

ZIVIMA - ZILA VIKAS MANCH

(UDP)

A PROJECT REPORT

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In

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We would like to appreciate the guidance given by other supervisor as well as the panels especially in our project presentation that have been critics for us and due to which it helped us a lot to improve our presentation skills, thanks to their comments and advices.

Certificate



C. K. Pithawalla College of Engineering and Technology, Surat

Department of Computer Engineering

Year – 2019

Date: / / 2019

This is to certify that the project entitled “ZIVIMA” has been carried out by following students under my guidance in partial fulfillment of the degree of Bachelor of Engineering in Department of Computer Engineering (8th Semester) of Gujarat Technological University, Ahmadabad during the academic year 2018-19. The work done by them is found satisfactory.

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Dr. Ami Tusharkant Choksi
Guide

Jury

Prof. Neelam A Surti
Head of Department

Abstract

“ $I.T+I.T=I.T$ ”, Prime Minister Narendra Modi devised an unusual equation to describe the future of the country. By this, he meant “Information technology + Indian Talent = India Tomorrow”. The PM said the country needs to embrace technology in a more cumulative manner than in a piecemeal fashion.

Technology must be embraced by all sections of society for it to have real benefit. Embracing technology cannot happen if only a few people are keen on it. The scale must be larger. So, we are working on a project titled “ZIVIMA” that is Zila Vikas Manch which is an initiative for the fulfillment of the vision of our honorable prime minister.

ZIVIMA aims for the development of districts by collaborating district authorities, people of districts, educational institutions and students. It facilitates people of districts to communicate their problems to district authorities. District collector post district specific problems on portal. This portal allows university students to see the problem statements so that they can provide innovative solution to those problems.

In short, our project will facilitate people of districts to easily communicate their problems on global platform as well as will provide a golden opportunity to young budding minds of India to showcase their ideas on global platform and the student with the best feasible idea will be granted recognition by government of India.

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List of Symbols, Abbreviations and Nomenclature

| Symbol | Abbreviations |
|-----------------|---|
| ZIVIMA | Zila Vikas Manch |
| I.T + I.T = I.T | Information technology + Indian Talent = India Tomorrow |
| PSAR | Patent Search and Analysis Report |
| ER | Entity Relationship |

1 Introduction

In introduction section we will discuss about aims of our project, concept of the project, how our system is different from the existing ones and what facilities are provided. It includes the following subsections - aims and objectives, flow of our project, motivation of our project and system modules.

1.1 Aims and Objectives

ZIVIMA aims for the development of districts by collaborating educational institutions with the district authorities where young budding minds of India come up with innovative solutions for the problems related to zilas.

ZIVIMA facilitates district authorities to post district specific problems. University students as well as people living in district can provide solutions to those problems. Person who gives the best feasible solution would be granted recognition by government of India.

‘Make in India’ is great, but 'Make It Happen in India' is even greater. Make It Happen in India is more than just manufacturing. It is about automation, about training, about education, about societal development and engineering.

Our objective is technology could be benefited to every section of society and rather than embracing technology in a piecemeal fashion it must be embraced in a collective manner.

