	Login	Use Case Type System Requirement
Use-Case ID	01	
Source	Web Interface	
Primary Business Actors	Worker (company, single worker)	
Other Participating Actors		
Trigger	The user submits the form on the web interface to login	
Course of Events	● The user submits the form with username and password ● Check the username with the corresponding password in the database and see if they match ● User will be logged into the system	
Pre-conditions	● User must not be currently logged into the system	
Post-conditions	● User is logged into the system under the relevant user privilege	
Alternative Scenarios	● If the username-password combination does not match, the user will receive an error message	

Use-Case Name	Logout	Use Case Type System Requirement
Use-Case ID	01	
Source	Web Interface	
Primary Business Actors	Worker (company, single worker)	
Other Participating Actors		
Trigger	The user selects to logout	
Course of Events	● ask for verification whether the user wants to ● User will be logged out of the system	
Pre-conditions	● User must be currently logged into the system	

Post-conditions	● User is logged out of the system and user privileges will be taken away
Alternative Scenarios	● If the user declines the log out verification, the logout process will be terminated and the user will be stayed logged in

Use-Case Name	Worker Registration	Use Case Type System Requirement
Use-Case ID	02	
Source	Web Interface	
Primary Business Actors	User	
Trigger	The user submits the registration form	
Course of Events	● The user submits the form with all the relevant details ● All the user inputs will be validated ● A new account will be created and the relevant details will be stored in the system	
Pre-conditions	● The worker must not be currently logged into the system	
Post-conditions	Need to verify the email A new user account is created	
Alternative Scenarios	● If there is an issue with the given input, an error message will be displayed	

Use-Case Name	Admin Registration	Use Case Type System Requirement
Use-Case ID	03	
Source	Web Interface	
Primary Business Actors	Admin	
Other Participating Actors		
Trigger	An Admin submits the new admin registration form	
Course of Events	● admin submits the form with all the relevant details ● All the user inputs with being validated	

	● A new account will be created and the relevant details will be stored in the system
Pre-conditions	● User must be logged into the account as an admin
Post-conditions	1. The new admin account is created
Alternative Scenarios	● If there is an issue with the given input, an error message will be displayed

Use-Case Name	Report a problem	Use Case Type
Use-Case ID	04	System Requirement
Source	Web Interface	
Primary Business Actors	User	
Other Participating Actors		
Trigger	The user submits the reporting form	
Course of Events	● The user submits the form with the relevant information required and with a description of what happened with the system. ● A report will be created and the user will receive a confirmation email.	
Pre-conditions	● User must be logged into the account as a user	
Post-conditions	New report is created	
Alternative Scenarios	● If there is an issue with the given input, an error message will be displayed	

Use-Case Name	Add a complain	Use Case Type
Use-Case ID	05	System Requirement
Source	Web Interface	
Primary Business Actors	User	
Other Participating Actors		

Trigger	User submit the complaint
Course of Events	● Client can put complains about the workers according to their works ● Workers can complain about the clients
Pre-conditions	● The worker must be logged into the account
Post-conditions	2. New complain is created
Alternative Scenarios	

Use-Case Name	Generate report	Use Case Type
Use-Case ID	06	System Requirement
Source	Web Interface	
Primary Business Actors	Admin	
Other Participating Actors		
Trigger	Admin creates the report	
Course of Events	● Collect relevant details from the database	
Pre-conditions	● User must be logged into the account as an admin	
Post-conditions	New report is generated	

Use-Case Name	Delete account	Use Case Type
Use-Case ID	07	System Requirement
Source	Web Interface	
Primary Business Actors	Worker	
Other Participating Actors		
Trigger	Worker must create an account	
Course of Events	If the worker doesn't want his account, he can delete his account	

Pre-conditions	User must be logged into the account as a worker
Post-conditions	His account no longer available on the site
Alternative Scenarios	

Use-Case Name	Book worker	Use Case Type
Use-Case ID	08	System Requirement
Source	Web Interface	
Primary Business Actors	Client	
Other Participating Actors		
Trigger	User can book a worker by visiting worker's account	
Course of Events	● The client will be shown all the details about the workers ● The client can choose a worker according to their essentials ● User should fill the booking form and wait until the workers response	
Pre-conditions	● must be logged into the account ● Fill the booking form	
Post-conditions		
Alternative Scenarios	● If there is an issue with the booking, an error message will be displayed	

Use-Case Name	Cancel booking	Use Case Type
Use-Case ID	09	System Requirement
Source	web interface	
Primary Business Actors	Single worker, Client, Admin	
Other Participating Actors		
Trigger	Book a worker	

Course of Events	● Need to fill the cancellation form ● Give a valuable reason to cancel the booking
Pre-conditions	● User must be logged into the system as a user, worker or admin ● Give a valuable reason to cancel the booking
Post-conditions	● Get the notification
Alternative Scenarios	if there is an issue with the given input, an error message will be displayed

Use-Case Name	Contact worker	Use Case Type System Requirement
Use-Case ID	10	
Source	Web Interface	
Primary Business Actors	Client	
Other Participating Actors	Single worker	
Trigger	To get more details about the worker	
Course of Events	● Fill the booking form ● Take the contact number of the worker	
Pre-conditions	● Must be logged into the system as a Client ● Fill the booking form	
Post-conditions		
Alternative Scenarios	• If there is an issue with the given input, an error message will be displayed	

Use-Case Name	Add a review	Use Case Type System Requirement
Use-Case ID	11	
Source	Web Interface	
Primary Business Actors	Client	
Other Participating Actors		

Trigger	The worker did the work
Course of Events	● After a worker done the work Client can comment about the worker's job
Pre-conditions	● Workers accept the booking ● The worker did the job
Post-conditions	● Verify the email
Alternative Scenarios	

Use-Case Name	Ask for help/support	Use Case Type
Use-Case ID	12	System Requirement
Source	Web Interface	
Primary Business Actors	User	
Other Participating Actors	Admin	
Trigger	The user selects to ask for help	
Course of Events	● The user submits the form with the relevant information required and with a description of what happened. ● A report will be created and the user will receive a confirmation message. ● an admin will help the user to solve the problem if needed or admin will solve it by himself and notify the user afterwards	
Pre-conditions	● User must be logged into the system as a user	
Post-conditions	● a new support request will be uploaded to the system which admins can view	
Alternative Scenarios	If there is an issue with the given input, an error message will be displayed	

Use-Case Name	Rate worker	Use Case Type
Use-Case ID	13	System Requirement

Source	Web Interface	
Primary Business Actors	User(client)	
Other Participating Actors		
Trigger	the worker completes a job or cancels it	
Course of Events	● after a worker complete/terminate/drop out a job, client can rate him based on his performance under few categories, which can be viewed by other clients before giving them a job again.	
Pre-conditions	● User must be logged into the system as a client	
Post-conditions	a new review with ratings will be updated on workers profile	
Alternative Scenarios		

Use-Case Name	Filter details	Use Case Type System Requirement
Use-Case ID	14	
Source	Web interface	
Primary Business Actors	Clients	
Other Participating Actors		
Trigger	Get the worker according to the essentials	
Course of Events	● Fill the filter form	
Pre-conditions	● Fill the filter form	
Post-conditions		

Use-Case Name	Search	Use Case Type System Requirement
Use-Case ID	15	
Source	Web Interface	

Primary Business Actors	Client
Other Participating Actors	
Trigger	Find a proper worker
Course of Events	• fill the search bar with the details
Pre-conditions	• fill the search bar with the details
Post-conditions	
Alternative Scenarios	If there is an issue with the given input, an error message will be displayed

Use-Case Name	Add photos	Use Case Type System Requirement
Use-Case ID	16	
Source	Web Interface	
Primary Business Actors	Worker	
Other Participating Actors		
Trigger	Update the profile	
Course of Events	• Select the edit profile • Add photos to the profile	
Pre-conditions	• The worker must complete a work	
Post-conditions		
Alternative Scenarios		

Use-Case Name	Create a schedule	Use Case Type System Requirement
Use-Case ID	17	

Source	Web Interface	
Primary Business Actors	Single worker	
Other Participating Actors		
Trigger	Manage working days	
Course of Events	● create a worker's account ● Add a schedule to the profile	
Pre-conditions	● Add Create and verify accounts	
Post-conditions	Manage the schedule	
Alternative Scenarios		

Use-Case Name	Edit schedule	Use Case Type System Requirement
Use-Case ID	18	
Source	Web Interface	
Primary Business Actors	Single worker	
Other Participating Actors		
Trigger	Update free and working days	
Course of Events	● Go to edit profile ● Select the schedule ● Edit details ● Publish the schedule	
Pre-conditions	● user must be logged in as a worker	
Post-conditions		
Alternative Scenarios		

