

A MINI PROJECT REPORT ON

# **PICT QUORA**

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE IN THE  
PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE

Of

**BACHELOR OF ENGINEERING**

IN

**INFORMATION TECHNOLOGY**

**BY**

TEJAS AGRAWAL

T150058503

SAGAR BARAPATRE

T150058614

MIHIR BAHETI

T150058513

PRAJWAL CHANDAK

T150058524

**UNDER THE GUIDANCE OF**

**PROF. R. B. MURUMKAR**



**DEPARTMENT OF INFORMATION TECHNOLOGY**

**PUNE INSTITUTE OF COMPUTER TECHNOLOGY, PUNE.**

**S. No. 27, Dhankawadi, Pune, Satara Road, Pune - 411043.**

**2017-2018**

## **CERTIFICATE**

This is to certify that the project report entitled

**PICT QUORA**

**Submitted by**

TEJAS AGRAWAL

T150058503

SAGAR BARAPATRE

T150058614

MIHIR BAHETI

T150058513

PRAJWAL CHANDAK

T150058524

is a bonafide work carried out by them under the supervision of Prof. R. B. Murumkar and it is approved for the fulfillment of the requirement of Savitribai Phule Pune University for the award of the Degree of Bachelor of Engineering (Information Technology).

This project report has not been earlier submitted to any other Institute or University for the award of any degree or diploma.

**Prof.R.B.Murumkar**

**Prof.R.B.Murumkar**

Internal Guide

Subject Co-ordinator

Department of Information  
Technology

Department of Information Technology

External Examiner

Place :

Date :

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## **ABSTRACT:**

In this project we have created one website which is basically a Question and Answer forum. This forum is mainly created for the college level students where they can put forward their queries and get the solution to it from various people. This is easy to access and user friendly. For this application we used the backend as SQL to store the data which is used in the application and for the user interface we had used the HTML, CSS and Bootstrap as front end. The connectivity is done using JDBC. Two kinds of people are able to use this application viz. Admin and User. The user is able to post any question on the forum and he can also answer to already posted question. The admin is the only person who is able to add and remove the questions, answers as well as users from the database.

## **ACKNOWLEDGEMENT :**

The satisfaction that accompanies the successful completion of this project would be incomplete without the mention of the people who made it possible, without whose constant guidance and encouragement would have made efforts go in vain. I consider myself privileged to express my sincere gratitude and respect towards all those who guided us through the completion of this project.

I convey thanks to my project guide **Prof. R.B. Murumkar** of Information Technology department for providing encouragement, constant support and guidance which was of a great help to complete this project successfully.

Last but not the least, we wish to thank our parents for financing our studies in this college. Their personal sacrifice in providing this opportunity to learn engineering is gratefully acknowledged.

# **1. INTRODUCTION :**

## **1.1 Purpose :**

In this era of competition, everyone is struggling a lot for everything. Even students have many questions and doubts. The main purpose of our project is to solve such queries by providing a platform where number of people can post their answers to the asked questions. In this way, the person who asked the question can the answers from multiple sources.

## **1.2 Scope :**

The Pict Quora website allows its users to ask any kind of questions and also post the answers to the questions asked by other people. Moreover, the questions are categorized under various sections like admissions, office, cut off, faculty, academics, hostel, etc. In addition to this, the users can also upvote or downvote to the questions as well as answers. The answers will then be sorted as per their votes.

## **1.3 Definition, Acronym and Abbreviations :**

Provide definitions or references to all the definitions of the special terms and acronyms used within this document.

1. ***HTML5*** - Hypertext Markup Language revision 5.
2. ***CSS*** - Cascading Style Sheets.
3. ***JSP*** - Java Server Page.
4. ***MySQL*** - A query language to interrogate the system.
5. ***Login*** - A use identification to enter into the system.
6. ***Web Based Application*** - An application that runs on Internet.

## **1.4 References**

- <https://www.google.com/>
- <https://www.youtube.com/luv2code>
- <https://www.w3schools.com/>
- <https://www.tutorialspoint.com/>
- <https://www.javatpoint.com/>
- <https://www.stackoverflow.com/>

## **1.5 Developer's Responsibilities : An Overview**

- Perform project design and development activities according to customer specifications.
- Work with developing project plan, budget and schedule.
- Coordinate with management in preparing project proposals and contractual documents.
- Track project progress regularly and develop status reports to management.
- Ensure that project is completed within allotted budget and timelines.
- Research and recommend new technologies to carry out project development tasks.
- Provide feedback for improvements.
- Develop cost reduction initiatives while maintaining quality and productivity.

## **2.GENERAL DESCRIPTION :**

### **2.1 Product function perspective :**

The product is supposed to be an open source, under the GNU general Public License. It is a web based system implementing client-server model. The PICT Quora system provides simple mechanism for users to ask questions and get the answers.

- ***User account:*** The user can log in to the system using the id and password provided by the administrator.
- ***Search:*** User can search for required questions using related keywords.

### **2.2 User Characteristics :**

The user could be student, teacher, parent, or any person who is willing to know about the college administration or having any queries regarding college or academics.