1.2 Flow of project

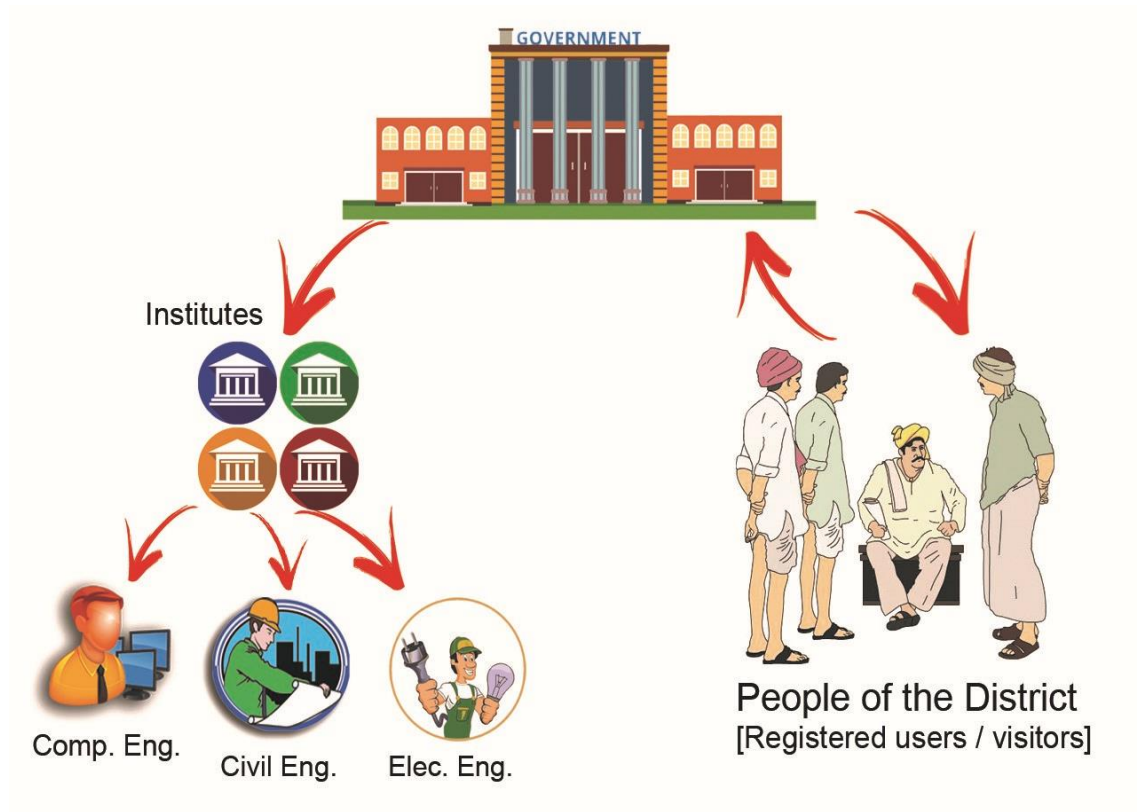


Figure 1. Flow of project

As we can see, Figure1 clearly illustrates the concept of our project. First of all, People of districts will convey district related problems to district collector. Than district collector will post those problems on a common portal. This portal collaborates educational institutions and district authorities. On portal category-wise problem statements will be displayed. Students of educational institutions can see those problems and can provide solution. Polling will be done to select the best solution. Student with the best solution will be granted recognition by government.

1.3 Motivation of our project

We studied various Patent Search and Analysis Report (PSAR) related to our topic. We analyzed system related to our project and here is the comparison table of the same.

Table 1. Comparison table

| PSAR | Our System (ZIVIMA) | Existing System (Hackathon Problem Statement Portal) |
|--|---|---|
| Extendable information management mechanism for collaborative online assessment, problem solving, and related activities | We have added this facility in our system. District collector can post district related problems on portal and university students, people of district could provide solution | In this whole country related problems proposed by government are posted and university students provide solution |
| Mass-Scale, User-Independent, Device-Independent Voice Messaging System | It is added in our system. It facilitates people of district to orally narrate their complains through the application | There is no such facility |
| Intelligent social polling platform | Polling is done to choose best feasible solution | No such facility provided |
| Prospective city government jobs posting system for multiple city government employers with integrated service features | Only referred | Only referred |
| System for automatic geo-tagging of photos | This facility is added in our system. It enables people of district to geo tag their pictures as complains | No such facility provided |
| Method of polling to determine service needs and the like | This is enabled in our system to actually understand the views of villagers, on the solutions provided by the students and based on their | No such facility provided |

| | | |
|---|--|--|
| | liking and votes solution will be implemented. | |
| Geo-tagging digital images | This facility is added in our system. It enables people of district to geo tag their pictures as complains, this will not only help the villagers but also the government with whose help complaint can be verified. (Through Latitude and longitude verification). | No such facility provided |
| Speech to text conversion | It is added in our system. It facilitates people of district to orally narrate their complains through the application. As, we are referring to district specific problems and solving problems for the villagers, not all population is literate enough to write the problems. | no such facilities available |
| Multi-lingual text-to-speech system and method | potential users for this module are villagers, so it will be easier for them to orate problems in their own language. | No such facility available |
| Secure authentication using one-time passwords | for registration for villagers who wish to add requests/solutions, onetime passwords will be used with aadhar verification. | Registration facilities for students is provided |
| Computer game development factory system and method | Only referred | Only referred |
| Computer network based conditional voting system | Leads to better and faster group discussion | Not provided |

| | | |
|--|---|---|
| System and method for complaint submission and management abstract | We have added this facility in our system. District collector can post district related problems on portal and university students, people of district could provide solution | Only concern authorities can add problem statements and students provide solution |
|--|---|---|

The above table1 describes comparison between existing system and our system. It lists all the functionalities present in the existing system as well as additional facilities that will be added in our system that makes it better than the existing one.

1.4 System Modules



- Posting of problems: Problems will be upload on the portal. District collector will upload them on portal as well as people of the district will be allowed to upload requests and complaints.
- Geo tagging: This facility is added in our system. It enables people of district to geo tag their pictures as complains, this will not only help the villagers but also to the

government with through this complaint can be verified. (Through Latitude and longitude verification).

- Voice to text: It is added in our system. It facilitates people of district to orally narrate their complains through the application.As, we are referring to district specific problems and solving problems for the villagers, not all population is literate enough to write the problems.
- Polling: Online voting would be conducted where people of district could vote.This is enabled in our system to actually understand the views of villagers on the solutions provided by the students and based on their liking and votes solution will be implemented.
- Recognition: After polling the best idea is selected for implementation. The institutes/Students who come up with this unique and feasible solutions would be granted recognition by the government of India.
- Complain tracking: This module facilitates people of district to track the status of their complains.
- Multi lingual: The entire module accessible to the villagers will be multi lingual. It makes the system more user friendly.As, we are referring to district specific problems and solving problems for the villagers, not all population is comfortable with English language.

