BASELIOS POULOSE II CATHOLICOS COLLEGE BASELIOS MOUNT, PIRAVOM

Accredited with 'A' Grade by NAAC

(Affiliated to Mahatma Gandhi University)

DEPARTMENT OF COMPUTER APPLICATIONS



2018-19

Project Report

On

"Quick Fix"

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Project Report

on
"Quick Fix"

Submitted in partial fulfilment of the Requirements for the award of the degree of BACHELOR OF COMPUTER APPLICATION

Guided by: Dr.Jeeva Jose
(Dept. of Computer Applications)

Submitted by:

Glen S Abraham(160021108965)

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PIRAVOM



DEPARTMENT OF COMPUTER APPLICATIONS **Certificate**

Department Seal

This is to certify that the Project on "Quick Fix" submitted in partial fulfilment for the award of the degree of BACHELOR OF **COMPUTERAPPLICATION** is a bonafide report of the seminar done by Glen S Abraham(RegNo.160021108965), during the year 2018-19.

Internal Guide:	Head of the Department
Dr. Jeeva Jose	Prof. Kurian M J
Examiners:	

College seal

DECLARATION

I hereby declare that this Project report entitled "Quick Fix" is a record of original work done by us under the guidance of Dr. Jeeva Jose, Assistant Professor, Department of Computer Applications and the work has not formed the basis for the award of any degree or diploma or similar title to any candidate of any university subject.

Internal Guide

Signature of Student

Dr. Jeeva Jose

ACKNOWLEDGEMENT

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With immense pleasure we take this opportunity to record out sincere thanks to the Head of the Department Prof. **Kurian M J**, Asst. Professor, Department of Computer Applications for the support

Last but not the least, I also express my gratitude to all other members of the faculty and well wishers who assisted me in various occasions during the project work.

:-Glen S Abraham

ABSTRACT

Quick Fix is a progressive web application to provide a platform for coordination of labour and services online. There are two classes of users,(1) common user and the (2) labourer. The common user can make requests for basic home services such as plumbing, wiring, cleaning etc followed by the location and the budget. All the labourers will then receive notification based on the service-requested and locations, ie for instance a user posts a request for a plumber in ernakulam, all the plumbers registered within ernakulam will be notified about the job. The labourer can respond to the notification by placing a bid on the budget of the job.

The technology used for the app will be

- (1) Front End:
- HTML5
- CSS
- JavaScript
- Bootstrap
- (2) Backend
- PHP
- Mysql

This application will eliminate the difficulty in finding skilled labour. It also ensures the proper distribution of jobs and eliminate the influence of third party labour agencies. It ensures the availability common services at the finger tips of the user.

TABLE OF CONTENTS

1. SYSTEM ANALYSIS	1
1.1. EXISTING SYSTEM1	
1.2. PROPOSED SYSTEM1	
1.3. SOFTWARE REQUIREMENTS SPECIFICATIONS3	;
1.4. FEASIBILITY ANALYSIS6	
1.5. DATA FLOW DIAGRAMS7	
	_
2. SYSTEM DESIGN 14	
2.1. MODULE DESCREPTION1	4
2.2. INPUT DESIGN1	5
2.3. DATABASE DESIGN1	5
2.4. OUTPUT DESIGN	8
3. <u>SYSTEM TESTING</u> 1	8
3.1. UNIT TESTING	8
3.2. INTEGRATION TESTING1	9
3.3. VALIDATION TESTING1	9
3.4. OUTPUT TESTING	9
4 <u>IMPLEMENTATION</u> 1	9
4.1. SYSTEM DESCRIPTION19	9
4.2SYSTEM IMPLEMENTATION2	20

5. MAINTENANCE	20
6. <u>CONCLUSION</u>	21
7. <u>APPENDIX</u>	23
7.1. LANDING PAGES	23
7.2. REGISTRATION PAGES	24
7.3. LOGIN PAGES	25
7.4. USER PANEL	26
7.5. WORKER PANEL	29
7.6. ADMIN PANEL	32
8. BIBLIOGRAPHY	35

1. SYSTEM ANALYSIS

System analysis is a detailed study of the various operations performed by a system and their relationships within and outside the system. One aspect of the analysis defines the boundaries of the system and whether or not a candidate should consider other related system. During analysis data is collected from the available files, decision points, and transactions handled by present system. This project mainly aims to develop an application for the administrator of the company to handle their day to day operation in an easy way.

1.1. EXISTING SYSTEM

There are many solutions that provide some of the functionality of this project. Most of which are paid services or middle agencies who recruit labourers to work for them under low wages with moderately high commission rates. Also there are some ad based services which may take time to get noticed and responded.

Disadvantages of Existing System

- Most services are paid.
- Takes time to notice and respond.
- Moderate knowledge of System is required.
- Distribution of work is inconsistent.

1.2.PROPOSED SYSTEM

The proposed System will solve some the problems of the existing system in a cost effective manner. The major advantage of the system is the responsive and user friendly design which can be used by anyone with minimum computer knowledge. The services offers are free of cost. Usage of this app eliminates the middles agencies providing a direct link between the client and the labourer. The app is a location based service thus there is equal opportunity for the workers in location to find and request for jobs.

Product modules:

1. Landing Module

- Directs user to register as various entities
- Lead user to corresponding section

2. User Module

- Register with proper credentials
- Post and track jobs
- Edit account
- Contact labourer

3. Worker Module

- Register with proper credentials
- Search jobs
- Bid or track on jobs
- Edit profile
- Contact client

4. Administrator module

- Check on the credentials of users
- Approve or disprove workers
- Track works
- List, ban or allow users
- Track complaints

Advantages of Proposed System

The various functionalities of the system are divided into four modules. All these three modules perform different functions but all these functionalities performed on the data provided by the users.

The user first enters the landing page where he/she can decide the type of registration to be done.ie as a common user or a worker. Then the user is redirected to the corresponding modules according to the registration. The administrator can verify the worker details and approve or disprove his account. The verification of the user account is done via email. The common user can then post service requirements, view

offers, fix the offers contact workers and track completed jobs, whereas the worker can search for job opportunities and bid offers. If confirmed the contact of the client is shared with the worker. The admin can ban or approve users, list them and keep track of the ongoing works as well as the completed ones.

