# Veer Narmad South Gujarat University, Surat.

### M.Sc. (Information Technology) Programme

**Project Report** 

8<sup>th</sup> Semester

# M.Sc. (Information Technology)5 Year Integrated Course

Year 2019 – 2020

"Engiworks"

Guided By: Submitted By:

Ms. Leeba John Rishit Zaveri(000076)

### Certificate

This is to certify that **Mr.** <u>Rishit N.</u> <u>Zaveri</u> Exam Seat Number : <u>000076</u>
has satisfactorily completed his project work entitled "<u>Engiworks</u>" as a partial fulfilment of the requirements for 8<sup>th</sup> *Semester - M.Sc.(Information Technology)* [5 Year course], during the academic Year 2019-2020.

Date : Place :

Course Coordinator M.Sc. (I.T.) Programme. Department of I.C.T V.N.S.G.U, Surat

#### **ACKNOWLEDGMENT**

- It was an educational phase while studying at the Master of Science in Information Technology working with highly devoted computer teacher's community and will probably remain the most memorable experience of our life. Hence this acknowledgement is a humble attempt to earnestly thank all those who were directly or indirectly involved in our project work and were of immense help to us.
- With immense pleasure, we present this report on the project assignment title "Engiworks".
- We take a rather special privilege of thanking our Respected **Ms. Leeba John**, & All the Faculties for making the resources available within the institute for the project work.
- The encouragement and help received from our family members, friends and colleagues cannot be expressed in terms of words. Without their moral support, the work would have been left unfinished.

Project Associate: Rishit Zaveri(000076)

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# 1. Introduction

# 1.1 Project Profile

Engiworks is an online project applying and posting website for the engineers who need helps of different field of engineers to complete their project as per their needs and requirements. This website is built on Java Application with MySql server database.

### **Basic Information:**

Project Title	Scribd
Front End Tools	Java , JavaScript, jQuery and AJAX.
Back End Tools	MySQL SERVER.
Other Tool	HTML5, CSS3, BOOTSTRAP ,JSF.
Project Category	Web Based Application.
Project Associates	Two
Internal Project Guide	Ms. Leeba John
Submitted By	Rishit N. Zaveri.
Submitted To	J.P. Dawer Institute of Information Science and Techonology.

# 2. Proposed System

# 2.1 Scope

- The system serves the end clients to complete their project according to their convenience. The concept of this website is that the user can apply or post the project from home with comfort and also assign the project the user that he/she wishes to assign by simply analyzing the other users which makes the bid on the project.
- ➤ There are many features in the website that can help users to bid on project, according to the user who posted the project will decide to whom he/she wants to assign the project after analyzing the bidders details. It allows users to post reviews, ratings and comments on the respective project.
- ➤ User can send verification request for the project that to be posted on the website.
- ➤ In this system admin is the super user who can manage all the data on the website. He can manage users, verification request, category adding, comments, reviews etc. He can block/unblock, view data and perform various functions on all the data of website.

# 2.2 Objective

- ➤ Provide the system administrator with easy interface for different administrative tasks such as Searching, Addition, Deletion and Updating of different entities.
- ➤ The System should properly maintain user privilege i.e. it should only allow registered users to access certain features, which it should not allow for unregistered users.
- ➤ Only registered users will be able to access all the functionalities.
- ➤ The main objective of the website is to provide an engineers to post their project or to apply for the project as per their requirements according to their task and abilities.
- > Only administrator will have all privileges.

### 2.3 Constraints

#### **2.3.1 H/W Constraints**

- Computer or Laptop needs the power supply.
- ➤ Cannot access through the mobile like Application.
- ➤ Internet connection required.(Through LAN or Modem)

#### 2.3.2 S/W Constraints

➤ Website can slow down for a while if there are so many request at the same time.

# 2.4 Advantages

- > Freedom of clients.
- Control of workload.
- > Independence of doing work whenever and wherever.

### 2.5 Limitations

- ➤ Posts on the website can sometimes be malicious or can be misleading which can be known to the admin only when other users report them to admin of the site.
- Fake users can post projects, which can be malicious.

# 3. Environment Specification

# 3.1 Hardware and Software Spec.

• Hardware Configuration:

<b>Processor:</b>	2.0 GHz Intel Core i3-6006U
Hard Disc:	1 TB
RAM:	4 GB
CD Drive:	Hp DVDRW GUD1N
<b>Key Board:</b>	Standard PS/2 Keyboard
Mouse:	Synaptic SMBus TouchPad
Monitor:	Generic PnP Monitor
<b>Networking:</b>	Lan Card (Must be internet connection) or modem

- <u>Software Configuration</u>:
  - Google Chrome, Mozila Firefox
- Server Configuration:
  - MY-SQLSERVER

# 4 System Planning

# 4.1 Feasibility Study

➤ A feasibility study is an evaluation and analysis of the potential of the proposed project which is based on extensive investigation and research to give full comfort to the decision makers.

### Technical Feasibility:

- A large part of determining resources has to do with assessing technical feasibility. It considers the technical requirements of the proposed project. The technical requirements are then compared to the technical capability of the organization. The systems project is considered technically feasible if the internal technical capability is sufficient to support the project requirements.
- This website is built on java which is a platform independent, tested, robust and efficient to develop such website.

### Operational Feasibility:

- ➤ Operational feasibility is dependent on human resources available for the project and involves projecting whether the system will be used if it is developed and implemented.
- ➤ Operational feasibility is a measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development.

### **Economic Feasibility:**

As development tools and software are already, we own, so there isn't any burden of buying them. The organization doesn't have the same system, so it is certainly required for them. So here we do not need to invest extra funds to develop the system. Thus, it is economically feasible to the organization.

### Time Schedule Feasibility:

- ➤ Projects are initiated with specific deadline. We need to evaluate whether the deadlines are mandatory or desirable. Time is the one of the critical factor in the development of any system but this kind of feasibility is hardly perfect in any system.
- We have been asked to complete the project within the working days of the organization having period of 2 months approximately, so we have managed to complete the project before given deadline. In the project planning section, we elaborate our ideas to develop the system within the given period.
- ➤ Hence, it is feasible to develop a system in predetermined time interval.