2.1.2 Use case diagram

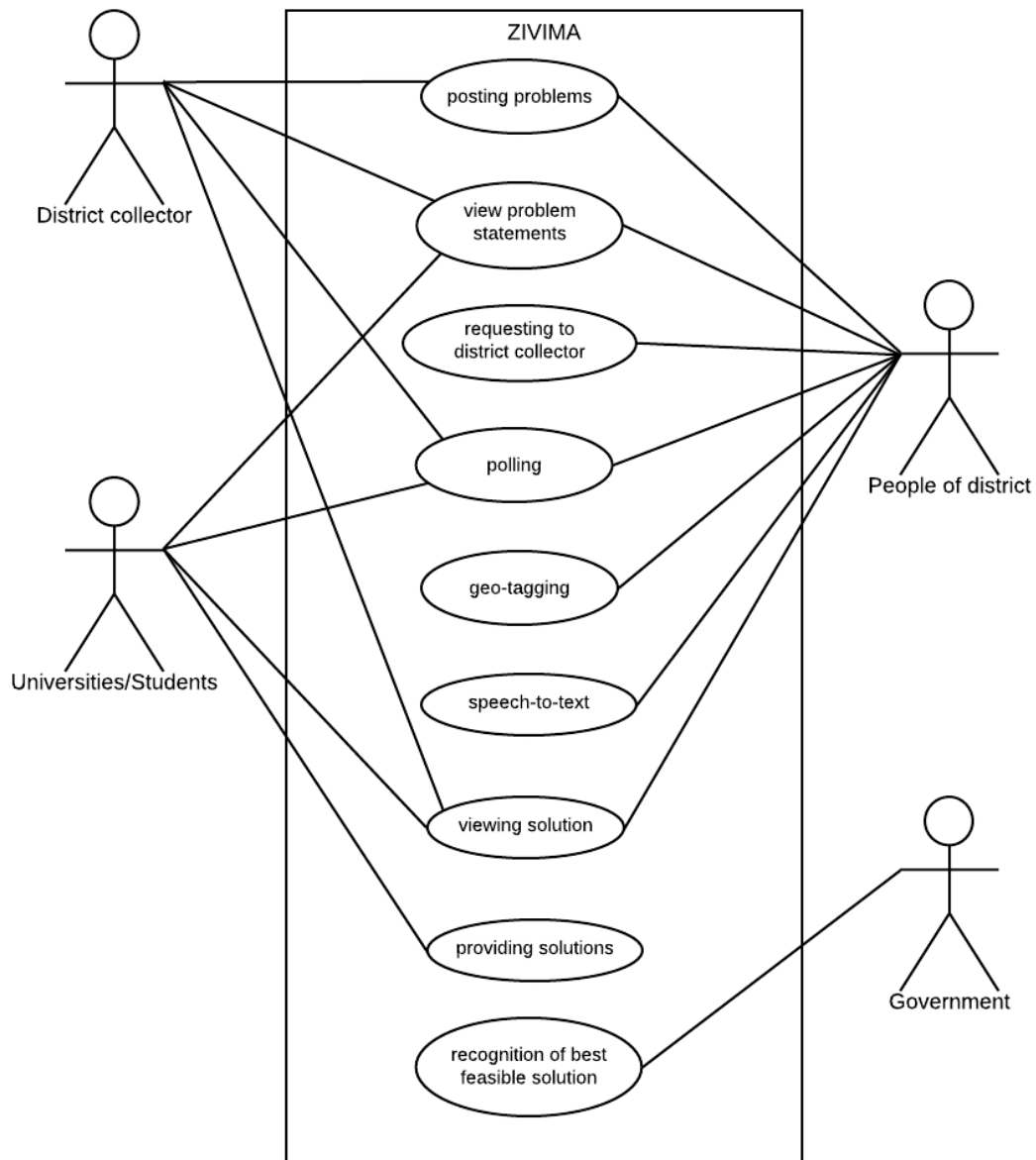


Figure 3. Use case diagram

The use case diagram in figure 3 describes the system functionalities written in an organized manner. It consists of:

Use cases: to describe functionalities of our system

Actors: There are four actors in our system and they are district collector, people of district, universities/students, government.

Edges: To describe relationships among use cases and actors.