### **2.3 General Constraints :**

- To post a question on the website user has to login first using his username and password.
- After posting a question user cannot delete it.
- User can upvote or downvote to any question or answer only once.



## **3.SPECIFIC REQUIREMENTS**

### **3.1 Inputs and Outputs :**

The input and outputs are very specific to the requirements with proper validations in place. Outputs are generated in a user friendly setup and proper messages so that the user can understand it easily.

### **3.2 Functional Requirements :**

There are no specific functional requirements as the system runs smoothly on all platforms – Windows, Linux and Mac OS.

### **3.3 Functional Interface Requirements :**

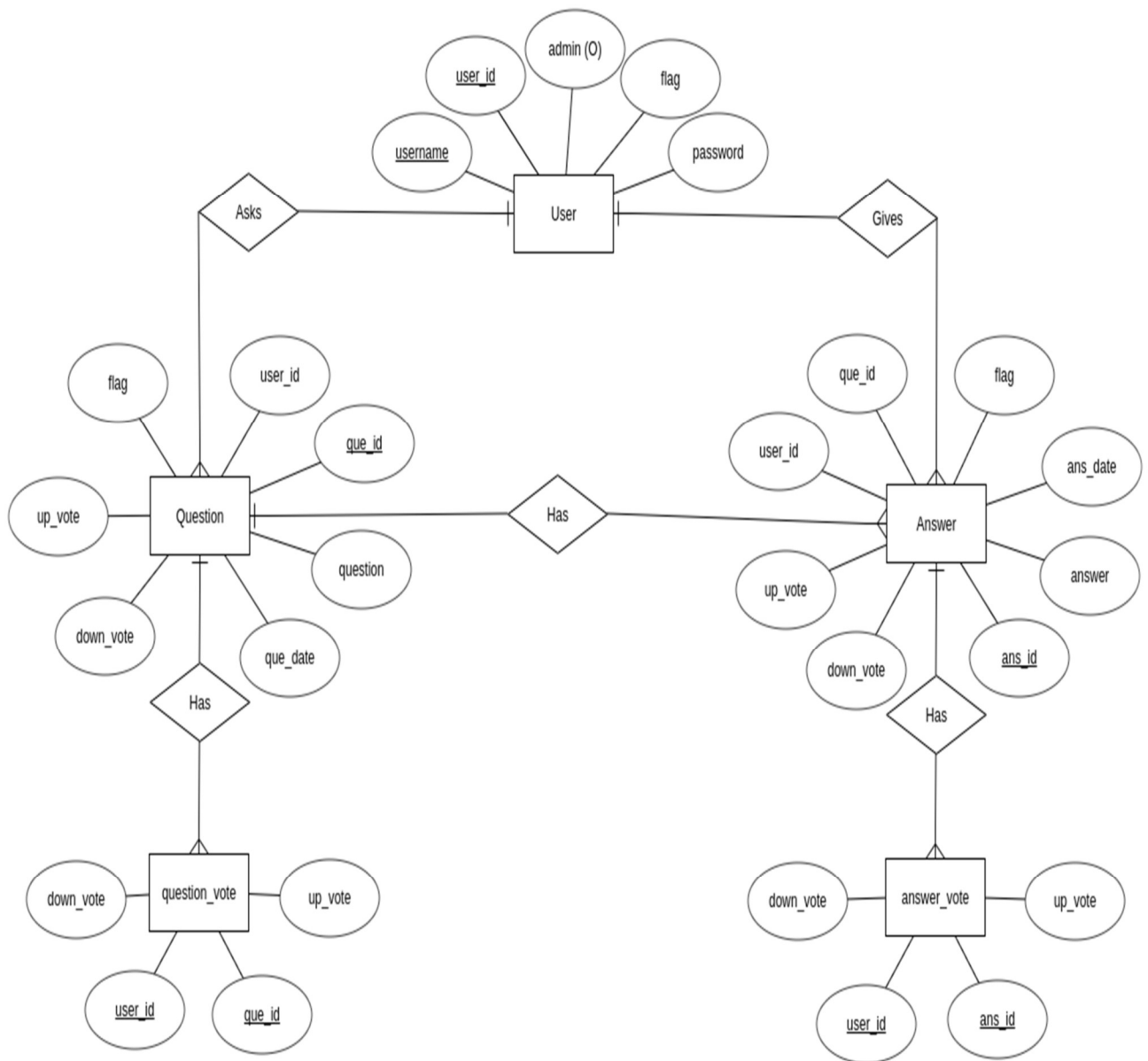
There are no specific functional interface requirements as the system runs perfectly on all browsers – Mozilla Firefox, Oracle, Chrome, Chromium, etc. Chrome and Chromium are suggested to get a good experience and smoother functioning.

### **3.4 Design Constraints :**

The design has been made by keeping in mind the comfort level of all the various groups of users. Proper color scheme has been used to make the pages self-explanatory. The design has been checked profusely on the Chrome and certain divisions and sections are specific to the browser. The webpage may not be functional on all types of devices.