# 4.2 Risk Analysis:

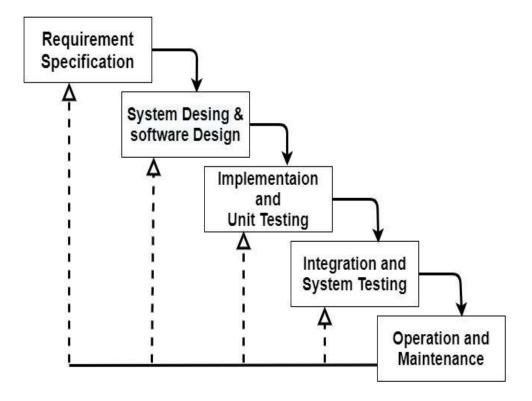
The probability of any unwanted incident is defined as Risk. In <u>Software Testing</u>, risk analysis is the process of identifying the risks in applications or software that you built and prioritizing them to test. After that, the process of assigning the level of risk is done. The categorization of the risks takes place, hence, the impact of the risk is calculated.

#### Risks in our Project:

- > Changes in database or model.
- > Issues with designing after updating module.

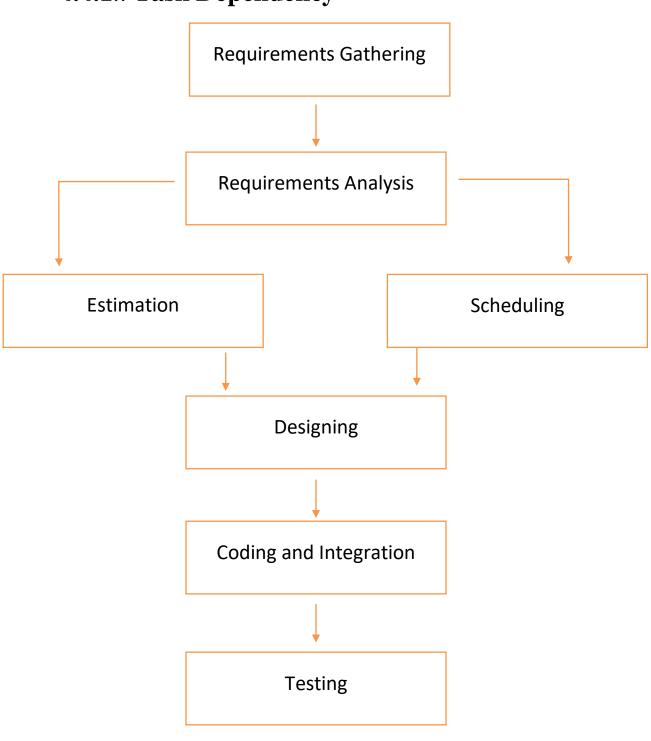
# 4.3 Software Engineering Model:

➤ We followed Iterative Waterfall Model for software development do we can add new functionalities as per requirement



# 4.3 Project Schedule

### **4.4.1**.: Task Dependency



# 5. System Analysis

### 5.1 Detailed SRS

- > Functional Requirement:
  - Attractive and Interactive Projects.
  - Web application With Admin & User Side.
  - Searching.
  - Know more about Projects and Engineers .

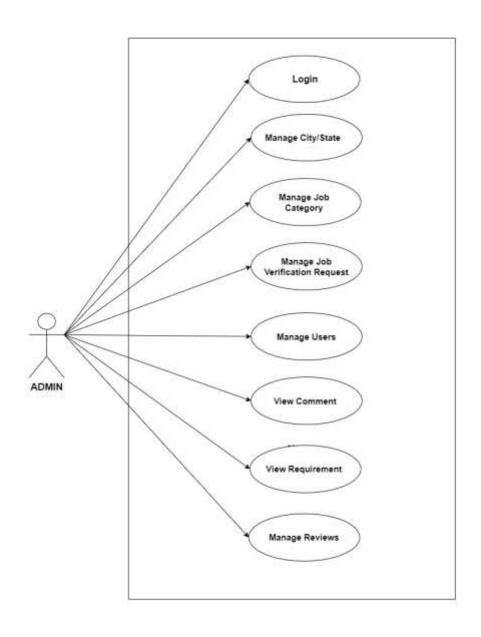
### ➤ Non-Functional Requirement:

- User, Admin Login & Logout.
- Database.
- Functionalities like Signup, Change Profile Data etc.
- Job Category.

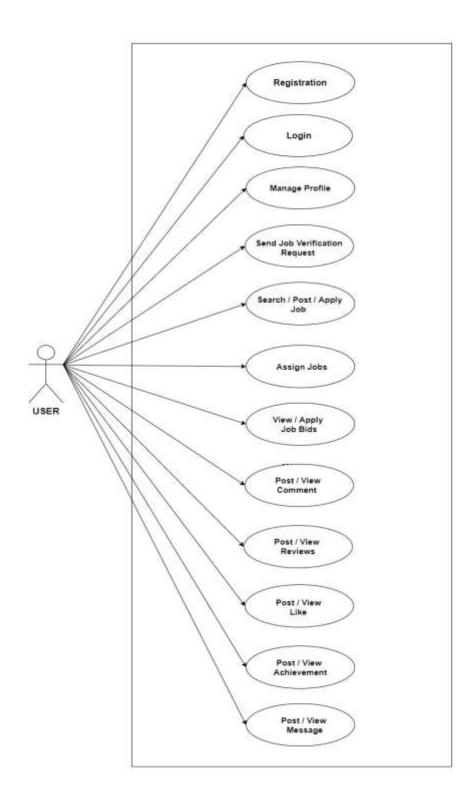
# **5.2 UML Diagrams**

# 5.2.1: Use Case Diagrams

Admin:

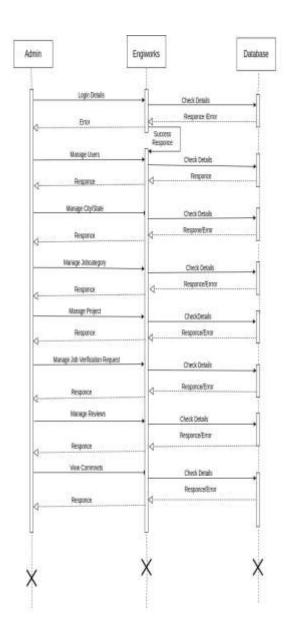


### User:

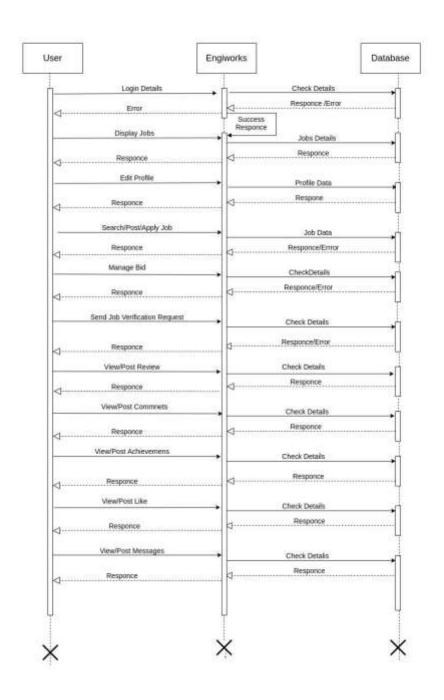


# **5.2.2**: Sequence Diagram

### Admin:



### User:

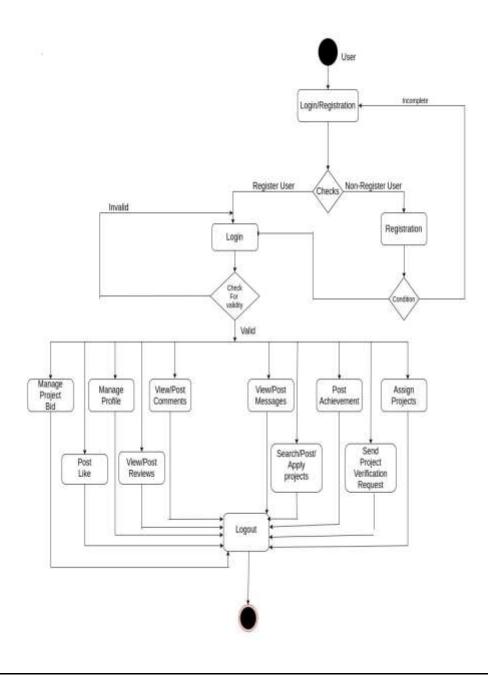


### 5.2.3: Activity Diagram

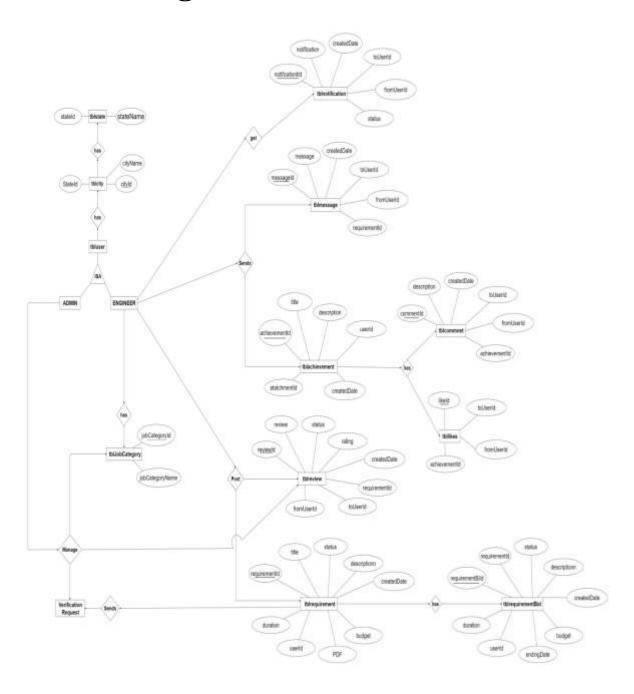
Admin:

Admin Invalid Login Valid Manage Users Manage City/State Manage View Manage Projects Comments Reviews Manage Project Manage Verification Jobcategory Request Logout

### <u>User:</u>



# 5.3 ER Diagram



# 6. Software Design

# **6.1 Database Design**

#### 1) tblachievement:

No	FieldName	DataType	Size	Constraint	Description
1	achievementId	Int	10	Primary key	It defines achievement id.
2	userId	Int	10	Foreign key	It defines user id.
3	attachmentId	Int	10	Foreign key	It defines attachment id.
4	title	Varchar	20	Not Null	Defines the title of the achievement.
5	Description	Varchar	100	Not Null	Defines description of the achievement.
6	createdDate	timestamp		Not Null	Date and time at which the achievement request was made.

#### 2) tblattachment:

No	FieldName	DataType	Size	Constraint	Description
1	attachmentId	Int	10	Primary key	It defines attachment id.
2	userId	Int	10	Foreign key	It defines the user id .
3	attachement	Varchar	50	Not Null	Name of the attachment.

#### ${\bf 3)}\ tblb id as signed:$

_	,	= =			
No	FieldName	DataType	Size	Constraint	Description
1	bidAssignedId	Int	10	Primary key	It defines bid assigned id.
2	userId	Int	10	Foreign key	It defines the user id.
3	requirementId	Int	10	Foreign key	It defines requirement id.
4	requirementBid Id	Int	10	Foreign key	It defines requirement bid id.

#### 4) tblcity:

	, ,				
No	FieldName	DataType	Size	Constraint	Description
1	cityId	Int	10	Primary key	It defines city id.
2	cityName	Varchar	15	Not Null	It defines the name of the city.
3	statetId	Int	10	Foreign key	It defines state id.

#### 5) tblcommnet:

No	FieldName	DataType	Size	Constraint	Description
1	commentId	Int	10	Primary key	It defines comment id.
2	description	Varchar	50	Not Null	It defines the comment(msg.).
3	achievementId	Int	10	Foreign key	It defines achievement id.
4	toUserId	Int	10	Foreign key	It defines the user id who had comment.
5	fromUserId	Int	10	Foreign key	It defines the user id on whom the comment is
6	createdDate	timestamp		Not Null	Date and time on which the comment is requested.

### 6) tblgroup:

No	FieldName	DataType	Size	Constraint	Description
1	groupId	Int	10	Primary key	It defines group id.
2	groupName	Varchar	20	Not Null	It defines group name.

#### 7) tbljobcategory:

No	FieldName	DataType	Size	Constraint	Description
1	jobCategoryId	Int	10	Primary key	It defines job category id.
2	jobCategoryName	Varchar	20	Not Null	It defines job category name.

### 8) tbllikes:

No	FieldName	DataType	Size	Constraint	Description
1	likeId	Int	10	Primary key	It is define project bid id.
2	achievementId	Int	10	Foreign key	It is define project id.
3	toUserId	Int	10	Foreign key	It defines the user id who had post the like.
4	fromUserId	Int	10	Foreign key	It defines the user id on whom the Like is given.