3 Implementation

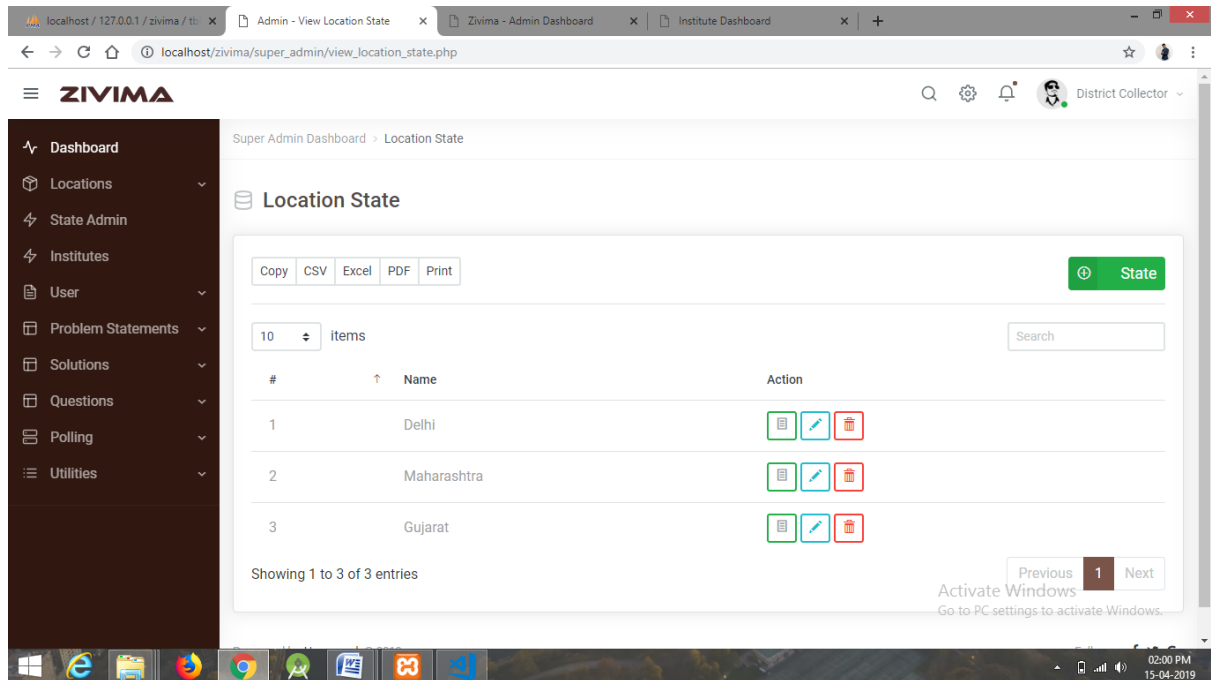


Figure 4. Admin side - state module

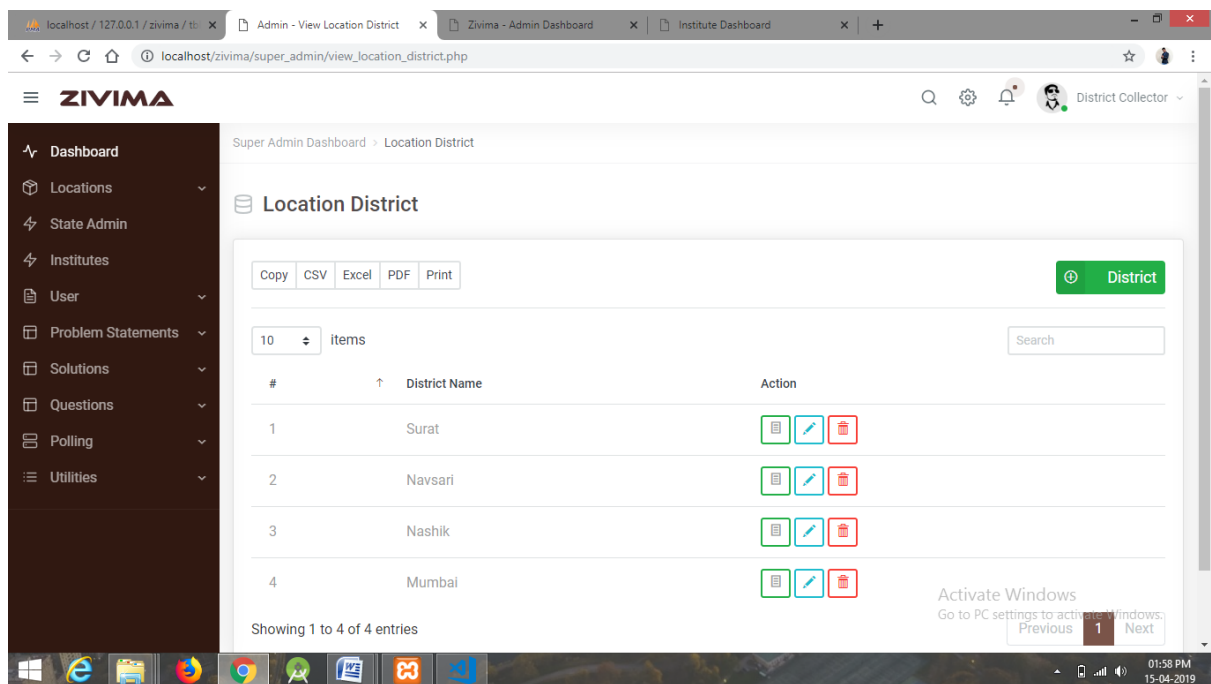


Figure 5. Admin side - district module