## 4. SYSTEM DESIGN :

### 4.1 ER Model :



## 4.2 Schema Description :

```
mysql> show tables;
```

```
+-----+
| Tables_in_quora |
+-----+
| Answer          |
| Question        |
| User            |
| answer_vote     |
| question_vote   |
+-----+
```

```
5 rows in set (0.00 sec)
```

```
mysql> desc User;
```

```
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| user_id    | int(11)       | NO   | PRI | NULL    | auto_increment |
| username   | varchar(250)  | NO   |     | NULL    |                |
| password   | varchar(250)  | NO   |     | NULL    |                |
| admin      | int(11)       | YES  |     | 0       |                |
| flag       | int(11)       | YES  |     | 0       |                |
+-----+-----+-----+-----+-----+-----+
```

```
5 rows in set (0.00 sec)
```

```
mysql> desc Question;
```

```
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default          | Extra          |
+-----+-----+-----+-----+-----+-----+
| que_id     | int(11)       | NO   | PRI | NULL            | auto_increment |
| user_id    | int(11)       | NO   | MUL | NULL            |                |
| question   | text          | YES  |     | NULL            |                |
| up_vote    | int(11)       | YES  |     | 0               |                |
| down_vote  | int(11)       | YES  |     | 0               |                |
| flag       | int(11)       | YES  |     | 0               |                |
| que_date   | timestamp     | NO   |     | CURRENT_TIMESTAMP |                |
+-----+-----+-----+-----+-----+-----+
```

```
7 rows in set (0.00 sec)
```

```
mysql> desc Answer;
```

```
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default          | Extra          |
+-----+-----+-----+-----+-----+-----+
| ans_id     | int(11)       | NO   | PRI | NULL            | auto_increment |
| que_id     | int(11)       | NO   | MUL | NULL            |                |
| user_id    | int(11)       | NO   | MUL | NULL            |                |
| answer     | text          | YES  |     | NULL            |                |
| up_vote    | int(11)       | YES  |     | 0               |                |
| down_vote  | int(11)       | YES  |     | 0               |                |
| flag       | int(11)       | YES  |     | 0               |                |
| ans_date   | timestamp     | NO   |     | CURRENT_TIMESTAMP |                |
+-----+-----+-----+-----+-----+-----+
```

8 rows in set (0.00 sec)

mysql> desc question\_vote;

Field	Type	Null	Key	Default	Extra
que_id	int(11)	NO	PRI	NULL	
user_id	int(11)	NO	PRI	NULL	
up_vote	int(11)	YES		0	
down_vote	int(11)	YES		0	

4 rows in set (0.00 sec)

mysql> desc answer\_vote;

Field	Type	Null	Key	Default	Extra
ans_id	int(11)	NO	PRI	NULL	
user_id	int(11)	NO	PRI	NULL	
up_vote	int(11)	YES		0	
down_vote	int(11)	YES		0	

4 rows in set (0.00 sec)

## **4.3 Procedures used**

```
DELIMITER $$
DROP PROCEDURE IF EXISTS UPDATE_QUESTION_UP_VOTE$$
CREATE PROCEDURE UPDATE_QUESTION_UP_VOTE()
BEGIN
-- declare NOT FOUND handler
DECLARE done TINYINT DEFAULT 0;
DECLARE fetched_q_id INT;
-- declare cursor for Question table
DECLARE que_id_cursor CURSOR FOR SELECT que_id from Question;

DECLARE CONTINUE HANDLER FOR NOT FOUND
BEGIN
    SET done = 1;
END;

OPEN que_id_cursor;

get_id: LOOP
    FETCH que_id_cursor INTO fetched_q_id;
    IF done THEN
        LEAVE get_id;
    END IF;

    -- display

    update Question set up_vote= ifnull((select sum(up_vote) from
question_vote where question_vote.que_id=fetched_q_id),0) where
Question.que_id=fetched_q_id;

END LOOP get_id;

CLOSE que_id_cursor;

END$$

DELIMITER ;

DELIMITER $$
DROP PROCEDURE IF EXISTS UPDATE_QUESTION_DOWN_VOTE$$
CREATE PROCEDURE UPDATE_QUESTION_DOWN_VOTE()
BEGIN
-- declare NOT FOUND handler
DECLARE done TINYINT DEFAULT 0;
DECLARE fetched_q_id INT;
```

```

-- declare cursor for Question table
DECLARE que_id_cursor CURSOR FOR SELECT que_id from Question;

DECLARE CONTINUE HANDLER FOR NOT FOUND
BEGIN
    SET done = 1;
END;

OPEN que_id_cursor;

get_id: LOOP
    FETCH que_id_cursor INTO fetched_q_id;
    IF done THEN
        LEAVE get_id;
    END IF;

    -- display

    update Question set down_vote= ifnull((select sum(down_vote) from
    question_vote where question_vote.que_id=fetched_q_id),0) where
    Question.que_id=fetched_q_id;

END LOOP get_id;

CLOSE que_id_cursor;
END$$
DELIMITER ;

DELIMITER $$
DROP PROCEDURE IF EXISTS UPDATE_ANSWER_DOWN_VOTE$$
CREATE PROCEDURE UPDATE_ANSWER_DOWN_VOTE()
BEGIN
    -- declare NOT FOUND handler
    DECLARE done TINYINT DEFAULT 0;
    DECLARE fetched_a_id INT;
    -- declare cursor for Answer table
    DECLARE ans_id_cursor CURSOR FOR SELECT ans_id from Answer;

    DECLARE CONTINUE HANDLER FOR NOT FOUND
    BEGIN
        SET done = 1;
    END;

    OPEN ans_id_cursor;

    get_id: LOOP
        FETCH ans_id_cursor INTO fetched_a_id;
        IF done THEN
            LEAVE get_id;