#### 9) tblmessage:

	, ,				
No	FieldName	DataType	Size	Constraint	Description
1	messageId	Int	10	Primary key	It defines message id.
2	message	Varchar	50	Not Null	It defines the message
3	requirementId	Int	10	Foreign key	It defines requirement id.
4	toUserId	Int	10	Foreign key	It defines the user id ,who sends the message.
5	fromUserId	Int	10	Foreign key	It defines the user id ,to whom the message is send.
6	createdDate	timestamp		Not Null	

#### 10) tblnotification:

	- <b>,</b>				
No	FieldName	DataType	Size	Constraint	Description
1	notificationId	Int	10	Primary key	It defines the notification id.
2	notification	Varchar	20	Not Null	It defines the notification (msg.).
3	status	Int	10	Not Null	Defines the status of the notification.
4	toUserId	Int	10	Foreign key	It defines the user id who sends the notification.
5	fromUserId	Int	10	Foreign key	It defines the user id to whom the notification is send.
6	createdDate	timestamp		Not Null	Date and time when the notification is added.

11) tblrequirement:

_	I) ton equileme				
No	FieldName	DataType	Size	Constraint	Description
1	requirementId	Int	10	Primary key	It defines the requirement id.
2	userId	Int	10	Foreign key	It defines the user id
3	status	Int	10	Not Null	It defines the status of the requirement.
4	title	Varchar	20	Not Null	Defines the title of the requirement.
5	description	Varchar	50	Not Null	It defines description about the requirement.
6	budget	Float		Not Null	It defines the budget of the requirement.
7	duration	Int	10	Not Null	It defines the duration of the requirement.
8	PDF	Varchar	50	Not Null	It stores the PDF of the requirement.
9	createdDate	timestamp		Not Null	Date and time when the requirement is added.

12) tblrequirementbid:

	2) whiequireme	iitbiu .			
No	FieldName	DataType	Size	Constraint	Description
1	requirementBid Id	Int	10	Primary key	It defines requirement bid id.
2	userId	Int	10	Foreign key	It defines the user id
3	requirementId	Int	10	Foreign key	It defines the requirement id.
4	status	Int	20	Not Null	It defines the status of the requirement.
5	description	Varchar	50	Not Null	It defines description about the requirement.
6	budget	Float		Not Null	It defines the budget of the requirement.
7	duration	Int	10	Not Null	It defines the duration of the requirement.
8	endingDate	date		Not Null	Date and time when the requirement is added.
9	createdDate	timestamp		Not Null	Date and time when the requirement is added.

#### 13) tblreview:

No	FieldName	DataType	Size	Constraint	Description
1	reviewId	Int	10	Primary key	It defines the review id.
2	review	Varchar	100	Not Null	It defines the review
3	ratings	Int	10	Not Null	It is define project id.
4	status	Int	20	Not Null	It defines the status of the review.
6	toUserId	Int	10	Foreign key	It defines the user id who sends the review.
7	fromUserId	Int	10	Foreign key	It defines the user id to whom the notification is send.
8	requirementId	Int	10	Foreign key	It defines the requirement id.
9	createdDate	timestamp		Not Null	Date and time when the requirement is added.

### **14) tbstate** :

No	FieldName	DataType	Size	Constraint	Description
1	stateId	Int	10	Primary key	It defines the state id.
2	stateName	Varchar	15	Not Null	It defines the name of the state.

### 15) tbluser:

No	FieldName	DataType	Size	Constraint	Description
1	userId	Int	10	Primary key	It defines the user id.
2	userName	Varchar	15	Not Null	It defines the name of the user.
3	gender	Varchar	07	Not Null	It defines the gender of the user.
4	email	Varchar	25	Not Null	It defines the email of the user.
6	password	varchar	500	Not Null	Defines the password of the acc. For login in the website.
7	address	varchar	50	Not Null	It defines where the users live.
8	profileImage	Varchar	20	Not Null	It defines the pic. for an account.
9	status	Int	10	Not Null	It defines the status of the user.
10	jobCategoryId	Int	10	Foreign key	It defines the job category id.

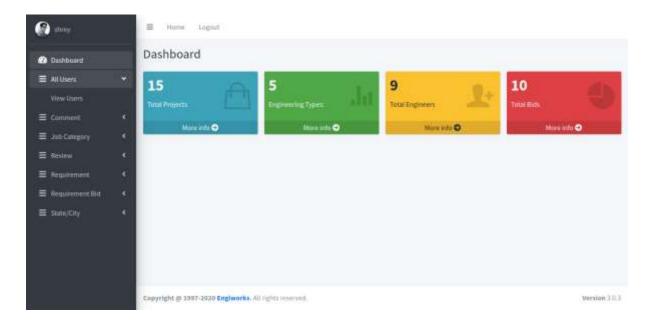
### 16) tblusergroup:

No	FieldName	DataType	Size	Constraint	Description
1	userGroupId	Int	10	Primary key	It defines user group id.
2	userId	Int	10	Foreign key	It defines the user id.
3	groupId	Int	10	Foreign key	It defines the user's group id.