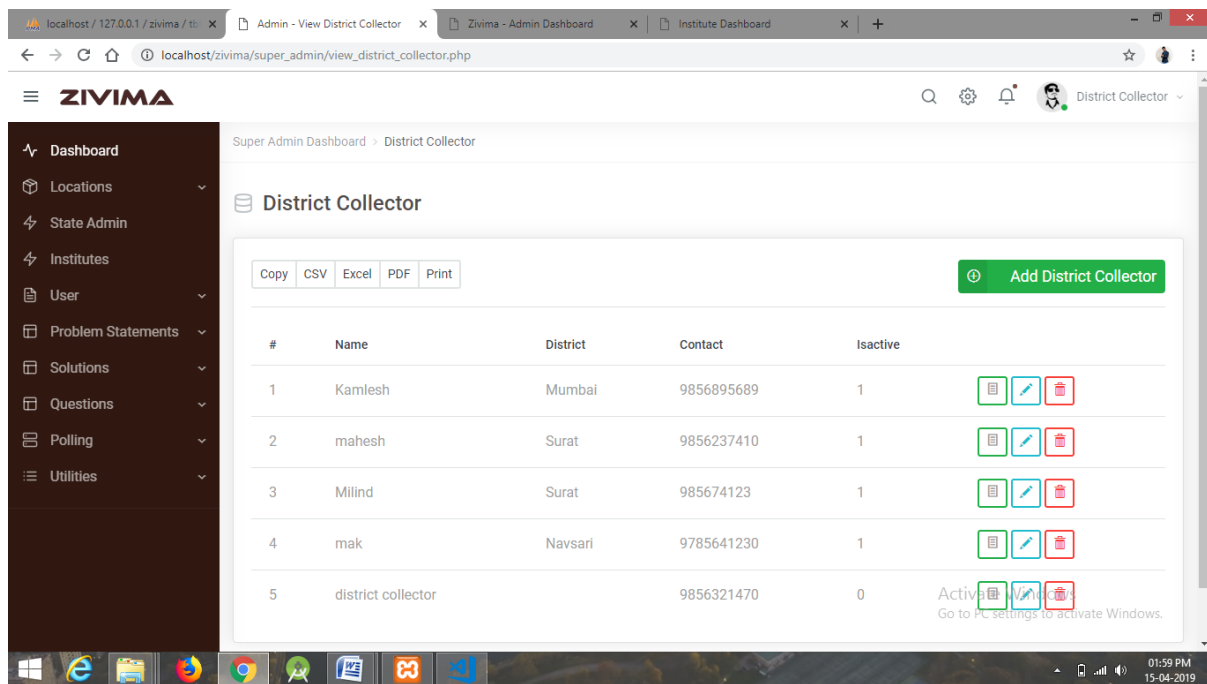


Figure 6. Admin side - district collector module

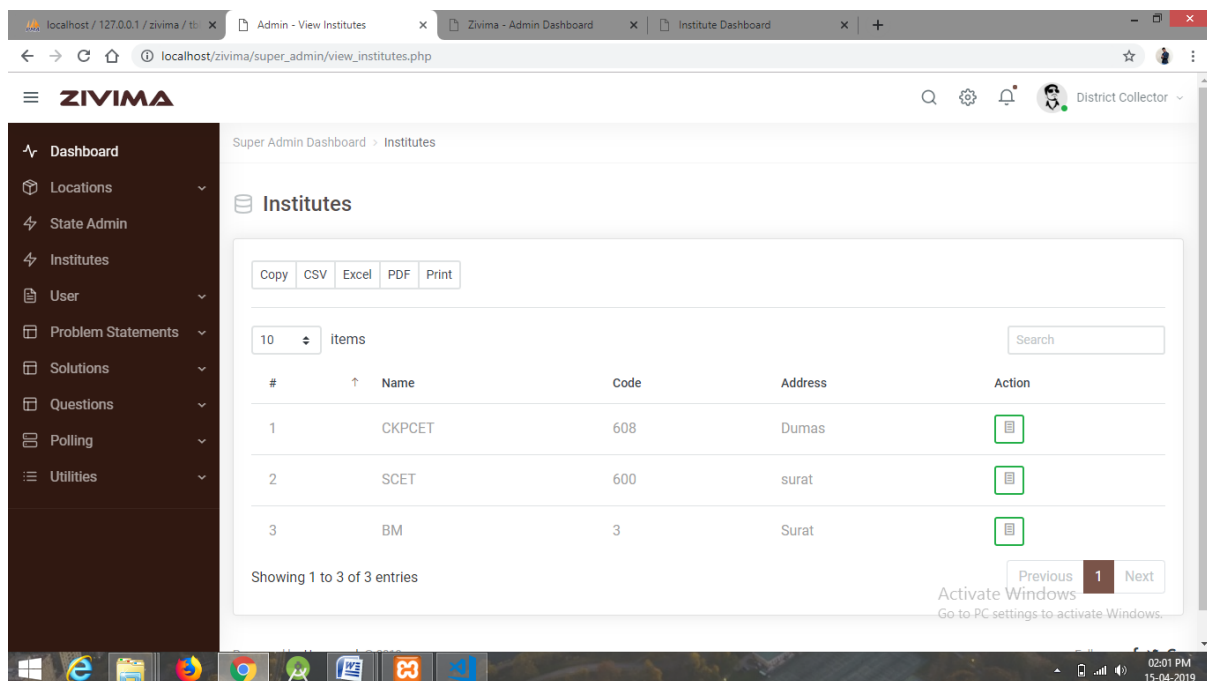