- A flexible, scalable infrastructure management platform has been architected and a prototype implemented
- Easy to handle
- Making transactions easily
- Stable of cost structure

1.3.SOFTWARE REQUIREMENT SPECIFICATION

Software Specification

- a) Operating System: Cross-platform
- b) Front End:
 - HTML5
 - CSS
 - JQuery
 - Bootstrap
- c) Back End: PHP
- d) Database: MySQL

Front End

a. HTML5 (Hyper Text Markup Language)

HTML is used for creating web pages. It describes the structure of web pages using markup. HTML elements are the building blocks of HTML pages. These elements are represented by tags.

b. CSS (Cascading Style Sheets)

CSS stands for Cascading Style Sheets.CSS describes how HTML elements are to be displayed on screen, paper, or in other media.CSS save

a lot of work. It can control the layout of multiple web pages all at once. External style sheets are stored in CSS files.

c. jQuery

The purpose of jQuery is to make it much easier to use JavaScript on your website. jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code. jQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

d. Bootstrap

Bootstrap is a free front-end framework for faster and easier web development.Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins.Bootstrap also gives you the ability to easily create responsive designs

Back End

PHP (Hypertext Pre-processor)

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. Originally created by RasmusLerdorf in 1994, the PHP reference implementation is now produced by The PHP Group. It is a widely-used, open source scripting language. PHP script is executed on the server.PHP files can contain text, HTML, CSS, JavaScript and PHP code. PHP code is executed on the server, and the result is returned to the browser as plain HTML. PHP files have extension ".php".

PHP can generate dynamic page content. It can create, open, read, write, delete, and close files on the server, collect form data, send and receive cookies, add, delete, modify data in your database, used to control user-access and encrypt data. The main features of PHP are it runs on various platforms (Windows, Linux,

UNIX, MacOS X, etc.), compatible with almost all servers used today (Apache, IIS, etc.), supports a wide range of data bases and easy to learn and run efficiently on the server side.

Database

MySQL Server

MySQL is an open source relational database management system that runs as a server providing multi-user access to a number of databases. The SQL phrase **stands** for Structured Query language. MySQL is the de-facto standard database system for web sites with HUGE volumes of both data and end-users (like Facebook, Twitter, and Wikipedia). Another great thing about MySQL is that it can be scaled down to support embedded database applications. The most important aspects of MySQL Server are:

- ➤ MySQL is a database system used on the web.
- MySQL uses standard SQL.
- > MySQL compiles on a number of platforms.
- ➤ MySQL is a database system that runs on a server.
- ➤ MySQL is ideal for both small and large applications.
- MySQL is very fast, reliable, and easy to use.

A database system is an overall collection of different database software components and database containing the part viz. Database application programs, front-end components, Database management system must provide the following features:

- ➤ A variety of user interfaces.
- Physical data independence and Logical data independence.
- Query optimization.
- > Data integrity.
- Concurrency control.

- Backup and recovery.
- > Security and Authentication

When creating a database, the main concept is to know how the database is structured in MySQL. It is a language that enables us to create and operate on a relational database, which are set of relational information stored in tables. Because of its elegance relational database technology, SQL has become the standard language are will remain as it is for the foreseeable future.

There are two types of SQLs interactive and embedded. Interactive SQL is used to operate directly on a database to produce output for human consumption. Embedded SQL consists of SQL commands put inside of programs that are mostly written in some other languages such as COBOL, Pascal and C etc. This can make programs more powerful and efficient. The functional categories of SQL commands consist of DDL and DML.

1.4.FEASIBILITY ANALYSIS

The feasibility of designing the system is determined by evaluating alternate methods of converting available data into the required outputs to fulfil the system objectives. Each of these alternate methods is termed as candidate system. The constraints unique to each candidate are stored.

Candidate systems are evaluated by identifying factors that significantly affect system cost & performance & by ranking each candidate in terms of these factors. Typical factors are development cost, operating cost, response time, development time, accuracy; reliability. It is a study to determine whether the proposed system is technically, economically and behaviourally feasible in all respects.

a) Economic Feasibility

Economic analysis is the most frequently used method for evaluating the effectiveness of the candidate system. The cost-benefit analysis is done, a procedure to determine the benefits and savings those is expected from a candidate system and compare them with cost. The selected candidate system is economically feasible.

Proposed system is developed with the available resources. Since cost input for the software is almost nil the output of the software is always a profit. Hence this proposed system, number of employees to be evolved is reduced drastically. So, the proposed system is said to be feasible.

b) Technical feasibility

Technical feasibility centers around the existing computer system and to what extend it can support the proposed addition. A study of function, performance and constraint that may effect to the ability to achieve an acceptable system is done.

In the proposed system data can be easily stored and managed using database management system software. The result of various queries can be generated easily. Therefore the system is technically feasible.

c) Operational Feasibility

Proposed projects are beneficial only if they can be turned into information systems that will meet the organization's operating requirements. This test of feasibility asks if the system will work when it is developed and installed.

There was no difficulty in implementing the system and the proposed system is so effective, user friendly and functionally reliable so that the user will find that the new system reduce their hard-steps.

d) Behavioural Feasibility

People are inherently resistant to changes and computer is known for facilitating the changes. An estimate should be made of how strongly the user reacts towards the developments of the computerized system.

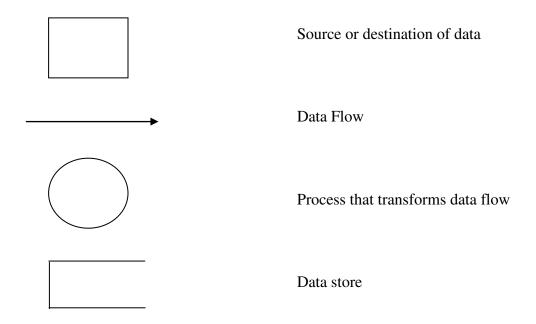
In the existing system data availability was somewhat limited and also the full experience was not recorded. Thus, the system is behaviourally feasible.

1.5.DATA FLOW DIAGRAM

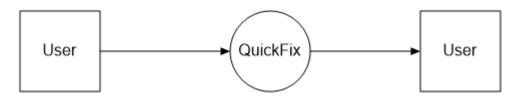
A Data Flow Diagram is a network that describes the flow of data & processes that change or transforms data throughout the system. The network is constructed by using a set of symbols that do not imply a physical implementation. It is a graphical tool for structured analysis of the system requirements DFD models a system by using external entities from which data flows to a process, which transforms the data & creates output data flows which go to other processes or external entities or files. Data in files may also flow to process as inputs.