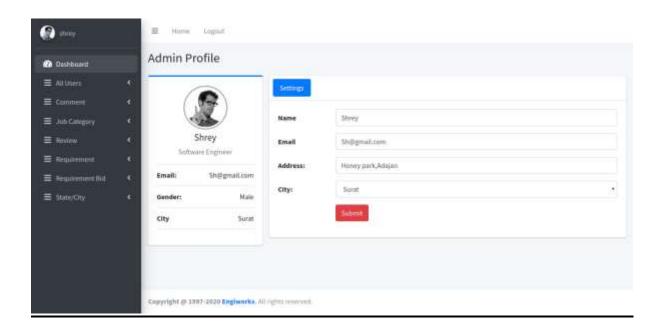
# **6.2 Interface Design**

### Admin Site:

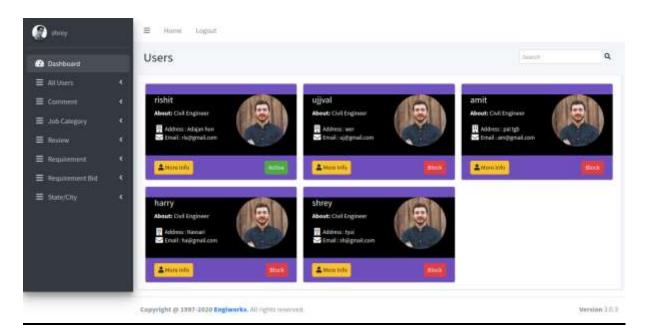
### **Dashboard:**



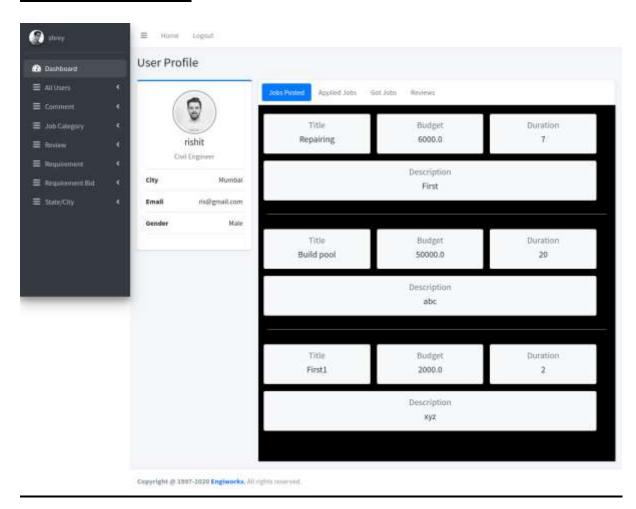
#### **Admin Profile:**



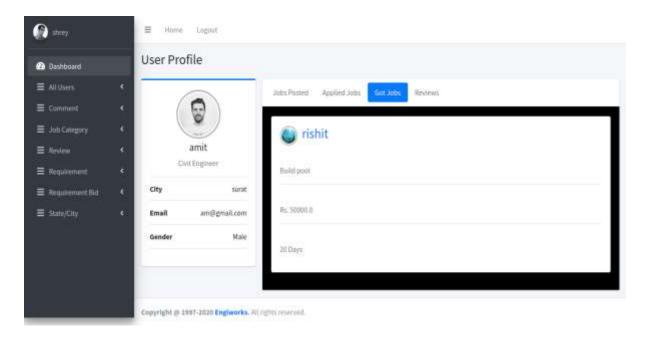
### **All Users:**



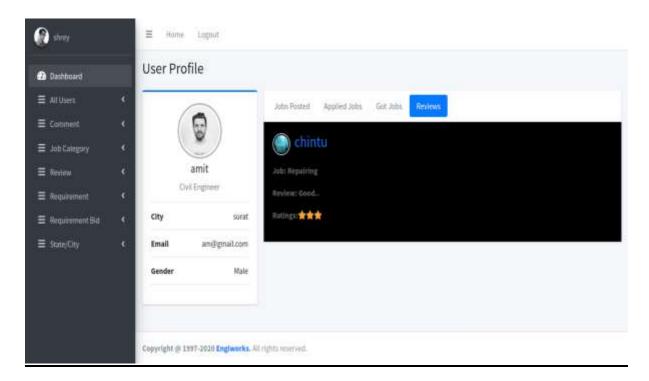
### **User Posted Projects:**



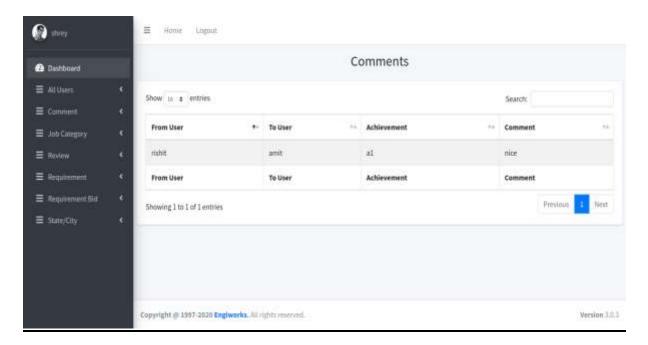
### **User Got Projects:**



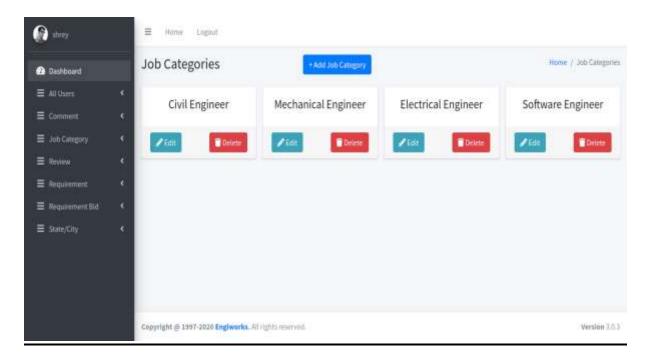
### **Sfecific User Reviews:**



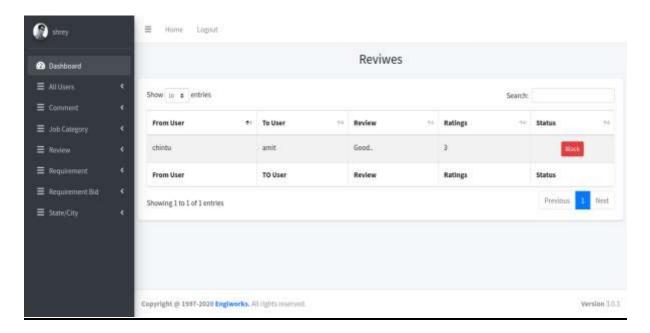
#### **All Users Comments:**



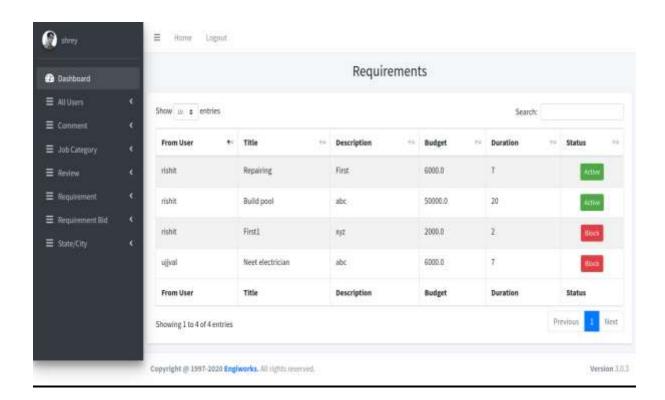
#### **Category:**



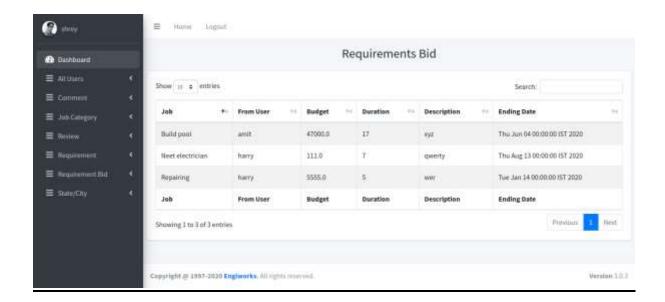
#### **All Reviews:**



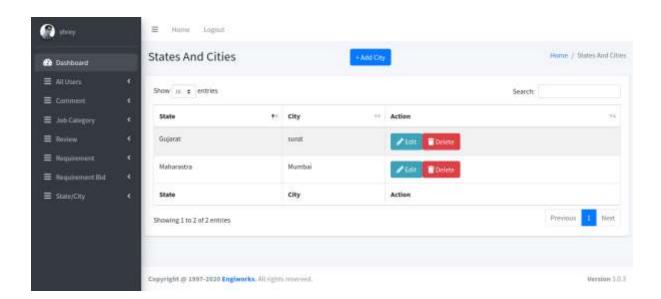
#### **All Requirements:**



#### **All Requirements Bid:**

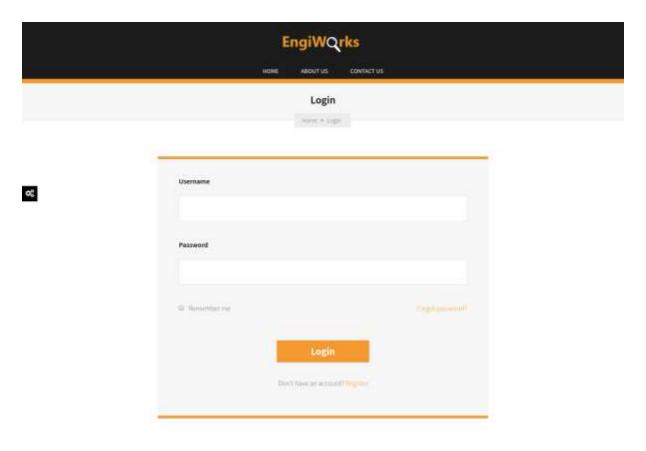


### **States / Cities:**



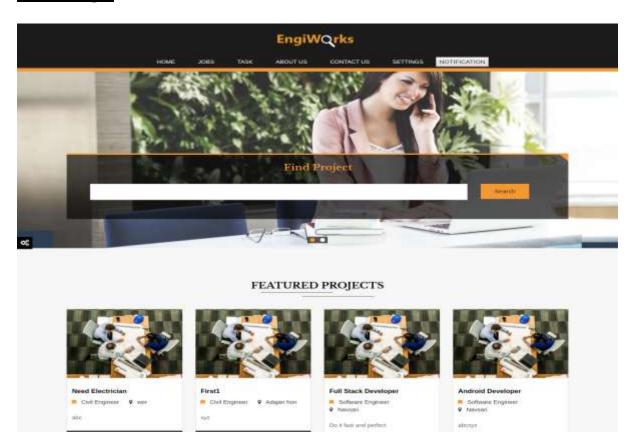
### **User Site:**

### Login:





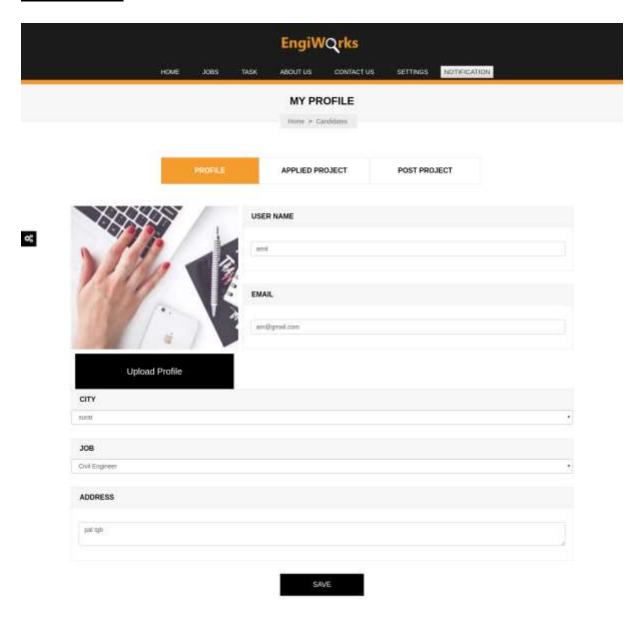
### **Home Page:**





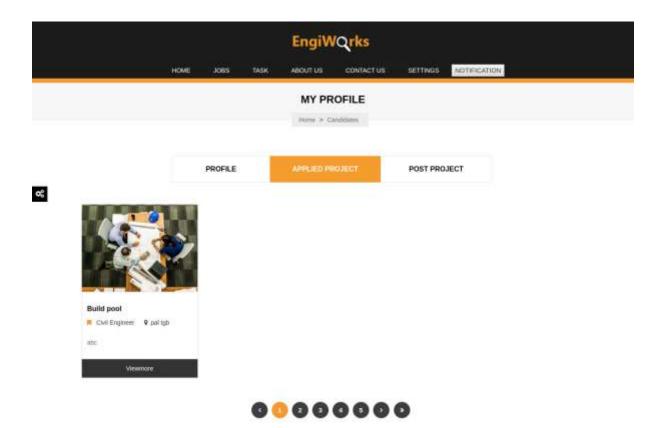


### **User Profile:**



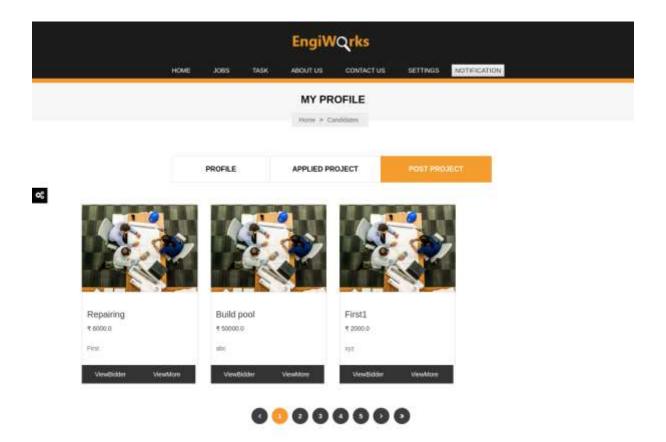


### **Applied Project:**



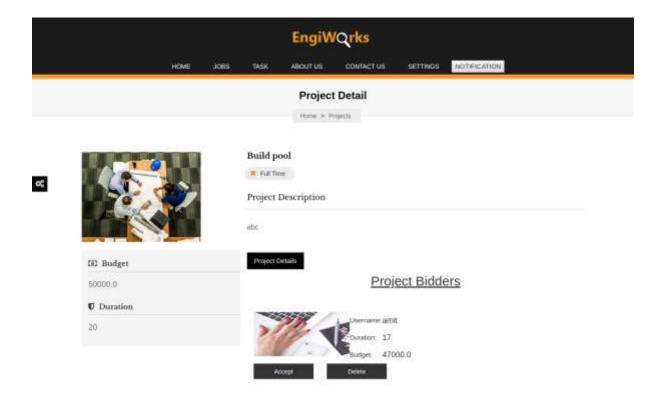