Figure 7. Admin side - institute module

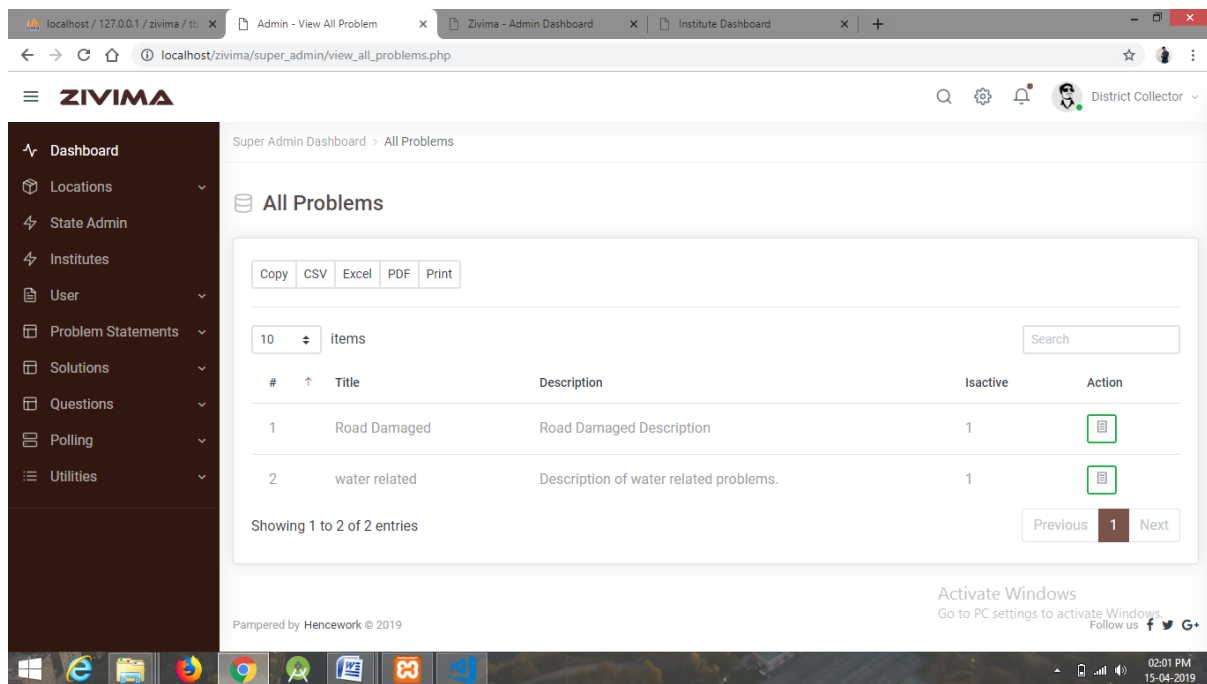


Figure 8. Admin side – problem statement module

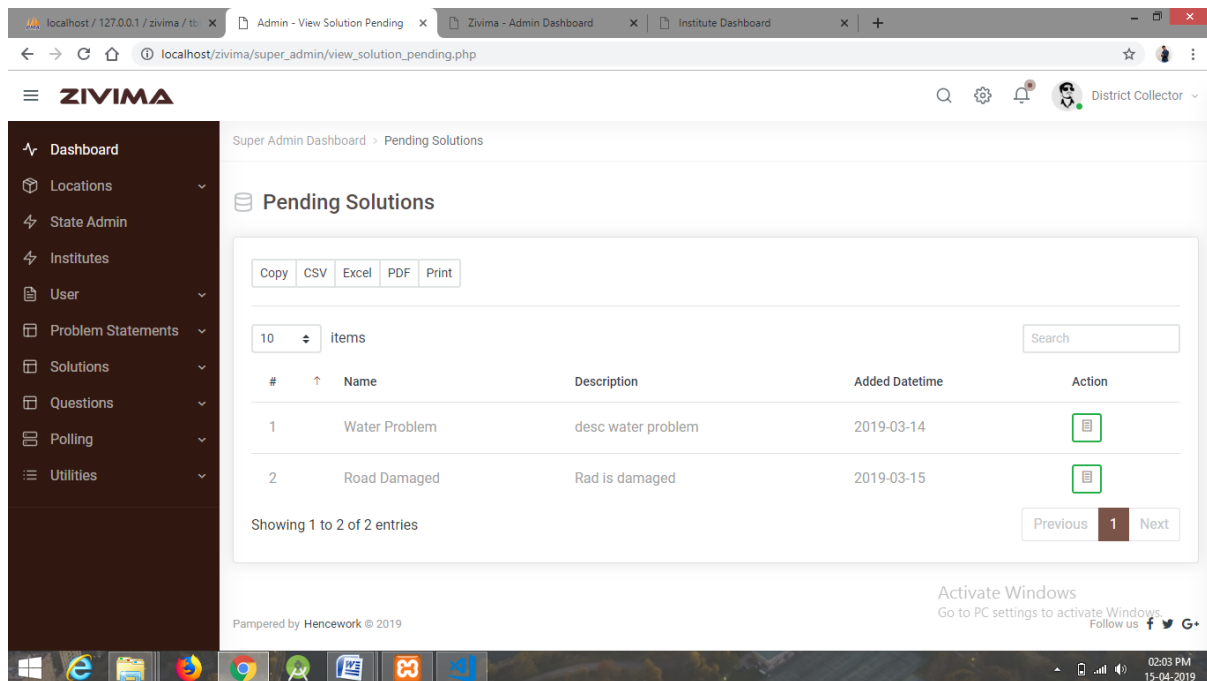