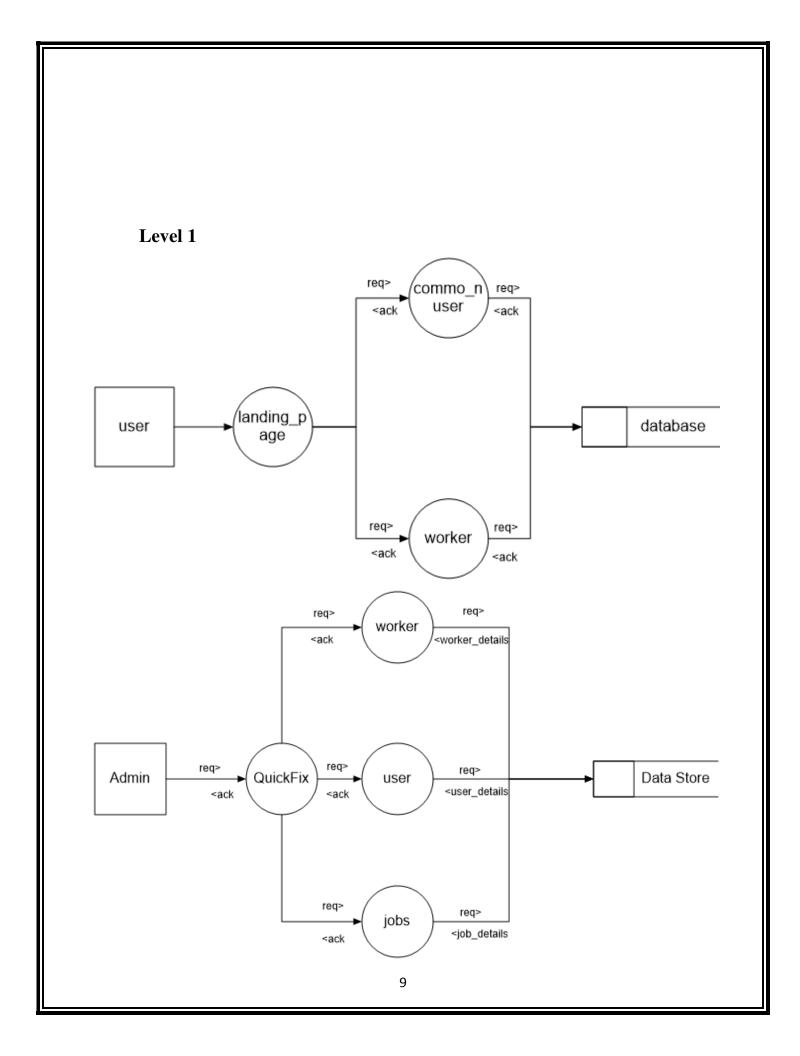
There are various symbols used in a DFD. Bubbles represented by rectangles. Named arrows indicate the data flow. External entities are represented by rectangles & are outside the system such as venders or customers with whom the system interacts. They either supply or consume data are called sinks. Data are stored in a data by a process in the system. Each component in a DFD is labelled with descriptive name. Process names are further identified with a number.