Use-Case Name	handle complaint	Use Case Type System Requirement
Use-Case ID	19	

Source	Web Interface	
Primary Business Actors	Admin	
Other Participating Actors	User	
Trigger	admin selects a new/not solved report	
Course of Events	● admin opens a new report/unhandled report ● take necessary actions/steps to handle the situation if needed	
Pre-conditions	● user must be logged in as an admin ● report must not be handled before	
Post-conditions	● situation/error will be handled ● if needed an inquiry will be happen	
Alternative Scenarios	● if it is not relevant or needed report will be ignored	

Use-Case Name	provide help	
Use-Case ID	20	
Source	Web Interface	
Primary Business Actors	Admin	
Other Participating Actors	User	
Trigger	admin selects a new help request from a user	
Course of Events	● admin opens a new support ticket ● if necessary, an admin will contact the user and provide help or guidance	
Pre-conditions	● help request must not be handled before	
Post-conditions	● the issue will be handled or needed help will be provided	
Alternative Scenarios		

Use-Case Name	Inquiry	
Use-Case ID	21	
Source	Web Interface	
Primary Business Actors	Admin	
Other Participating Actors		
Trigger	getting a report showing a serious misconduct	
Course of Events	• Admin view the complaint sent by a user • Admin checks the user's complaint validity through the interface • The final decision will be sent to the user via a notification	
Pre-conditions	• Admin should be logged into the system • There should be at least one complaint • The complaint should be not handled before	
Post-conditions		
Alternative Scenarios		

Use-Case Name	Block an account	
Use-Case ID	22	
Source	Web Interface	
Primary Business Actors	Admin	
Other Participating Actors		
Trigger	admin block an account if a worker didn't pay the registration fee	
Course of Events	• The worker can use the account for free in 1st 3 months • After that, he should pay the registration fee • If he doesn't pay it admin will block the account	
Pre-conditions	• Admin should be logged into the system	
Post-conditions	• A user account no longer available for the user (until the payment will be done)	
Alternative Scenarios		

Use-Case Name	Confirm Booking	
Use-Case ID	23	
Source	Web Interface	
Primary Business Actors	Single worker	
Other Participating Actors	Clients	
Trigger	Accept the client's request	
Course of Events	• Select the accept button on the requests section	
Pre-conditions	• user should be logged in • The client should put a booking	
Post-conditions		
Alternative Scenarios	Notification will be sent to the client	

Use-Case Name	Add a vacancy	
Use-Case ID	24	
Source	Web Interface	
Primary Business Actors	Company	
Other Participating Actors		
Trigger	Promote the company	
Course of Events	• Click on the add a vacancy option • Give details and add a vacancy	
Pre-conditions	• user should be logged in as a company	
Post-conditions		
Alternative Scenarios		

Use-Case Name	generate notifications	
Use-Case ID	25	
Source	Web Interface	
Primary Business Actors	Admin	
Other Participating Actors		
Trigger	admin needs to generate notifications about events	
Course of Events	● necessary details will be gathered automatically ● admin will generate the notification	
Pre-conditions	● data should be provided to the system	
Post-conditions	● notification will be sent	
Alternative Scenarios		

Use-Case Name	send notifications	
Use-Case ID	25	
Source	Web Interface	
Primary Business Actors	Admin	
Other Participating Actors	User	
Trigger	admin sends notifications to the user	
Course of Events	● admin needs to send notifications to the user	
Pre-conditions	● notification should be generated	
Post-conditions		
Alternative Scenarios		

Non-Functional Requirements

- **Security**

We will not be published any sensitive information to the outside world such as ID etc. Also, the password will be saved as encrypted.

- **Performance**

The system performs certain functions under any specific conditions. Examples are the speed of response, execution time etc

- **Availability**

System or a component required to work properly without any system crashes. If the system crashed the error should send where the errors occurred.

- **Capacity**

We are using the firebase free tier. It’s a Realtime Database and Simultaneous connection

- **Maintainability**

If our system exceeds our capacity, we can expand our cloud database service as we want.

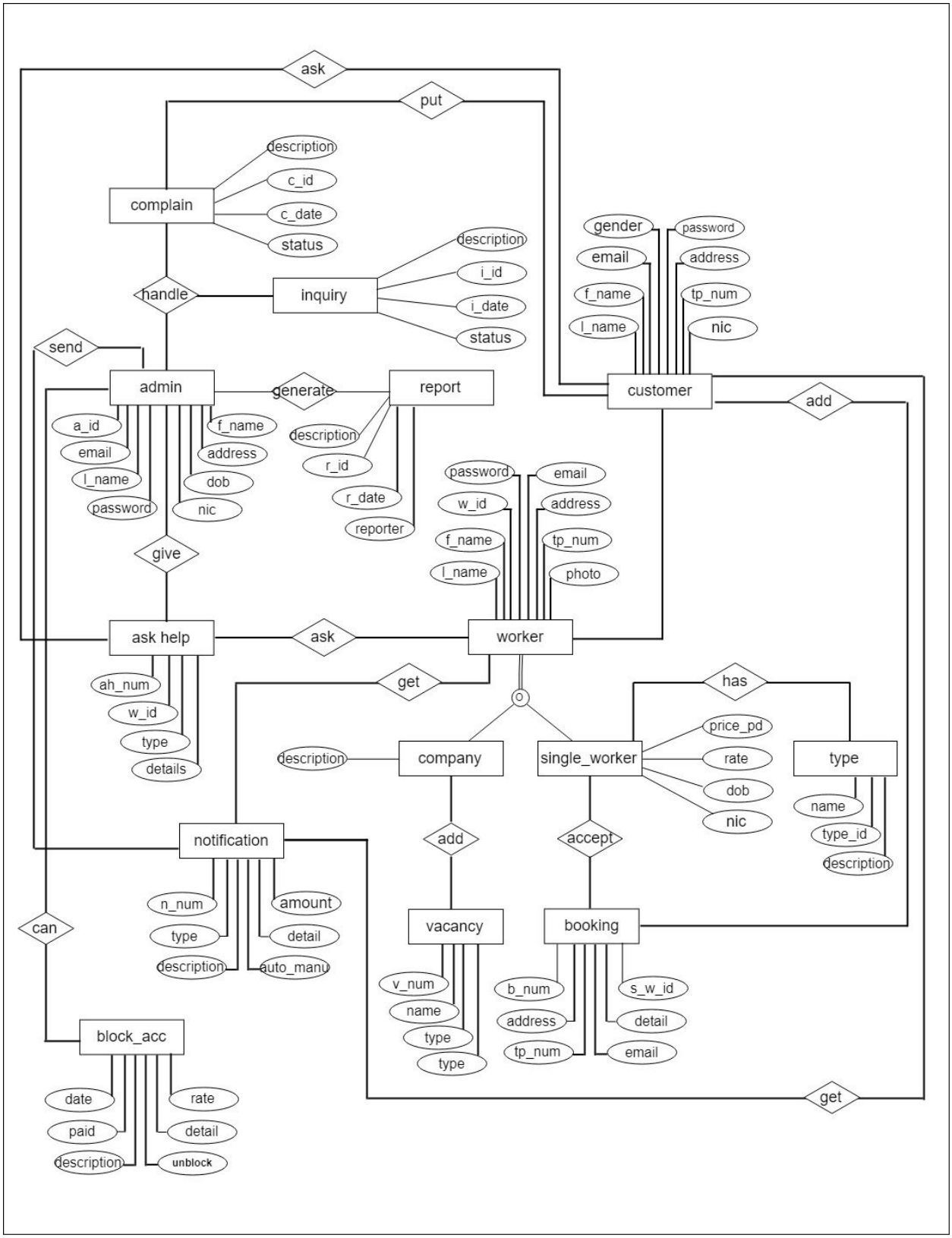
- **Reliability**

Completely reliable with proper backup and security.

- **Multi-language**

We have included English and Sinhala language in our system. Users can change to the preferred language as they want.