### **Posted Projects:**



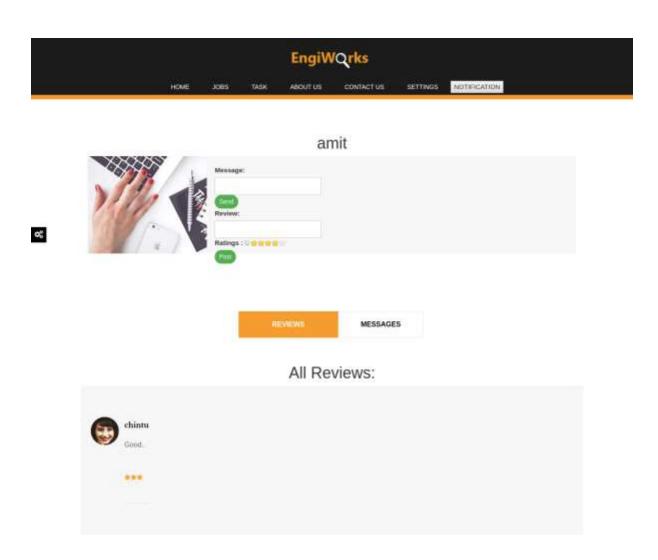


### **Assign Project:**



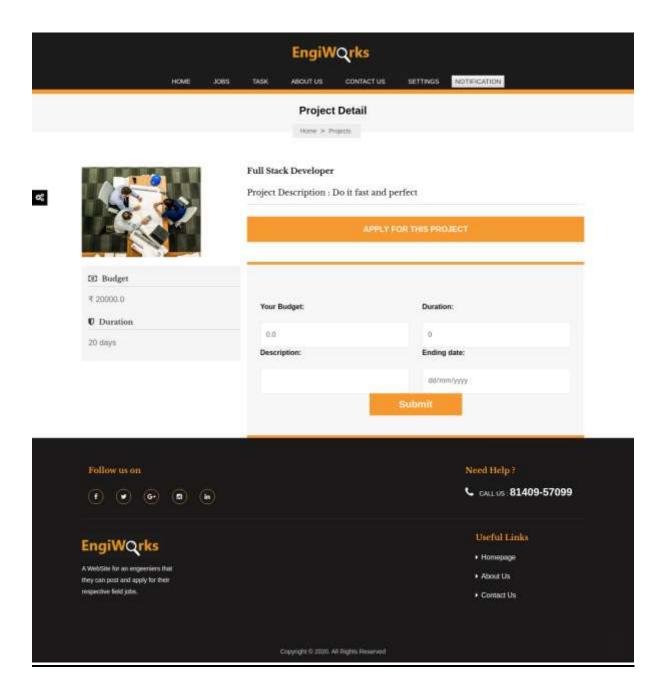


### **Reviews and Ratings:**

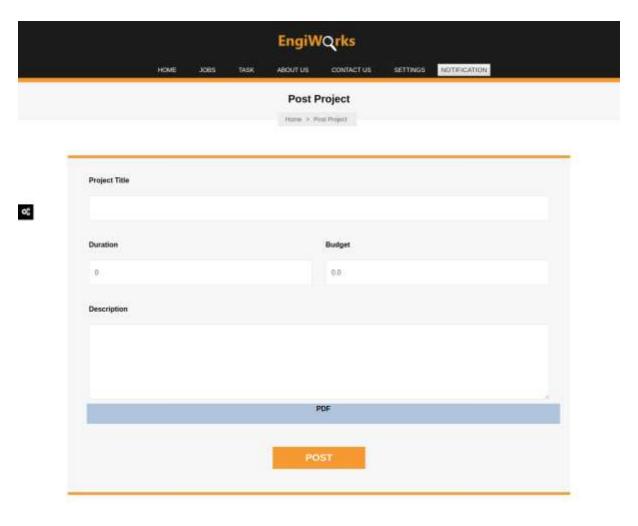




### **Bid For Project:**

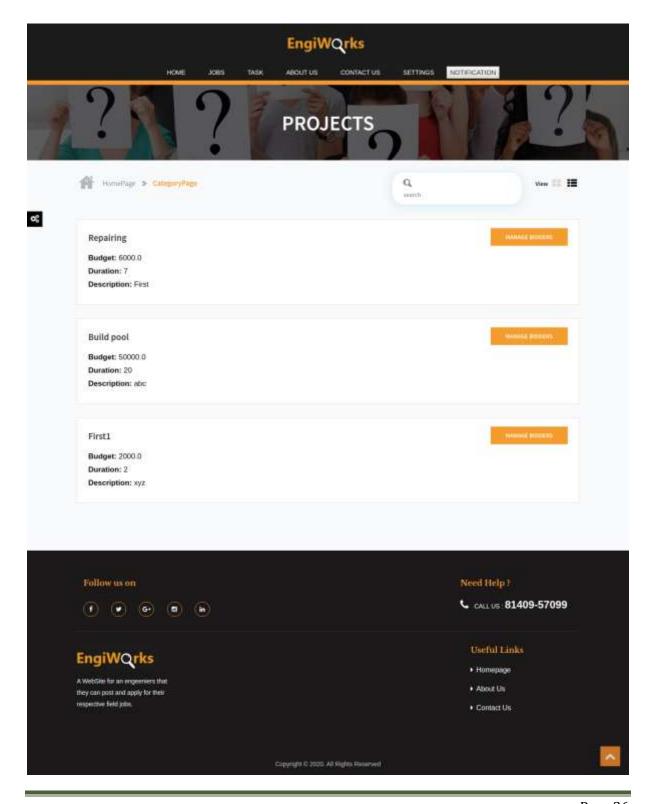


### **Post Project:**

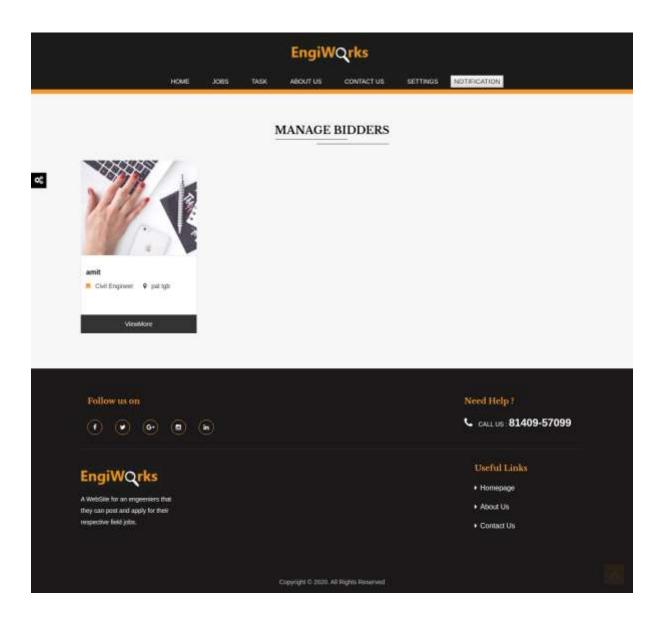




### **Manage Task:**



### **Manage Bidders:**

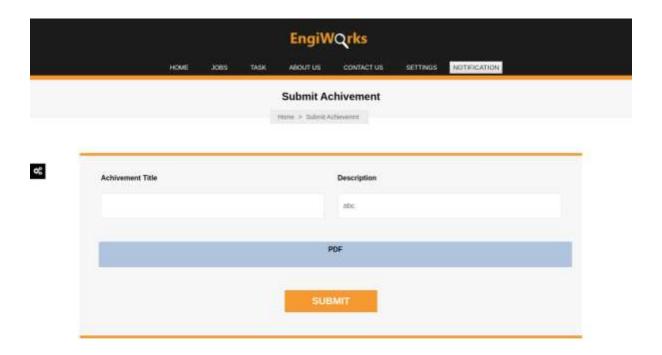


### Message:





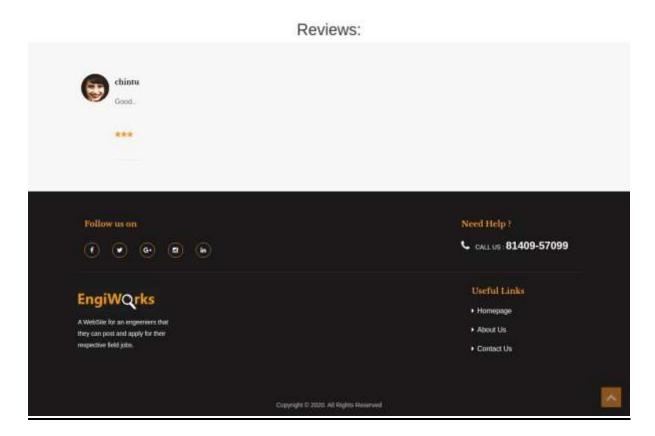
### **Post Achievement:**





### **Bidder Details:**





### **About:**

O<sub>0</sub>



#### Who we are

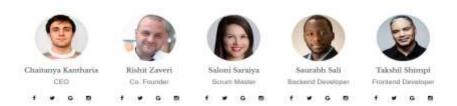
EnglWbika is the #1 job site in the world with over 25 crore unique visitors every month. EnglWbido, where to put job seekers first, giving them free eccess to search for jobs, post Jobs, and research companies. Every day, Engineers connect millions of other engineers for a new apparaunties.



#### Our Mission

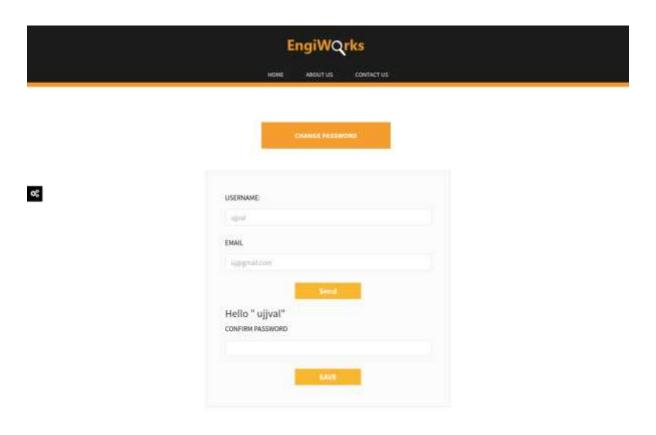
Engineers of different field needs help of one applier so this is the website for an engineers to communicate with the engineers which are from different field and can give writt take work as per their registernent.