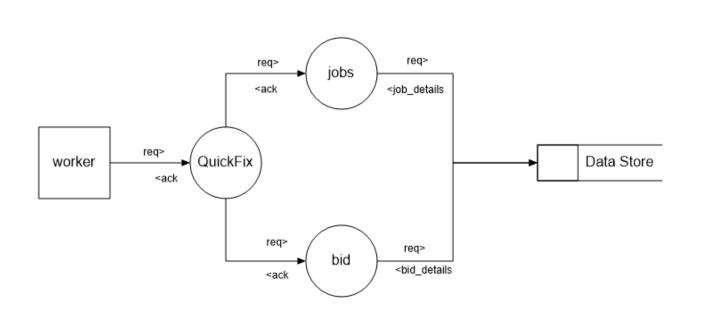
Symbols used in DFDs are

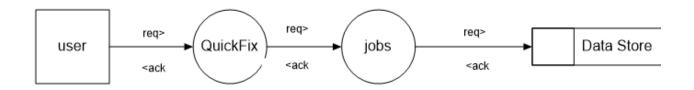


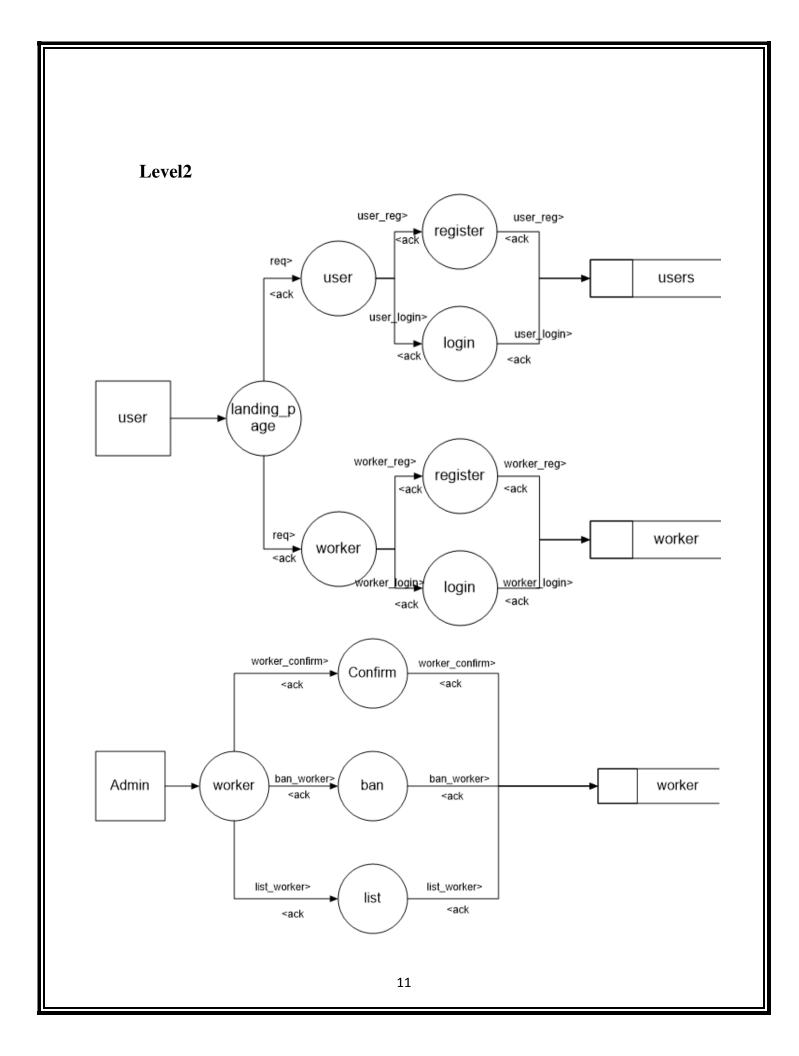
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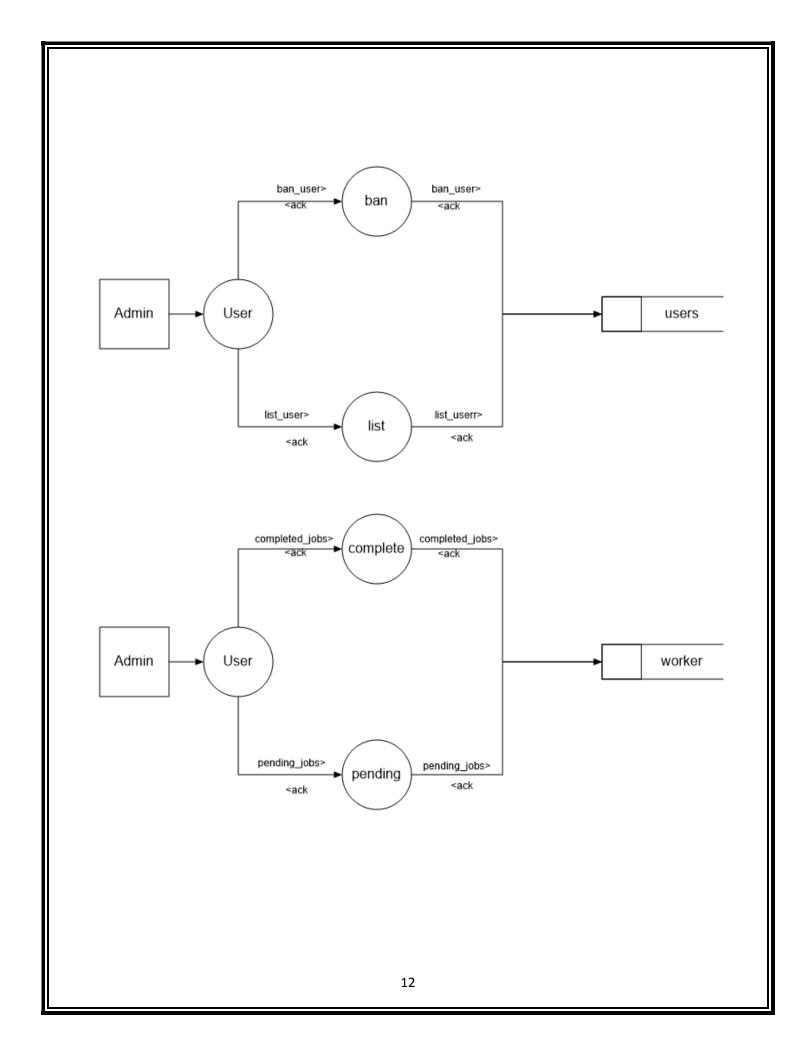


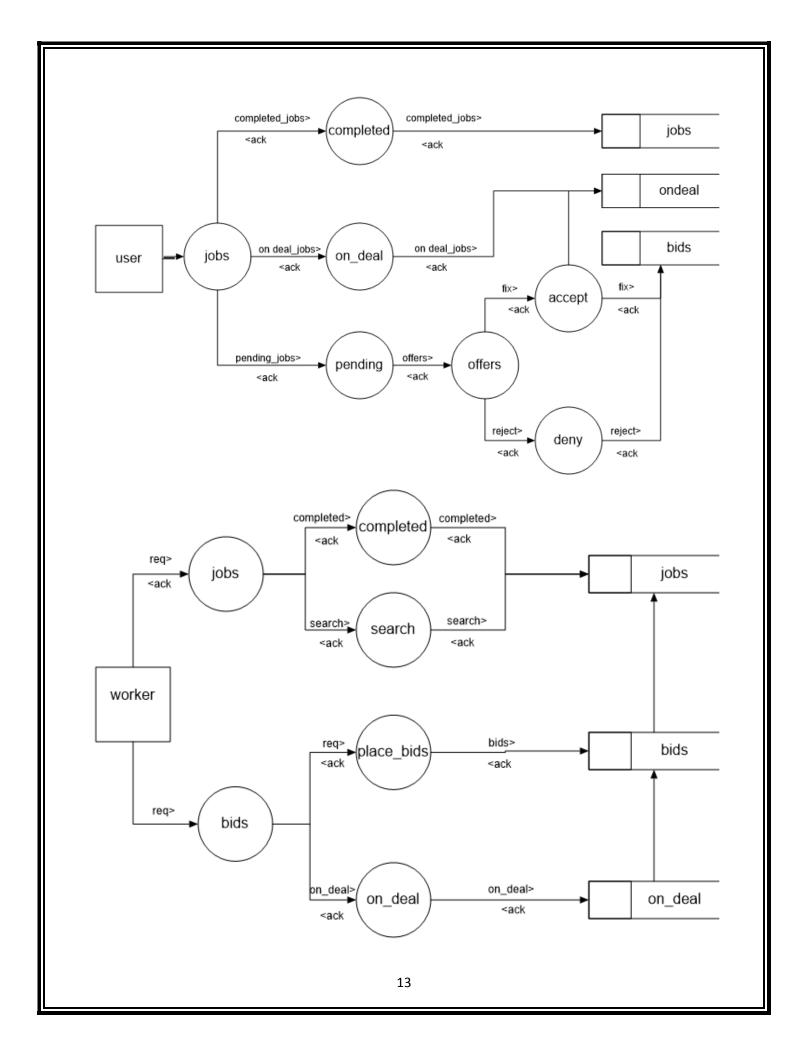












2. <u>SYSTEMDESIGN</u>

System design's main aim is to identify the modules that should be in the system, & the specification of these modules & how they interact with each other to produce the desired results. At the end of the system design all the major data structures, file formats & the major modules in the system & their specification are decided.