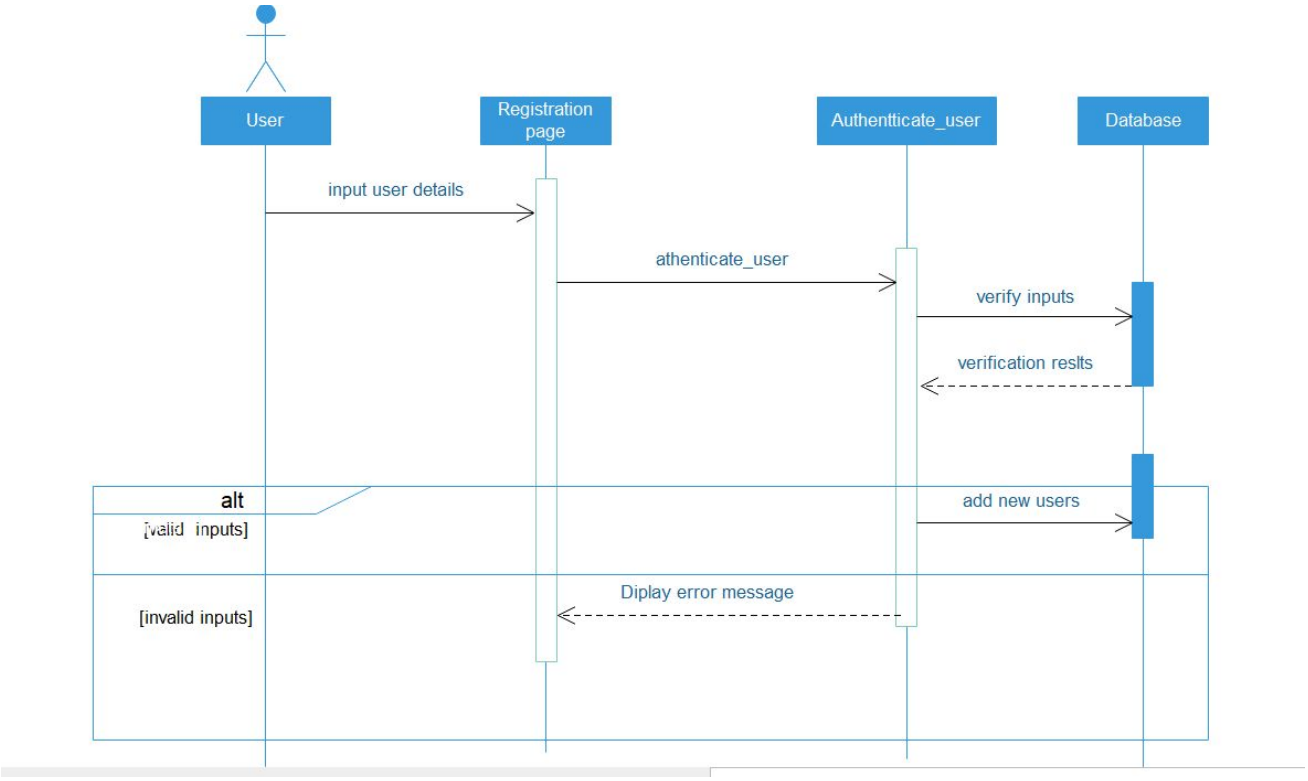
EER Diagram


ask
put
description
c_id
complain
c_date
status
gender
password
email
address
description
i_id
f_name
tp_num
handle
inquiry
i_date
l_name
nic
status
send
admin
generate
report
customer
add
a_id
f_name
description
email
address
r_id
l_name
dob
r_date
password
nic
reporter
password
email
w_id
address
give
f_name
tp_num
l_name
photo
ask help
ask
worker
ah_num
get
has
w_id
type
details
price_pd
description
company
single_worker
rate
type
dob
name
nic
type_id
notification
add
accept
description
n_num
amount
can
type
detail
vacancy
booking
description
auto_manu
v_num
b_num
s_w_id
name
address
detail
type
tp_num
email
type
block_acc
date
rate
paid
detail
description
unblock
get