#### Our Team





### **Change Password:**





## 7. Test Case

# 7.1Unit Testing

This testing focuses on verification effort on the smallest unit of software design – component or module. Using the component-level design description as a guide , important control paths are tested to uncover errors within the boundary of the module. The relative complexity of tests and the error those test uncover is limited by constraint scope establish for the unit testing. The unit testing focuses on internal processing logic and data structure with boundaries of the component this type of testing can be conducted in parallel for multiple components.

# 7.2 Test Case

## Admin Site:

Page Name	Data	Expecte	Result
		d Result	Generate d
AllJobCategory.xhtml	Loading of	All Controls	All Controls are
AllUsers.xhtml	Form –	should be	correctly
AllReviews.xhtml	Check if it	correctly	Displayed.
AllRequirements.xhtml	loads with	Displayed.	
AllStates.xhtml	correct		
AllCities.xhtml	page.		
AllRequirementsBid.xhtml	Controls –	All controls	All controls are
AllComments.xhtml	Check all	should load	loaded well and
	controls at	well and	generated results
	load and at	should generate	at run time.
	run time for	results at	
	correct	runtime.	
	result.		
	Add and	Information	Information is
	Edit all	must be	displayed
	Details.	displayed	according to
		according to	Admin and must
		Admin and	be stored in
		must be stored	Database.
		in Database.	

## **User Site:**

Registration.xhtml LogIn.xhtml Home.xhtml ManageTask.xhtml AboutUs.xhtml MyProfile.xhtml	Loading of Form – Check if it loads with correct page.	All Controls should be correctly Displayed.	All Controls are correctly Displayed.
message.xhtml bidderDeatils.xhtml ManageJob.xhtml ManageBidder.xhtml bidCheck.xhtml ViewMore.xhtml(project)	Controls – Check all controls at load and at run time for correct result.	All controls should load well and should generate results at runtime.	All controls are loaded well and generated results at run time.
PostAchievement.xht ml PostProject.xhtml	Add and Edit all Details.	Information must be displayed according to Admin and must be stored in Database.	Information is displayed according to user and must be stored in Database.

# **8.Future Enhancement**

Payment Module
Github API
Personal Messages

# 9.References

www.w3schools.com www.javatpoint.com www.Tutorialspoint.com www.Stackoverflow.com