2.1. MODULE DESCRIPTION

a) Landing and Registration Module

This is the main page of the application where the users are directed to the various sections. It holds the registration and login modules for various classes of users. Common users and workers can register in to this application. The Workers verified by the admin. At the time of registration, individual profiles are created for each user and notifications are updated email.

b) Login

The users can login to their respective panels using their credentials. There are three user levels to log into Admin, User and Worker

c) Admin Panel

The administrator can view requests, list the various users, ban users and view the status of works presently in the system

d) User Panel

The registered common users can make use of this module to post requirements, see offers and hire labourers. They can also keep track of the recent hires.

e) Worker Panel

The registered workers can now view and locate jobs, bid on them and get hired.

The worker can also keep track of the recent works done.

2.2. <u>INPUT DESIGN</u>

Input is the process of converting user inputs into computer based format. The project requires a set of information from the user to prepare a report. In the order, when organized input data are needed.

In the system design phase, the expanded DFD identifies logical data flow, data stores and destination. Input data is collected and organized into groups of similar data. The goal behind designing input data is to make the data entry easy and make it free from logical error. The input entry to all type of clients is the username and password. If they are valid the client is allowed to enter into the software.

Objectives:

- ✓ To produce a cost-effective method of input.
- ✓ To achieve the highest possible level of accuracy.
- ✓ To ensure that the input is acceptable and understandable.

In the application 'QuickFix', interactive input screens ensure the reliability and accuracy of the system. All data entry screens should be of interactive nature so that the user can directly input data according to prompt message. The input design determines whether the user can interact directly with the computer. Without input design, we can say that it is more user friendly as compared to the existing manual system containing paper operations.

2.3. <u>DATABASE DESIGN</u>

1. Table Name :admin

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	admin_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	username	varchar(20)	latin1_swedish_ci		No	None		
3	password	varchar(20)	latin1 swedish ci		No	None		

2. Table Name: users

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	user_id 🔑	int(5)			No	None		AUTO_INCREMENT
2	user_name	varchar(30)	latin1_swedish_ci		No	None		
3	email	varchar(30)	latin1_swedish_ci		No	None		
4	mobile	bigint(15)			No	None		
5	password	varchar(30)	latin1_swedish_ci		No	None		
6	address1	varchar(30)	latin1_swedish_ci		No	None		
7	address2	varchar(30)	latin1_swedish_ci		No	None		
8	city	varchar(30)	latin1_swedish_ci		No	None		
9	state	varchar(30)	latin1_swedish_ci		No	None		
10	pin	int(8)			No	None		
11	verified	int(11)			No	0		

3. Table Name: worker

Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
worker_id 🔑	int(11)			No	None		AUTO_INCREMENT
user_name	varchar(30)	latin1_swedish_ci		No	None		
email	varchar(30)	latin1_swedish_ci		No	None		
mobile	bigint(11)			No	None		
password	varchar(30)	latin1_swedish_ci		No	None		
address1	varchar(50)	latin1_swedish_ci		No	None		
address2	varchar(50)	latin1_swedish_ci		No	None		
city	varchar(30)	latin1_swedish_ci		No	None		
state	varchar(50)	latin1_swedish_ci		No	None		
pin	int(11)			No	None		
work	varchar(50)	latin1_swedish_ci		No	None		
verified	tinyint(1)			No	0		

4. Table Name: jobs

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	job_id 🔑	int(5)			No	None		AUTO_INCREMENT
2	user_id	int(5)			No	None		
3	title	varchar(30)	latin1_swedish_ci		No	None		
4	service	varchar(30)	latin1_swedish_ci		No	None		
5	location	varchar(30)	latin1_swedish_ci		No	None		
6	descreption	varchar(50)	latin1_swedish_ci		No	None		
7	status	varchar(30)	latin1_swedish_ci		No	pending		

5. Table Name: bids

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	bid_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	job_id	int(11)			No	None		
3	worker_id	int(11)			No	None		
4	amount	int(11)			No	None		

6. Table Name : on_deal

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	deal_id 🔑	int(5)			No	None		AUTO_INCREMENT
2	job_id	int(5)			No	None		
3	worker_id	int(5)			No	None		
4	user_id	int(5)			No	None		
5	amount	int(5)			No	None		
6	status	varchar(20)	latin1_swedish_ci		No	pending		

2.4. OUTPUT DESIGN

It is the part of overall system design. The goal of the output design is to capture the output and get the data into format suitable for the computer. Data flow diagram identifies the data tone captured and the output to the system. One of the important features of an information system for users is the output it produces. Output is the information delivers to the users delivered to the users through the information system. Without quality output the entire system appears to be unnecessary that users will avoid using it. Users generally merit the system solely by its output in order to create the most useful output possible. One works closely with the user through an interactive process, until the result is considered to be satisfactory.

3. SYSTEM TESTING

Software testing is a critical element of software quality assurance and represents the ultimate reviews of specification, design and coding. Testing presents an interesting anomaly for the software. Testing is vital to the success of the system. Errors can be injected at any stage during development. System testing makes a logical assumption that if all the part of the system is correct, the goal will be successfully achieved.

During testing the program to be tested is executed with set of test data and the output of the test data is evaluated to determine if the program is performing as expected. A series of testing are performed for the proposed system before the system is ready for user acceptance testing.

3.1 Unit Testing

In this different modules are tested against the specification produces during the design of the modules. Unit testing focuses on the modules independently of one another to locate errors. In this application each modules are tested individually and may caught errors such as save same data two times, does not clear the fields after the save etc. Also validation is not properly done. These errors may clear under unit testing.

3.2 Integration Testing

All modules are combined in these testing steps. In the integration testing step, all the errors uncovered are corrected for the next testing step. At integration testing there is an error at the time of linking one page to another page.

3.3 Validation Testing

At this phase each pages in a recipe book check that the validation is done properly. In this application proper validation is done for email id phone number, name etc. The data is submitted only if the value entered is according to that particular validation.

3.4 Output Testing

At this phase, check whether the output that are displayed are according to our expectations. The application is tested for valid display of the various details that each particular page is intended to display.

4. IMPLEMENTATION

4.1. <u>System Description</u>

Coding Standards

Coding conventions are a set of guidelines for a specific programming language that recommend programming style, practices and methods for each aspect of a piece program written in this language.