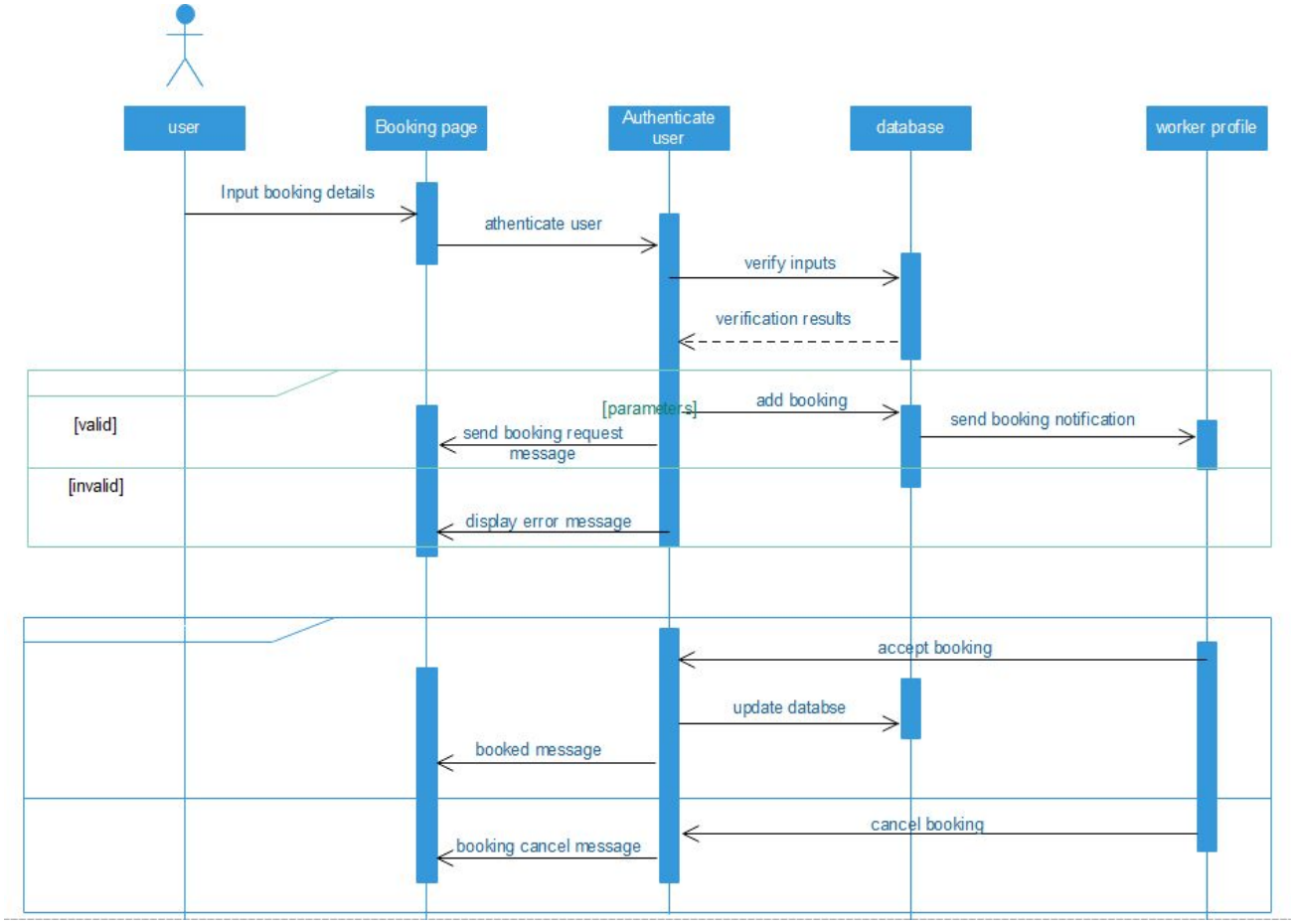
Use-Case Diagrams

Sequence Diagrams

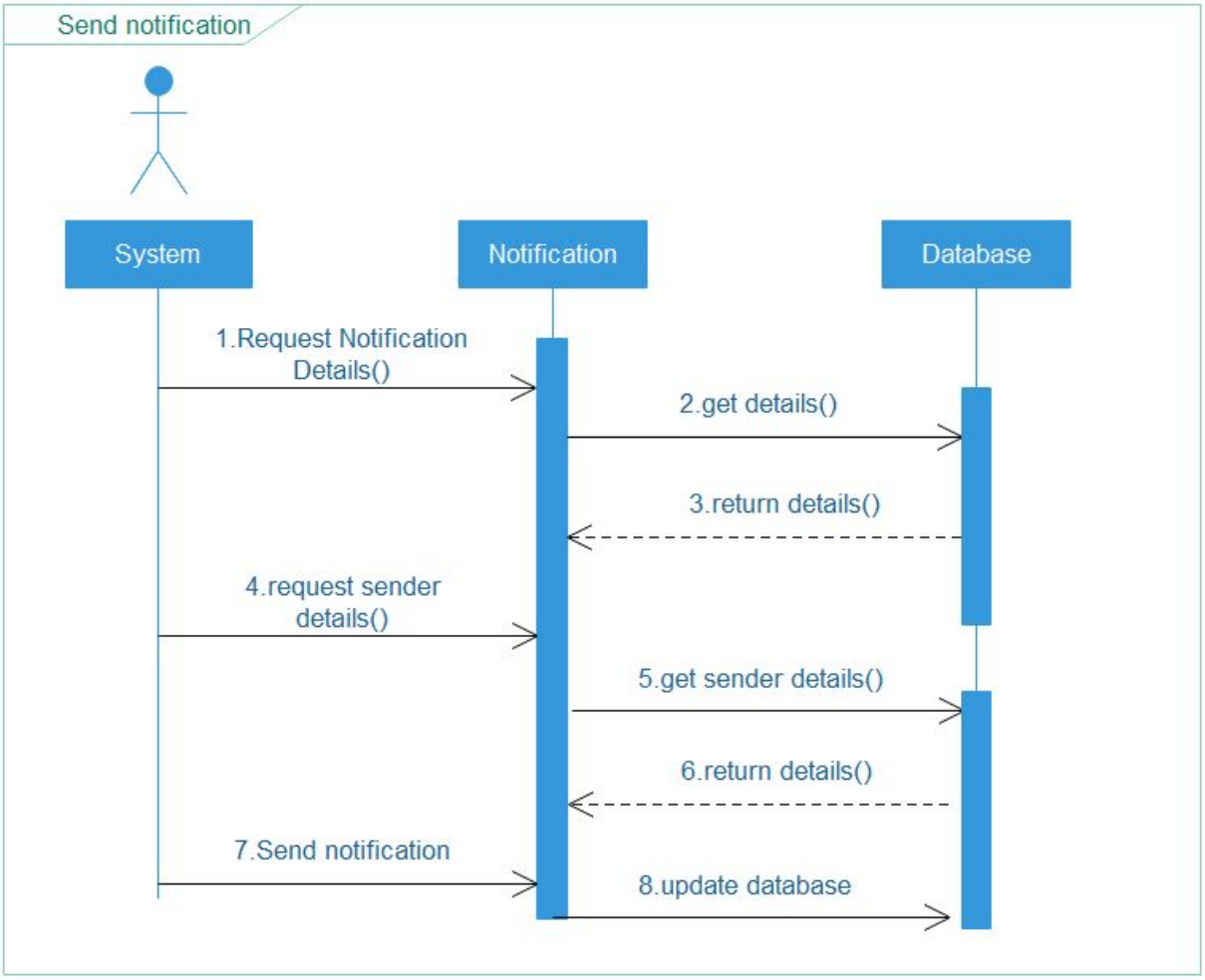
Register



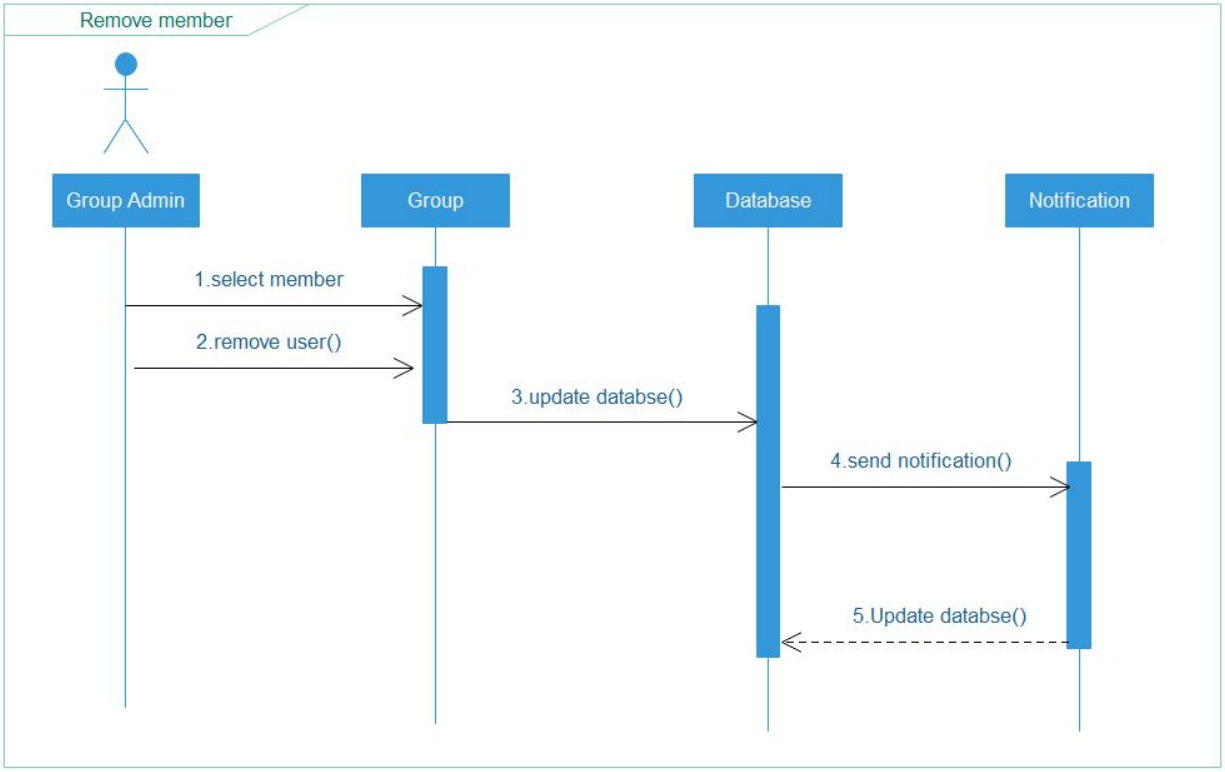
Booking system



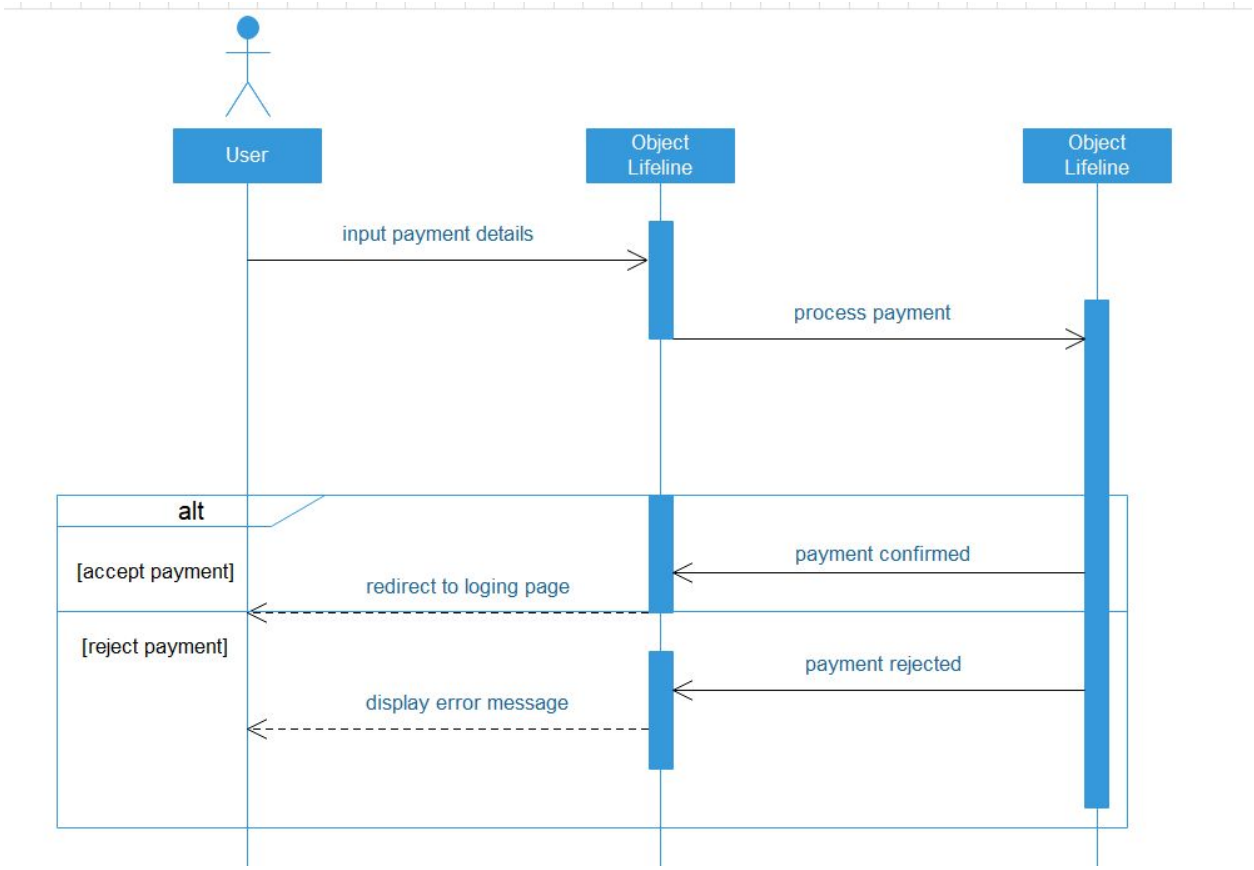