Figure 9. Admin side – solution student module

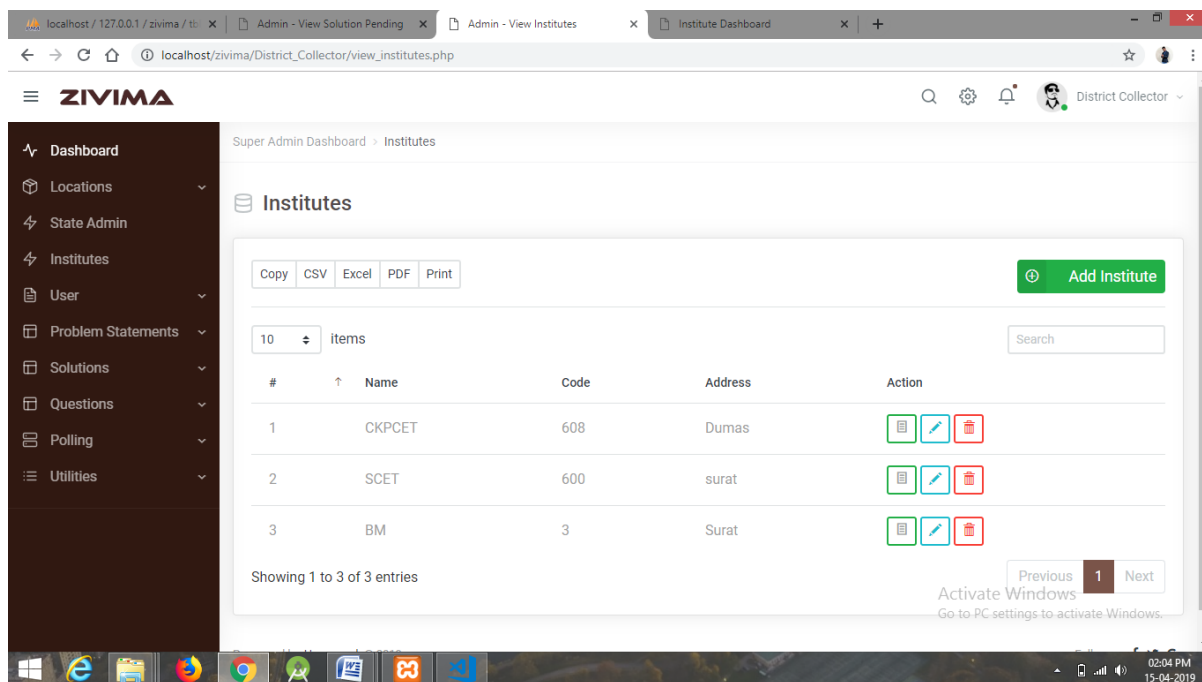


Figure 10. District side – district collector module