Purpose

Coding conventions are import to programmers and web developers for a number of reasons.

- 1. They improve the readability of software artifacts.
- 2. They reduce training management and effort.
- 3. They leverage organizational commitments towards standardization.

Major coding standards

Naming conventions: Apply naming conventions make your web component elements easier to identify, classify and coordinate in project.

4.2. System Implementation

It is the stage in the project where the theoretical design is turned in to working system & is giving confidence on the new system for the users that it will work effectively and efficiently. It involves careful planning, investigation of the current system and is implemented, design of methods to achieve change over, an evaluation of change over methods.

Implementation is the final & important phase. The system can be implemented only after trough testing is done & it is found on working according to specification

The implementation plan includes a description of all activities that must occur to implement the system & to put it into operation. It indicates the personal responsibility for the activities & prepares a time chart fir implementing the system.

The implementation plan consists of the following step.

- List all files required for implementation.
- Identify all data required to build new files during the implementation.
- List all new documents & procedure that go into the new system.

The implemented system has the following features:

- Reduce data redundancy.
- Ease of use.
- Simplifies the management activities.

5. MAINTENANCE

It is an important phase of any system. Maintenance of the system should be done accurately & with specific care for proper running of the system. Maintenance involves the software industry captive, typing up the system resources. It means restoring something to its original condition. It involves a wide range of activities including correcting, coding & design

errors, updating documentation and test data & upgrading user support. Maintenance is also done based on fixing the problems reported, changing the interface with other software or hardware enhancing the software.

Any system developed should be secured & protected against possible hazards. The system should be maintained & upgraded according to the technological advancements. It ensures the data integrity, data control and security. The system must be protected from fire and other natural calamities. The backup copies of data must be maintained daily so that to prevent the data loose.

Software maintenance is divided into the following three categories:

> Corrective maintenance

Corrective maintenance has to do with the removal of residual errors present in the product when it is delivered as well as errors introduced in to the Software during its maintenance.

▶ Adaptive maintenance

Adaptive may be needed because of changes in the user requirements, changes in target platformor changes in external interface.

> Perfective maintenance

Perfective maintenance involves changing the software to improve some of its qualities. The request to perfective maintenance may come directly from the software engineer, In order to improve the status of the product on the marketor they may come.

6. CONCLUSION

'Quick Fix' is an aimed to eliminate the discomfort of finding labour and various services. We can see that the work opportunity generated is accumulated only to a few known workers in an area, also there are some middle agencies who distribute work under a commission which may result in untimely finishing of the work and poor quality service. Thus the app provides a platform where the labourers who offer various services can be hired directly by the users on fixed bids. This app reduce the inconsistent distribution of labour over an area

and provide equal earning opportunities to all the registered workers. The less- complicated, responsive interface helps the users to easily access the application on any preferred device.

Advantages

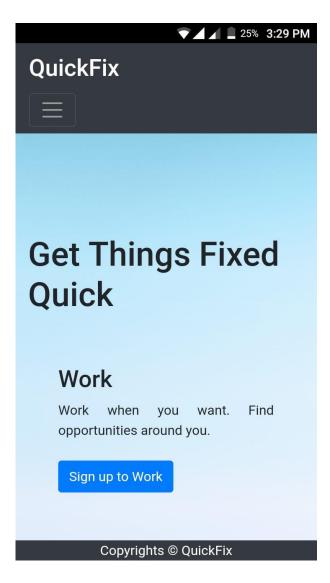
- A flexible, scalable infrastructure management platform has been architected and a prototype implemented
- Easy to handle
- Making transactions easily
- Measurement of resource usage and end user activities lies hands of cloud service provider
- Opaque cost structure due to highly flexible usage of cloud services
- Stable of cost structure

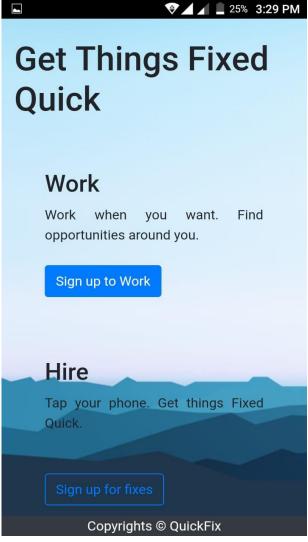
Future Scope

The scope of the system can be modified by making it in to available whole in India with same functionalities.