Send notification



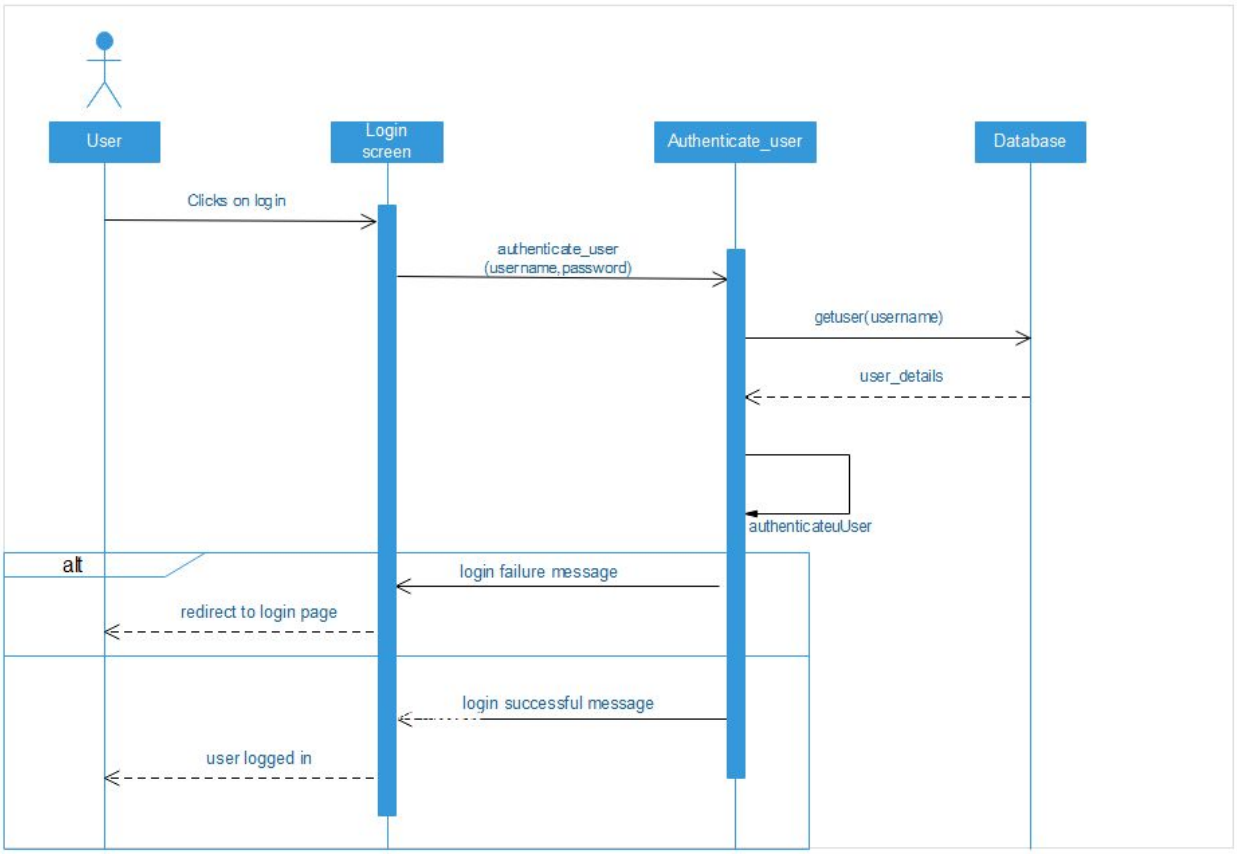
Remove member



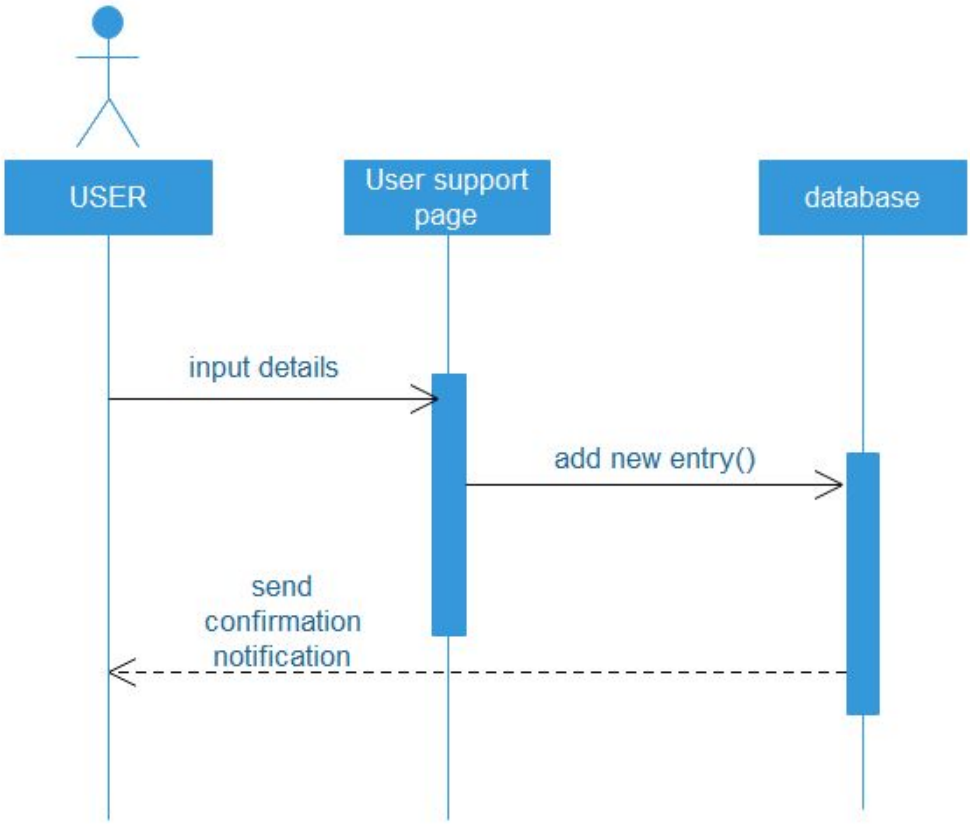
Payment method



Log-IN

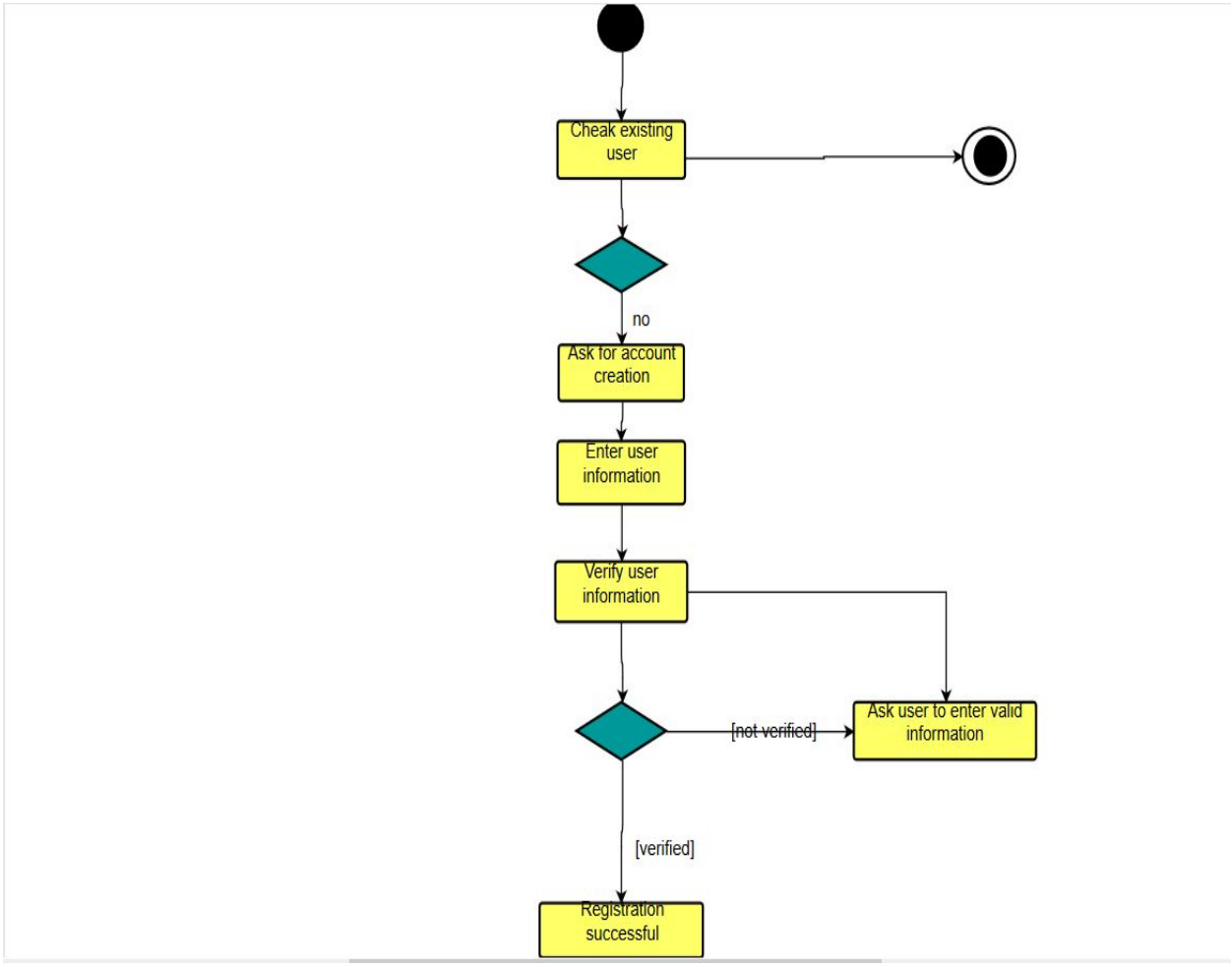

User
Login screen
Authenticate_user
Database
Clicks on login
authenticate_user (username,password)
getuser(username)
user_details
authenticateuUser
alt
login failure message
redirect to login page
login successful message
user logged in