```

```

END IF;

-- display

update Answer set down_vote= ifnull((select sum(down_vote) from
answer_vote where answer_vote.ans_id=fetched_a_id),0) where
Answer.ans_id=fetched_a_id;

END LOOP get_id;

CLOSE ans_id_cursor;

END$$

DELIMITER ;

DELIMITER $$
DROP PROCEDURE IF EXISTS UPDATE_ANSWER_UP_VOTE$$
CREATE PROCEDURE UPDATE_ANSWER_UP_VOTE()
BEGIN
-- declare NOT FOUND handler
DECLARE done TINYINT DEFAULT 0;
DECLARE fetched_a_id INT;
-- declare cursor for Answer table
DECLARE ans_id_cursor CURSOR FOR SELECT ans_id from Answer;

DECLARE CONTINUE HANDLER FOR NOT FOUND
BEGIN
    SET done = 1;
END;

OPEN ans_id_cursor;

get_id: LOOP
    FETCH ans_id_cursor INTO fetched_a_id;
    IF done THEN
        LEAVE get_id;
    END IF;

    -- display

    update Answer set up_vote= ifnull((select sum(up_vote) from
answer_vote where answer_vote.ans_id=fetched_a_id),0) where
Answer.ans_id=fetched_a_id;

END LOOP get_id;

CLOSE ans_id_cursor;

```

END\$\$

DELIMITER ;



## **4.4 Triggers used**

```
DELIMITER $$
CREATE TRIGGER flag_all_ans AFTER UPDATE ON Question
FOR EACH ROW
BEGIN

    UPDATE Answer SET flag=1
    where NEW.que_id = Answer.que_id and NEW.flag=1;

END$$
delimiter ;

DELIMITER $$
CREATE TRIGGER flag_all_que AFTER UPDATE ON User
FOR EACH ROW
BEGIN

    UPDATE Question SET flag=1
    where NEW.user_id = Question.user_id and NEW.flag=1;

END$$
delimiter ;
```

## **4.4 Test cases:**

1. Questions cannot be answered without Login.
2. User cannot upvote or downvote any question/answer without login.
3. Questions and Answer cannot be NULL.
4. Username must be Unique.
5. Register validations have done.
6. Admin can delete any User, Question or Answer.
7. When any User is deleted, all its questions and answers will be deleted .
8. Questions cannot be asked without Login.