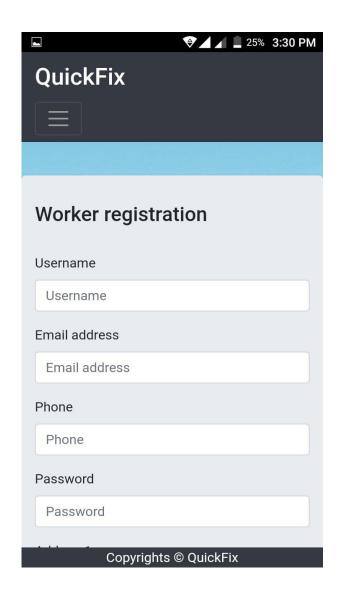
7. APPENDIX

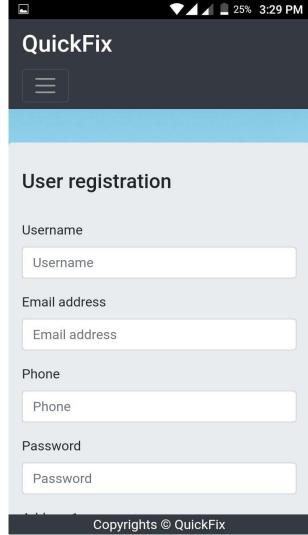
7.1. Landing page



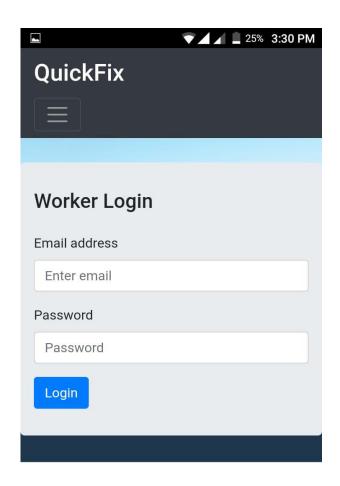


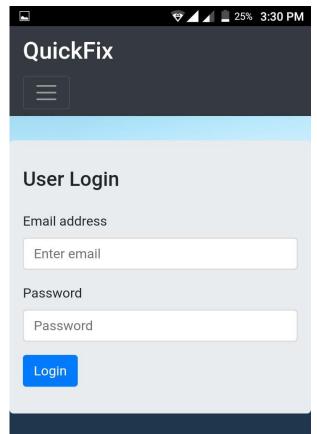
7.2. Registration pages





7.3. Login pages

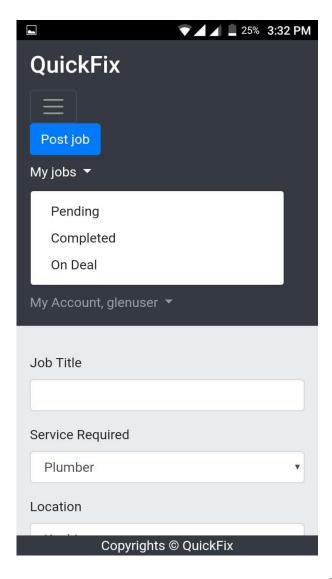


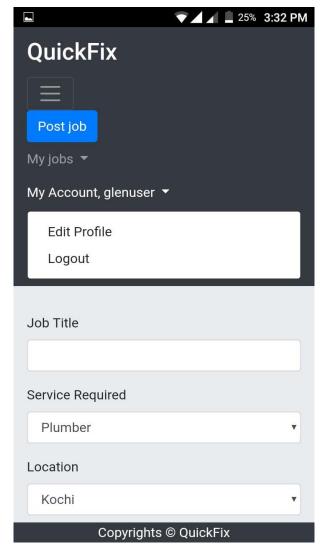


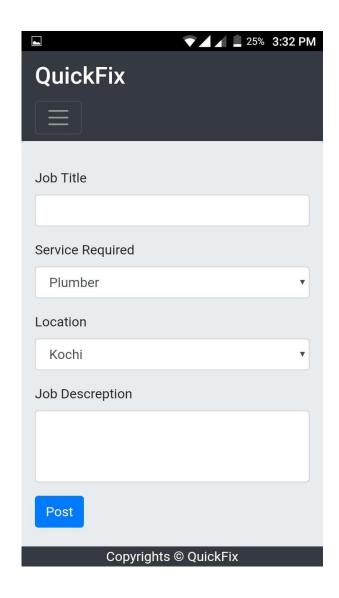
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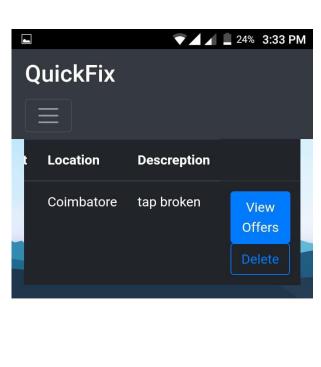
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7.4. User panel

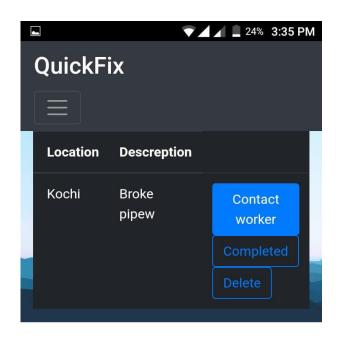


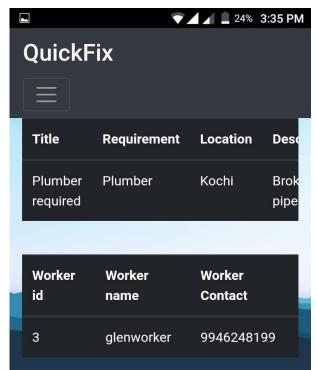






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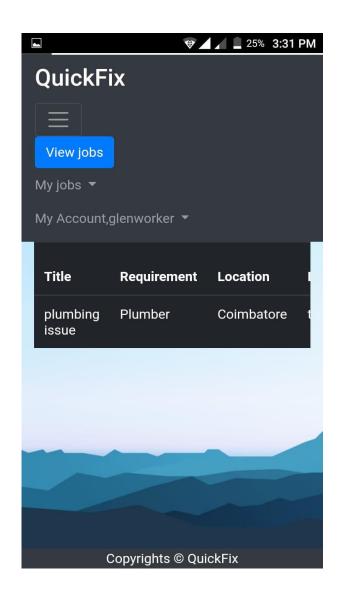


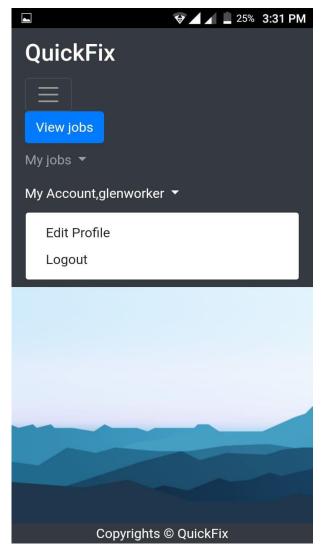


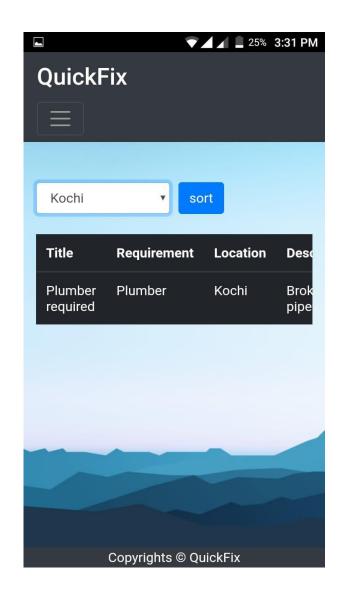
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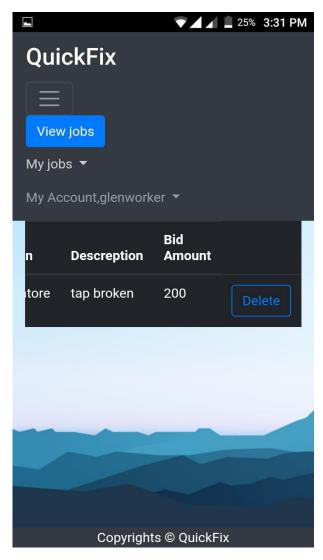
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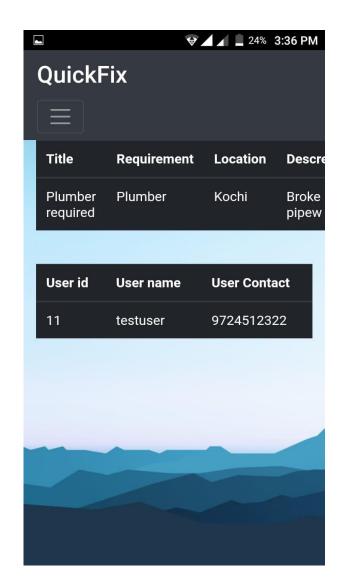
7.5. Worker Panel