User support

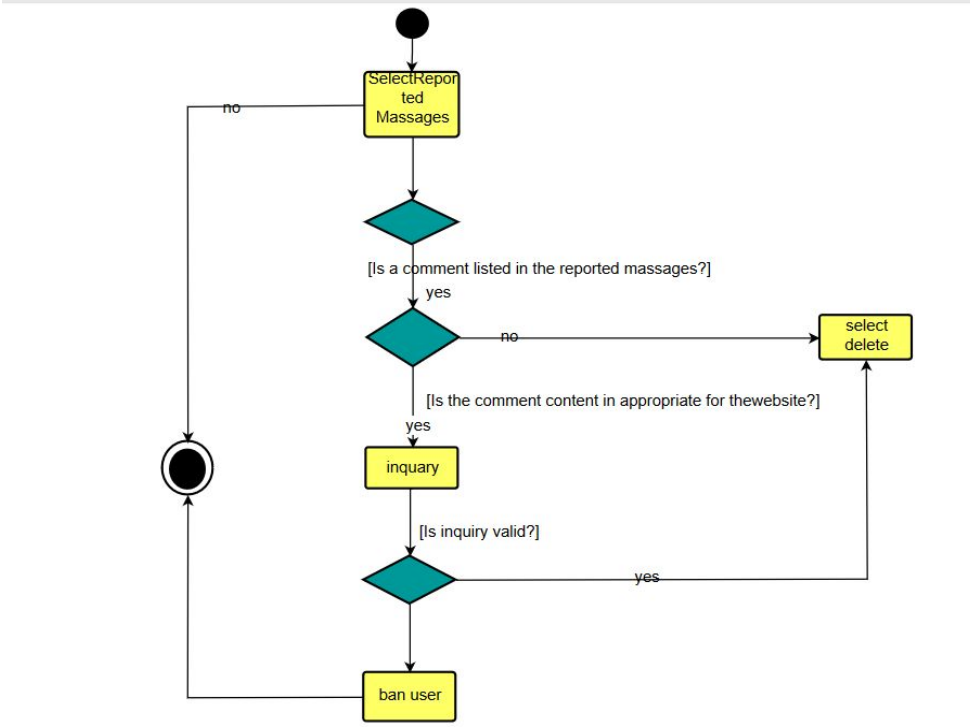


Activity Diagram

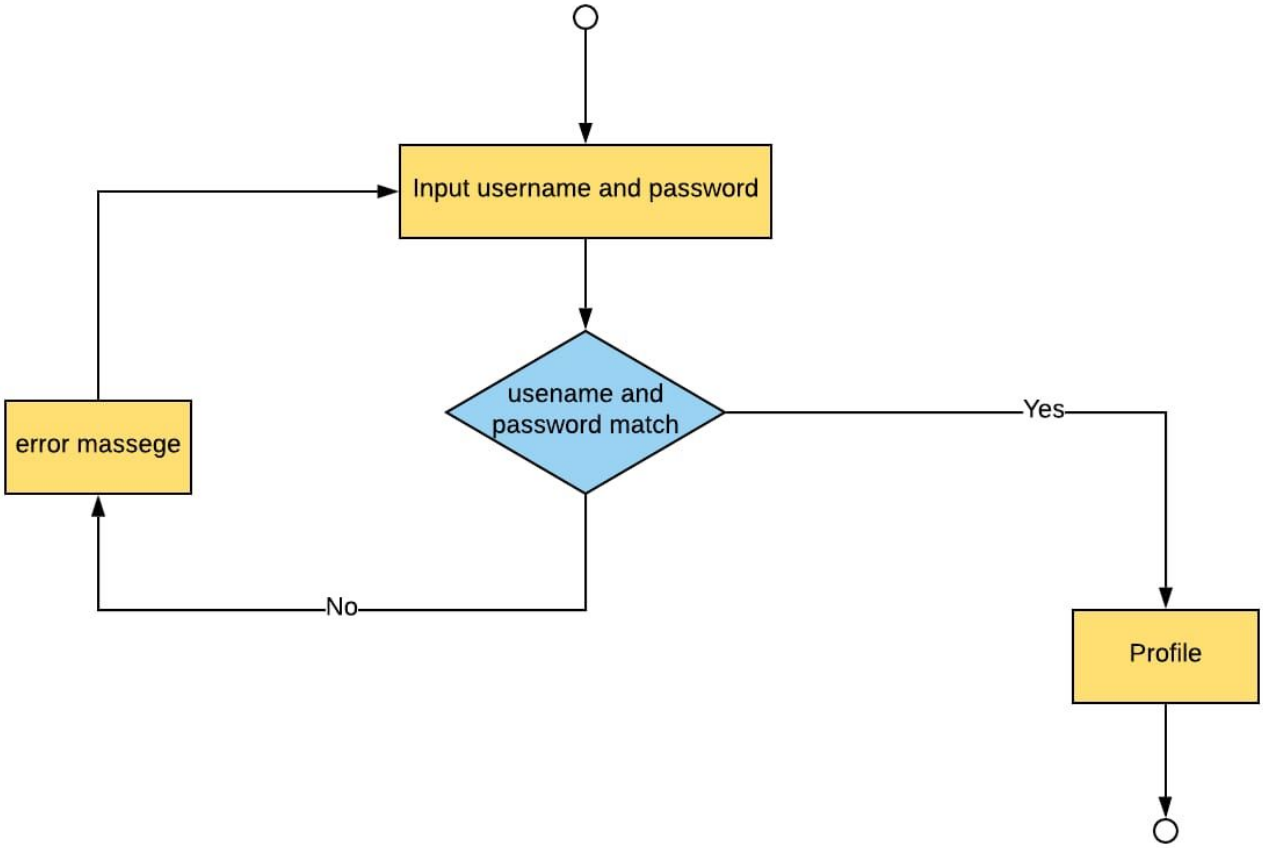
User registration



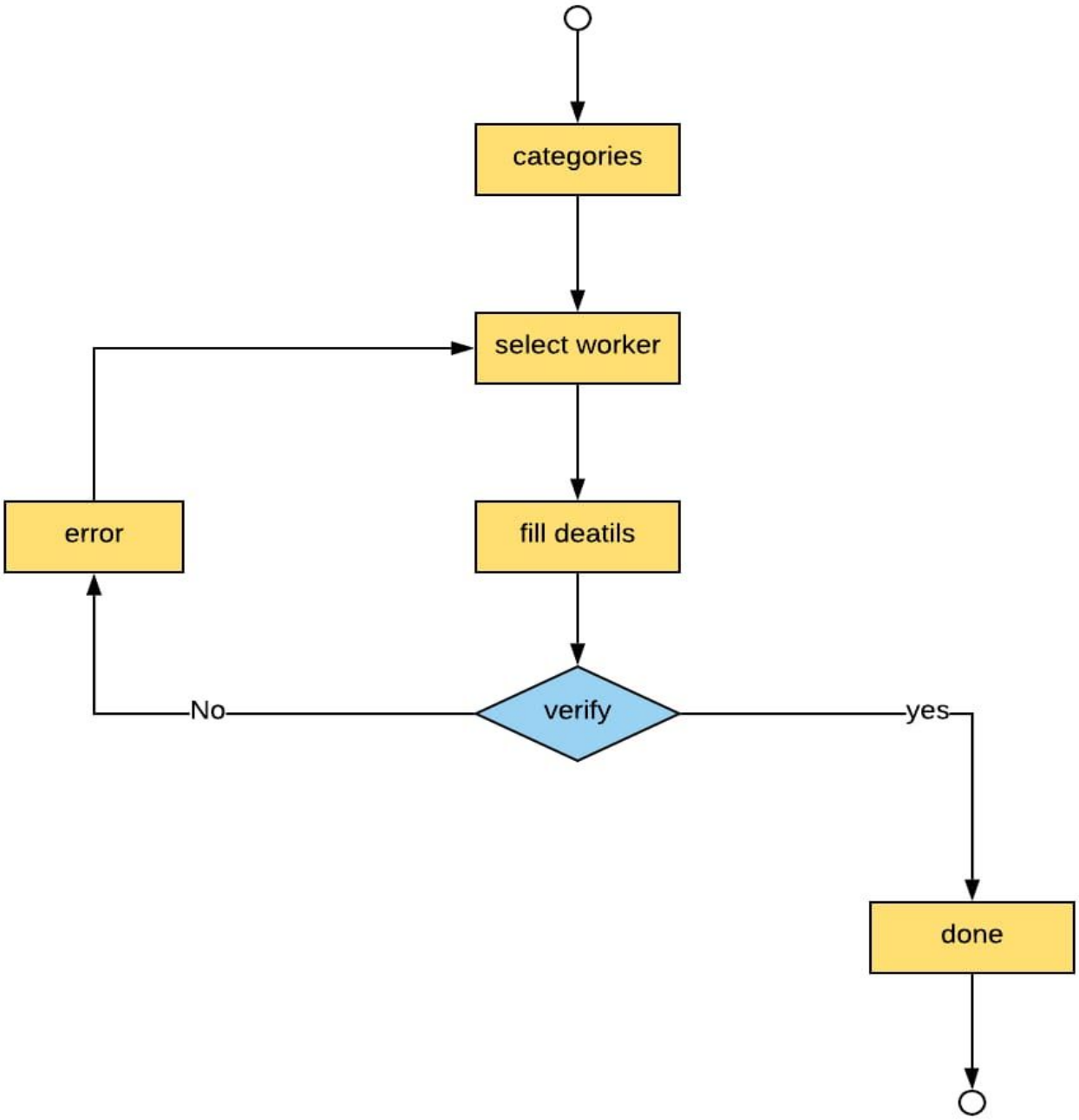
Report and remove user



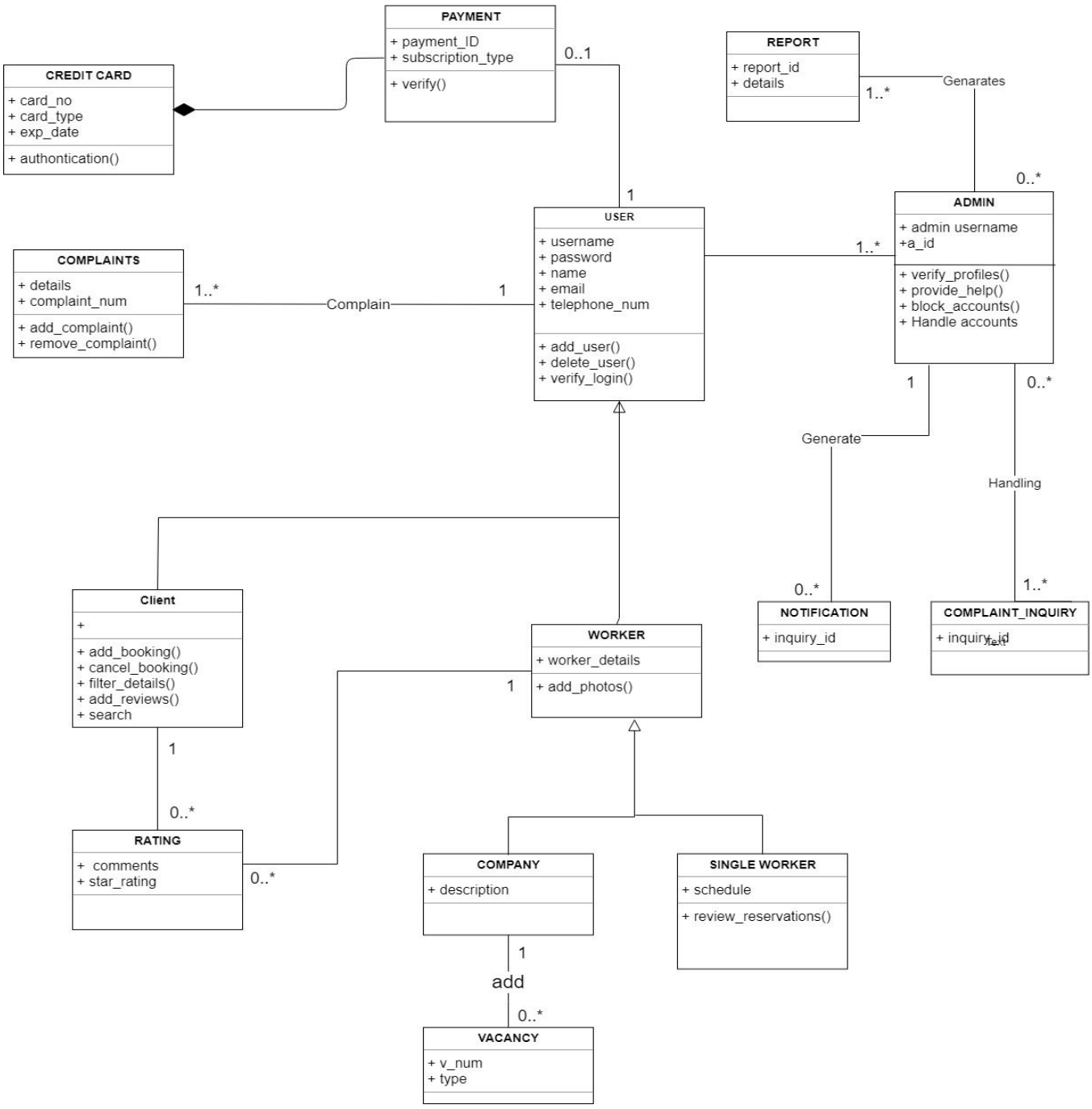
Login


Input username and password
usename and password match
Yes
No
error massege
Profile