## 4.5 User Interface Design

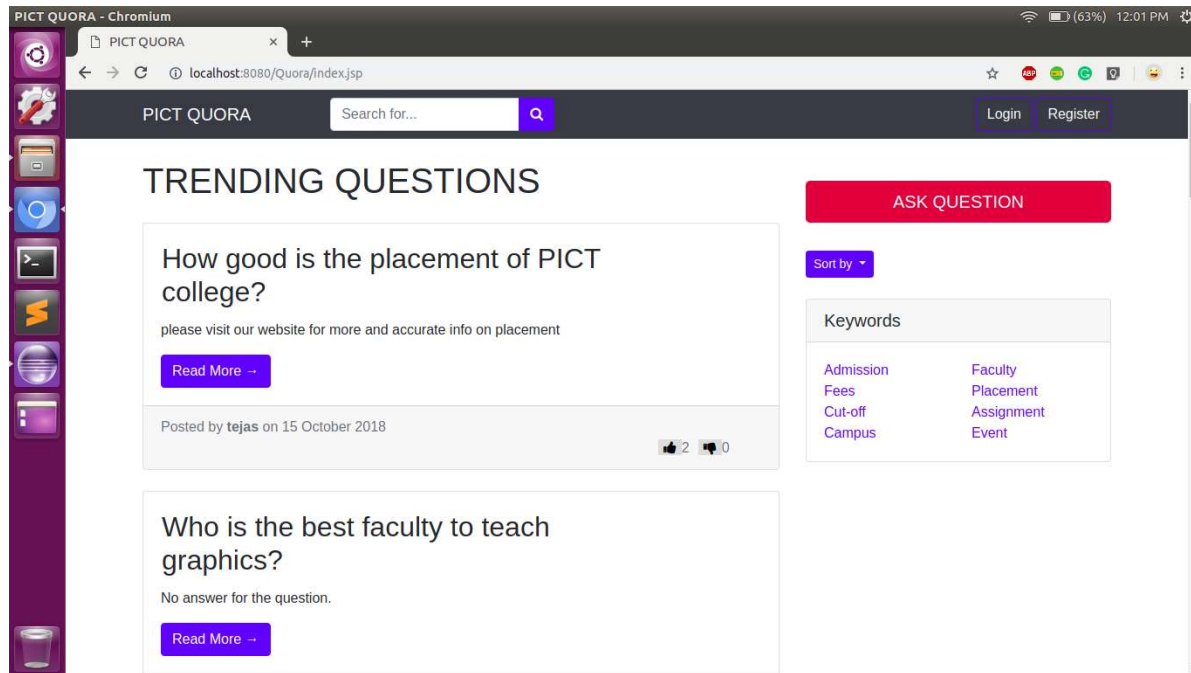


Fig 1: Index page

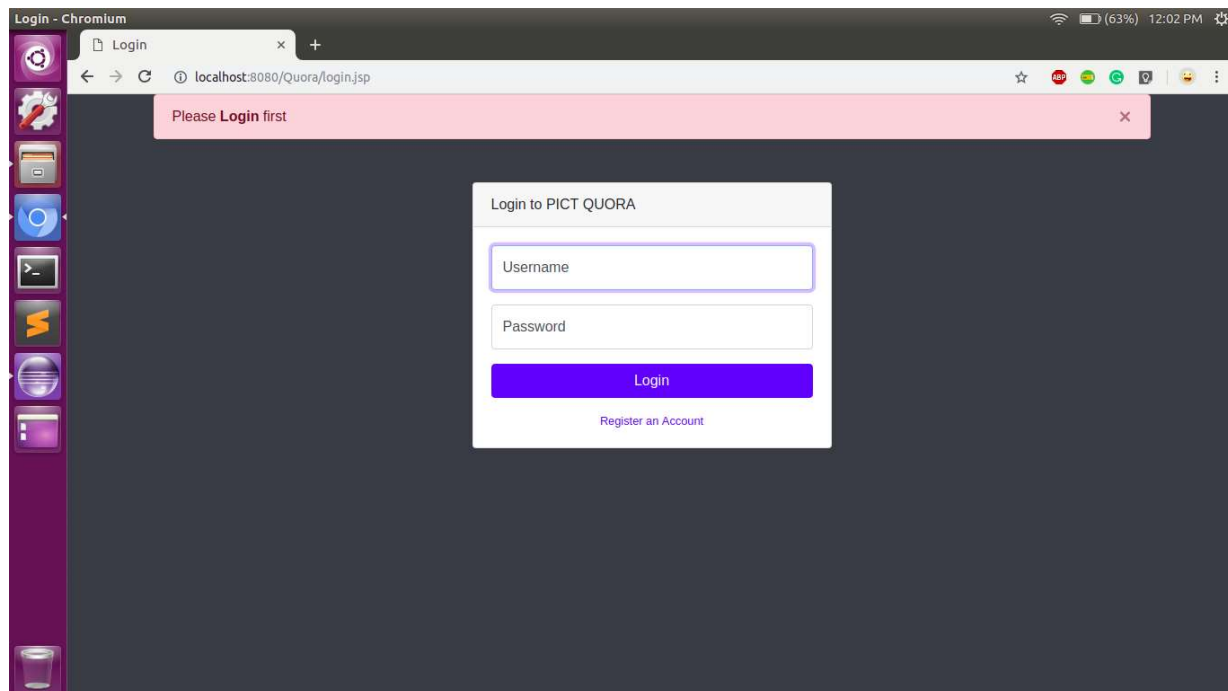


Fig 2: Login

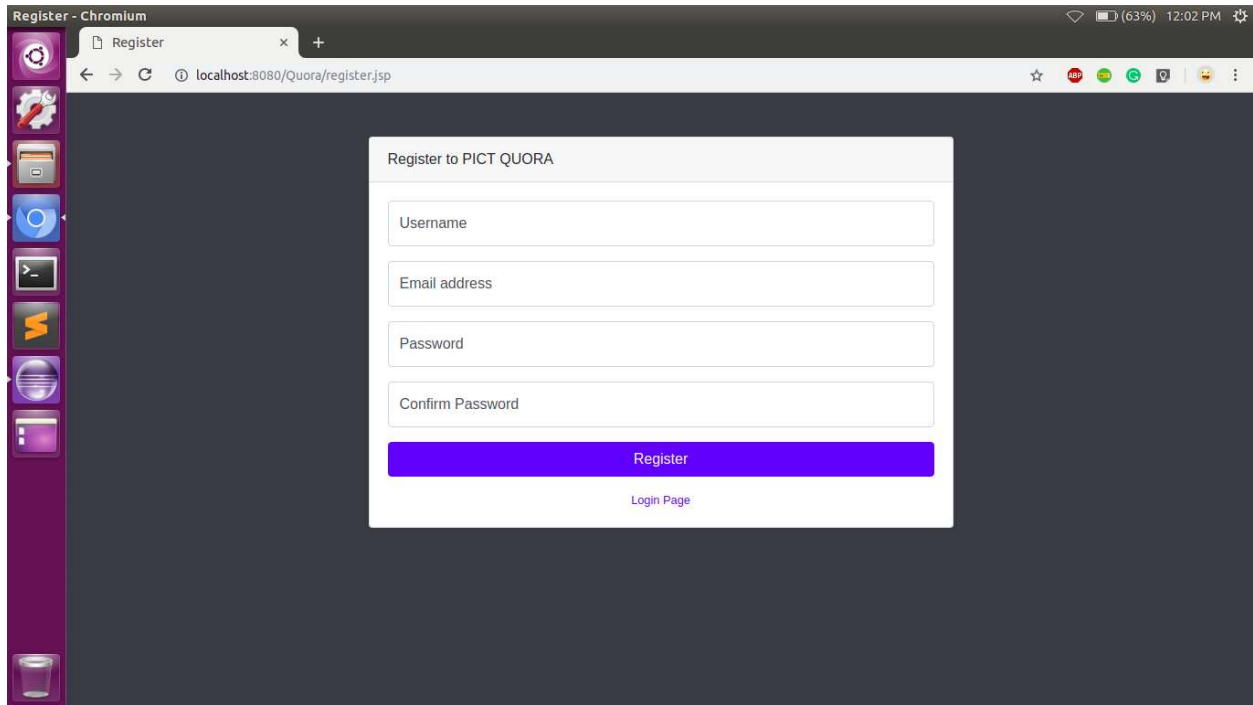


Fig 3: Register

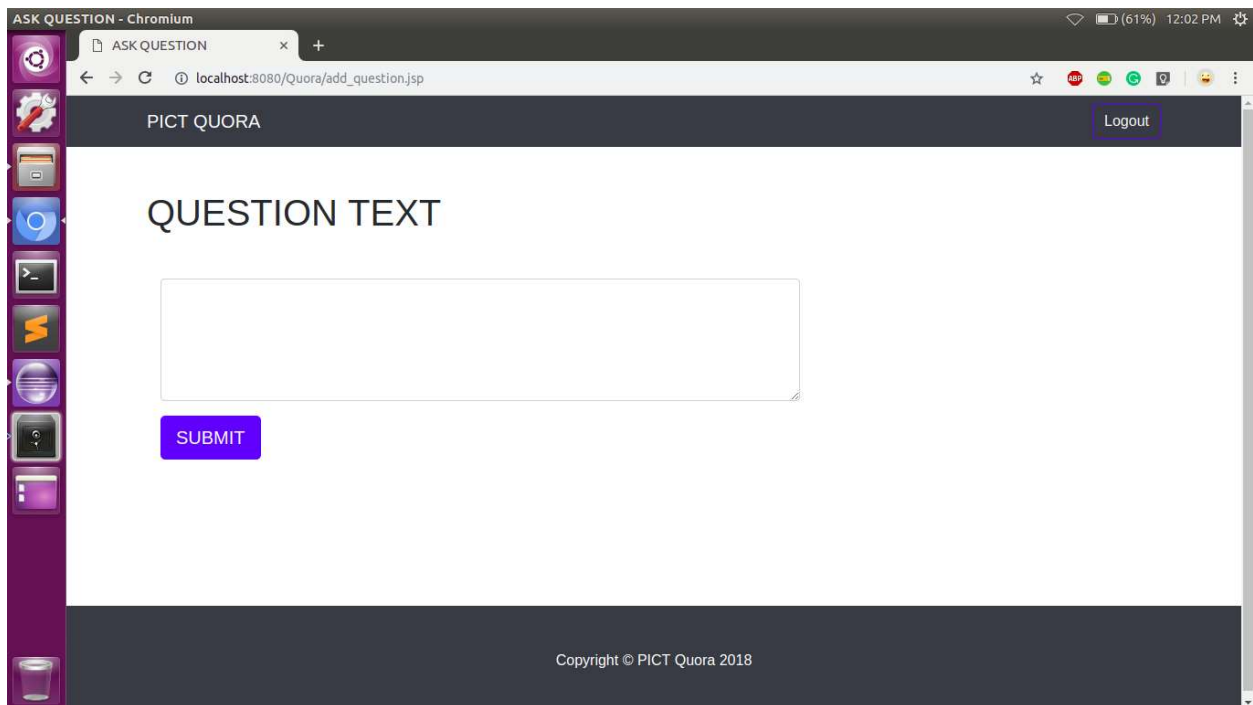


Fig 4: Ask Question

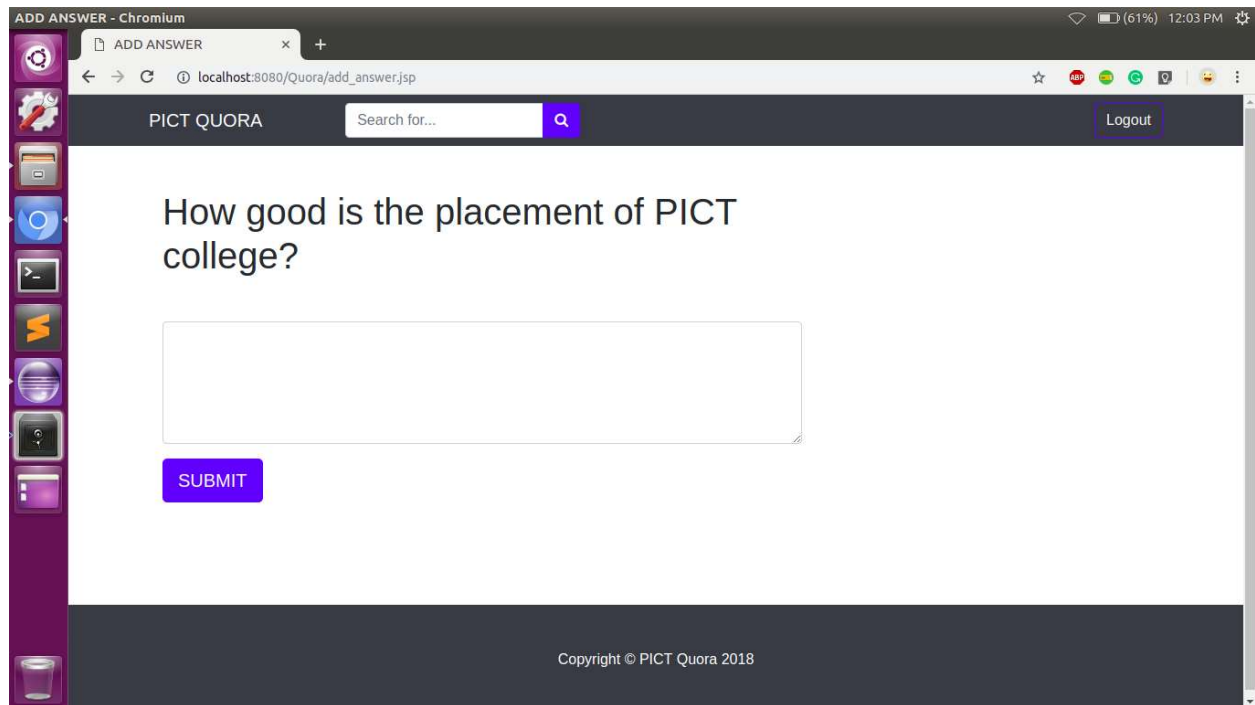


Fig 5: Add Answer

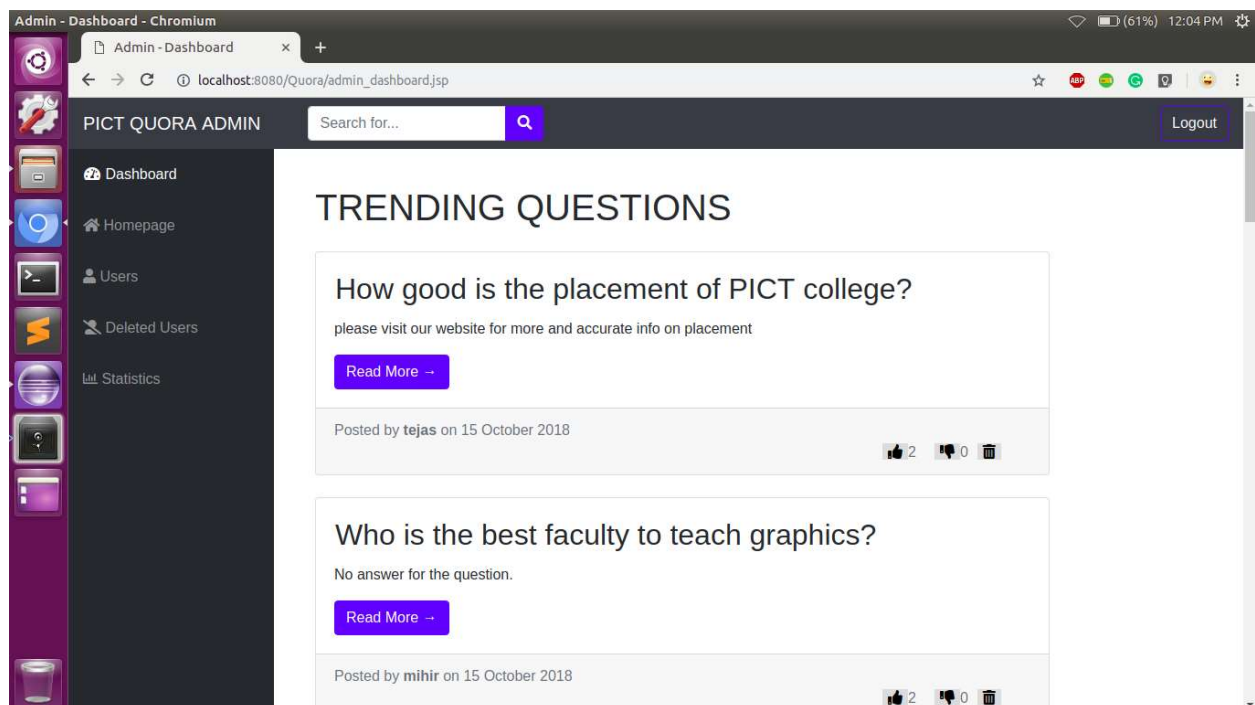


Fig 6: Admin Dashboard

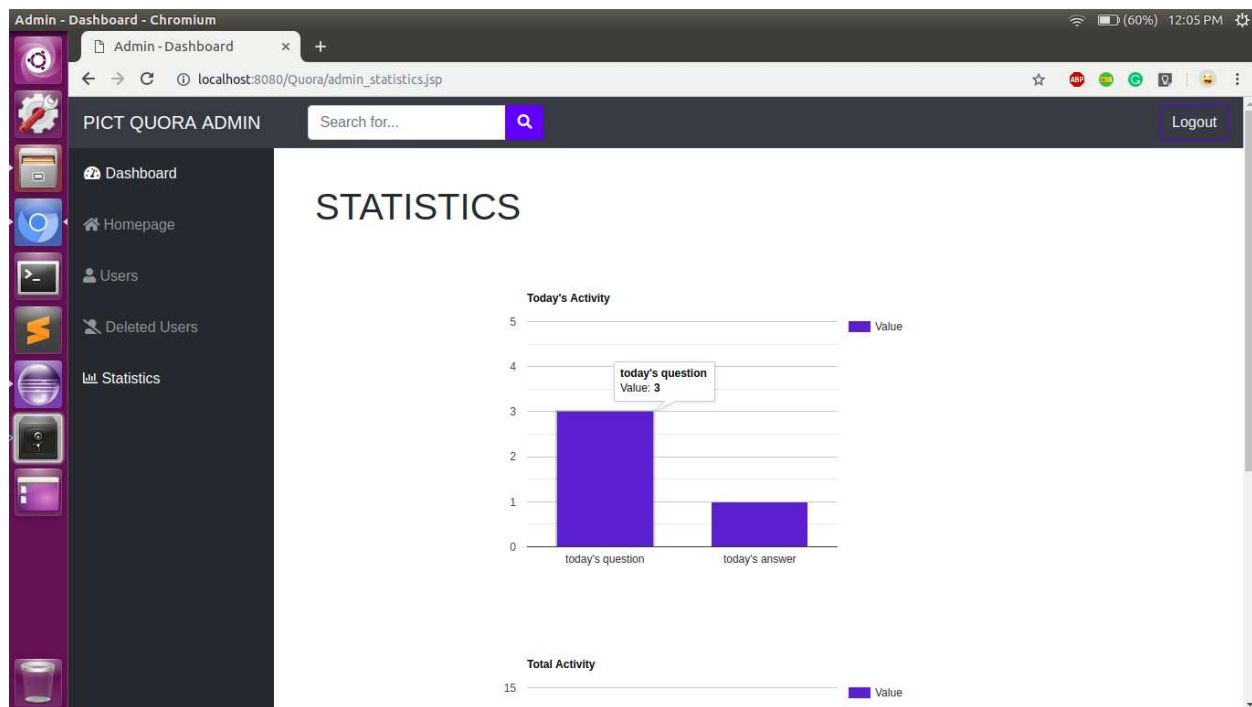


Fig 7: Statistics