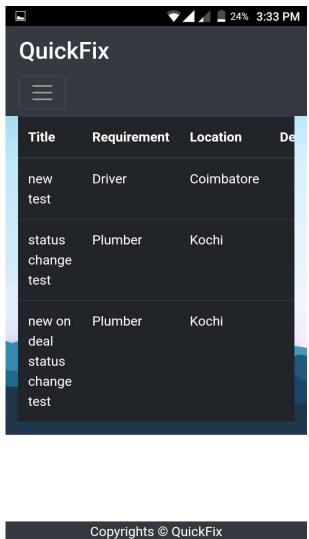




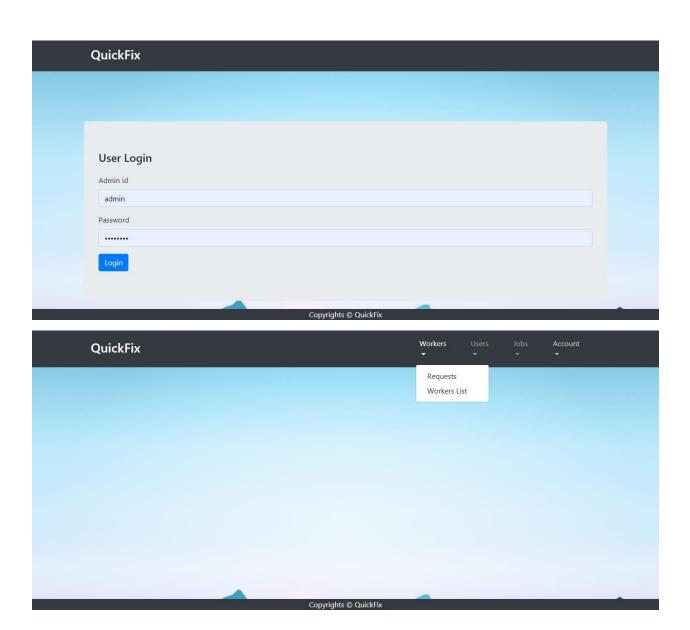


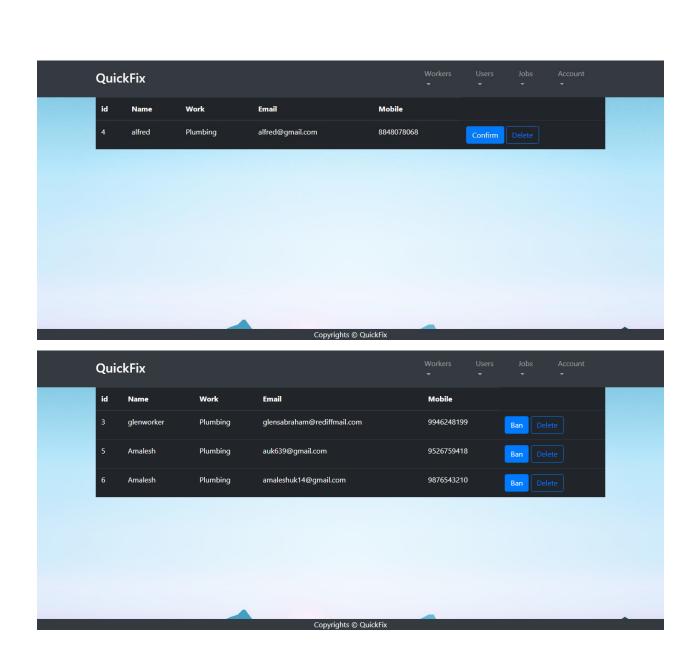


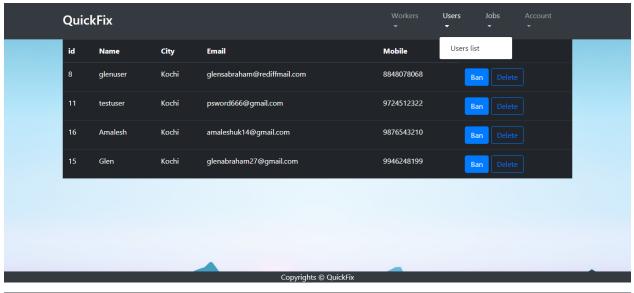


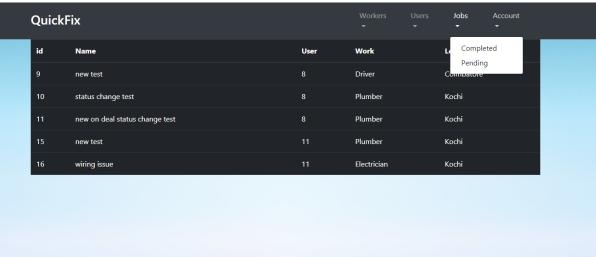


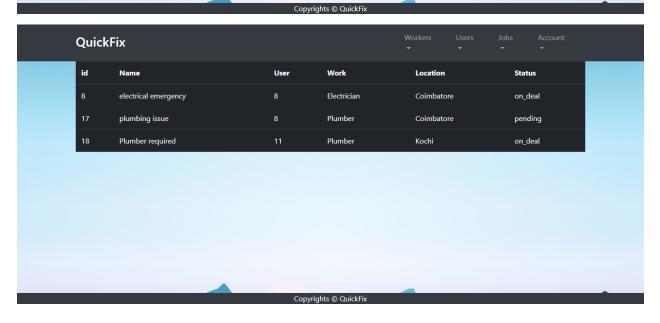
7.6. Admin Panel











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