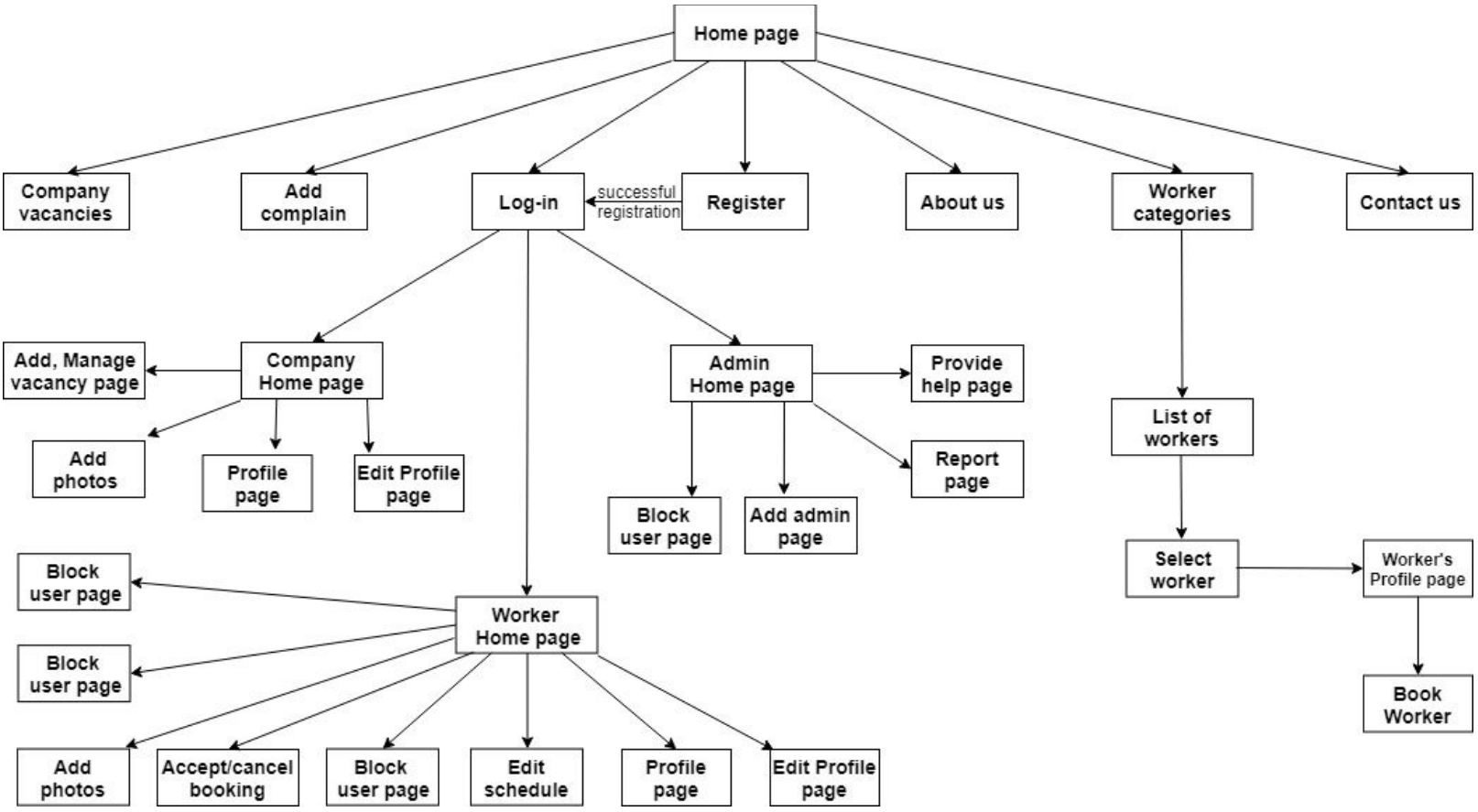
Book-worker


categories
select worker
fill deatils
verify
No
yes
error
done

Class Diagram



UI flow diagram

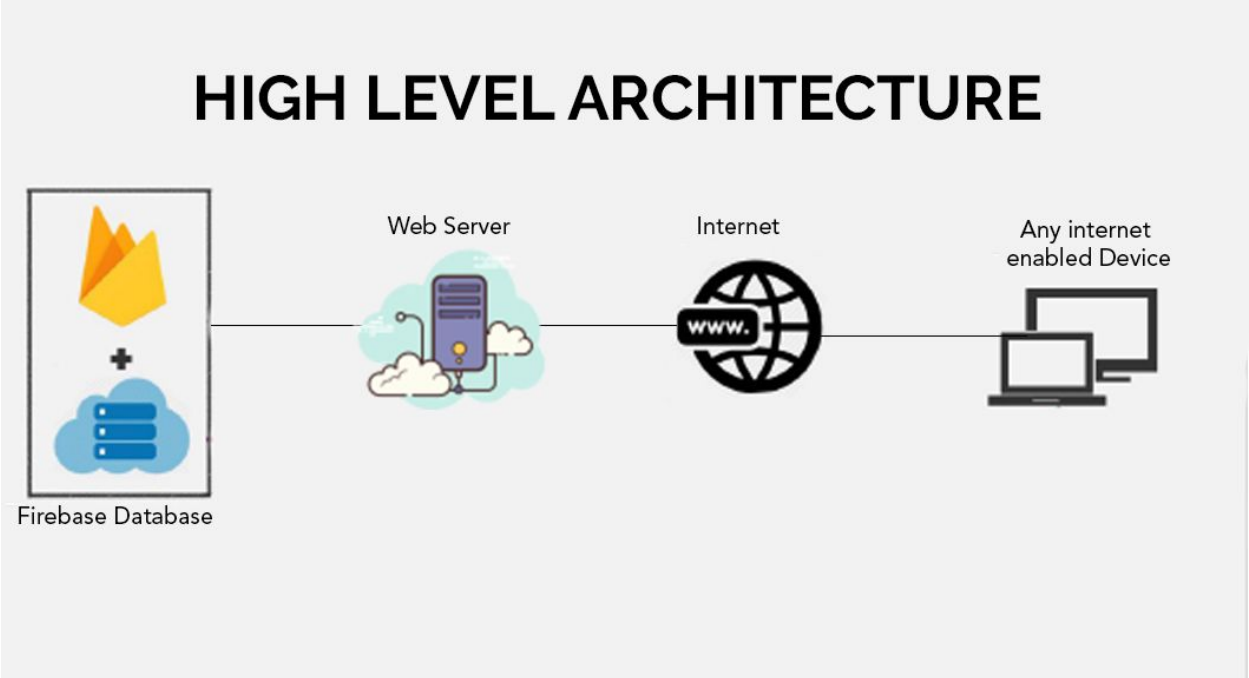


Proposed System Architecture

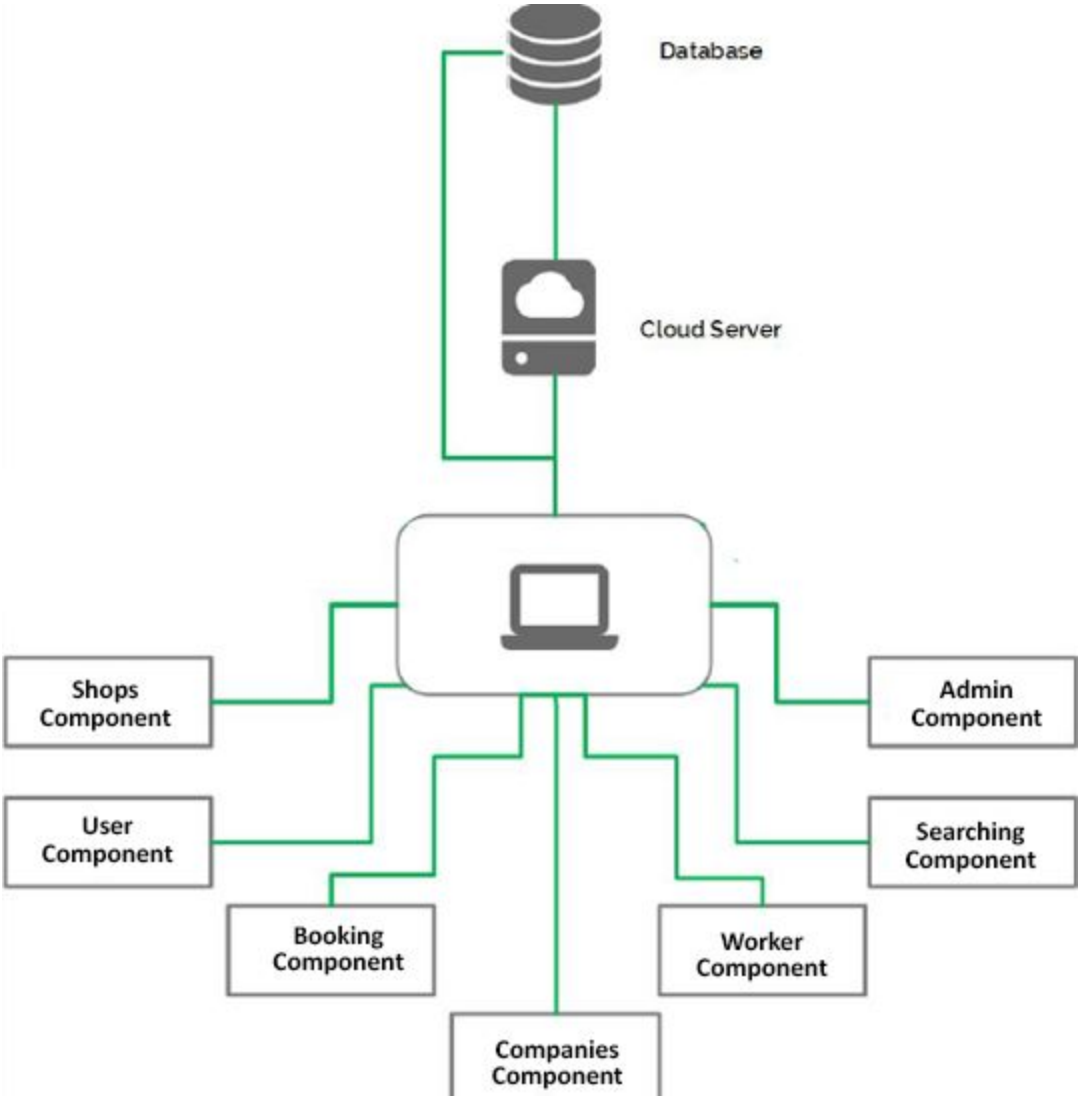
High-Level Architecture

Diagram of the high-level architecture of e-bass.lk

As seen in the below diagram, web application requires network connectivity. The web app will go through the Dedicated Server. as the web app is hosted in that server. Ultimately, the application connects to the Google Firebase Database which is a cloud-based database which acts as the back-end for the whole system. The application communicates with firebase using API calls.



Component Interactions



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