Admin - Dashboard - Chromium

Admin - Dashboard

localhost:8080/Quora/admin\_user\_display.jsp

PICT QUORA ADMIN

Search for...

Logout

Dashboard

Homepage

Users

Deleted Users

Statistics

### User Table

Show 10 entries

Search:

User Id	User name	Type	Flag User
1	mihir	USER	
2	sagar	USER	
3	tejas	USER	
4	admin	ADMIN	
5	random	USER	
6	qwerty	USER	
7	mihir1	USER	
8	mihirbaheti	USER	

Showing 1 to 8 of 8 entries

Previous 1 Next

Fig 8: User Table

# **5.SYSTEM IMPLEMENTATION :**

## **5.1 Hardware and Software Platform Description**

### **Hardware Requirement**

1. **RAM:** 2GB (Recommended).
2. **Processor:** Pentium-4 onwards.
3. **HDD Space:** 20GB or more.

### **Software Requirement**

1. **Operating System:** Linux, Windows.
2. **Internet Browser:** Mozilla Firefox, Google Chrome.
3. **Front End:** HTML5, CSS, JAVASCRIPT, JSP, Servlet.
4. **Front End Tool:** Eclipse photon.
5. **Back End:** MySQL Server.
6. **Web Server:** Apache Tomcat Server.

## **5.2 Technologies Used :**

- Eclipse(Photon)
- SublimeText 3
- Tomcat 8.5
- MySQL

## **6.Conclusion :**

Thus we have successfully implemented PICT Quora database management system project which helps us in getting our queries solved by multiple people on a single platform.

We have successfully implemented various functionalities of MySQL and frontend tools like HTML, CSS, etc. and created the fully functional database management system for question and answer forum.