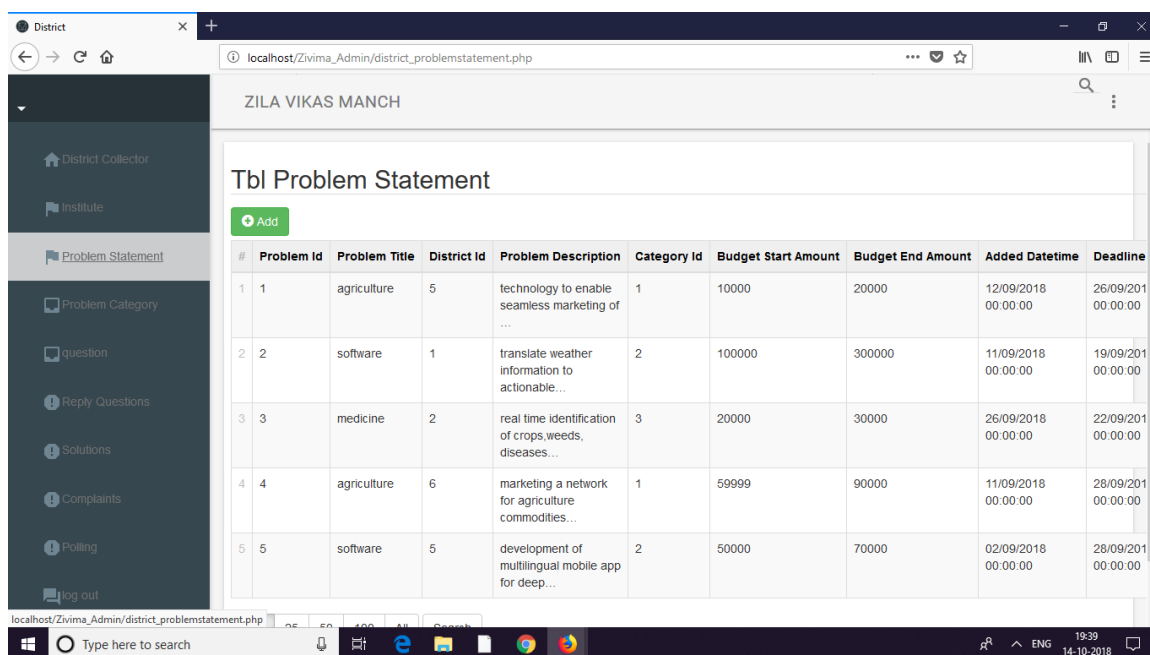


Figure 11. District side – question module

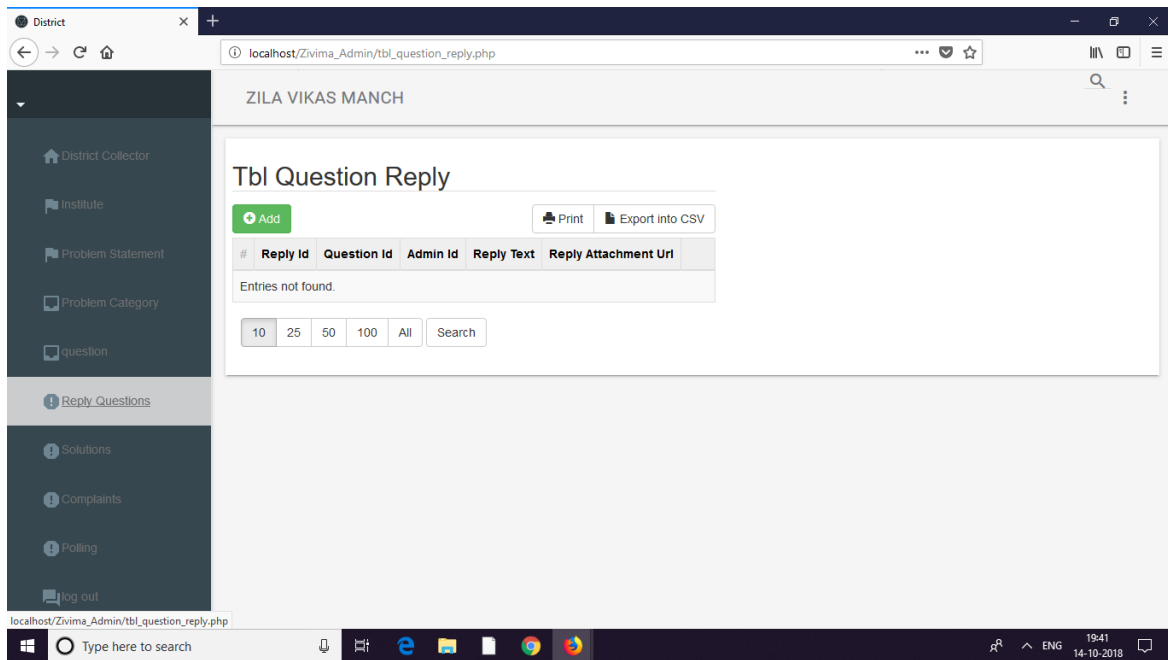


Figure 12. District side – question reply module

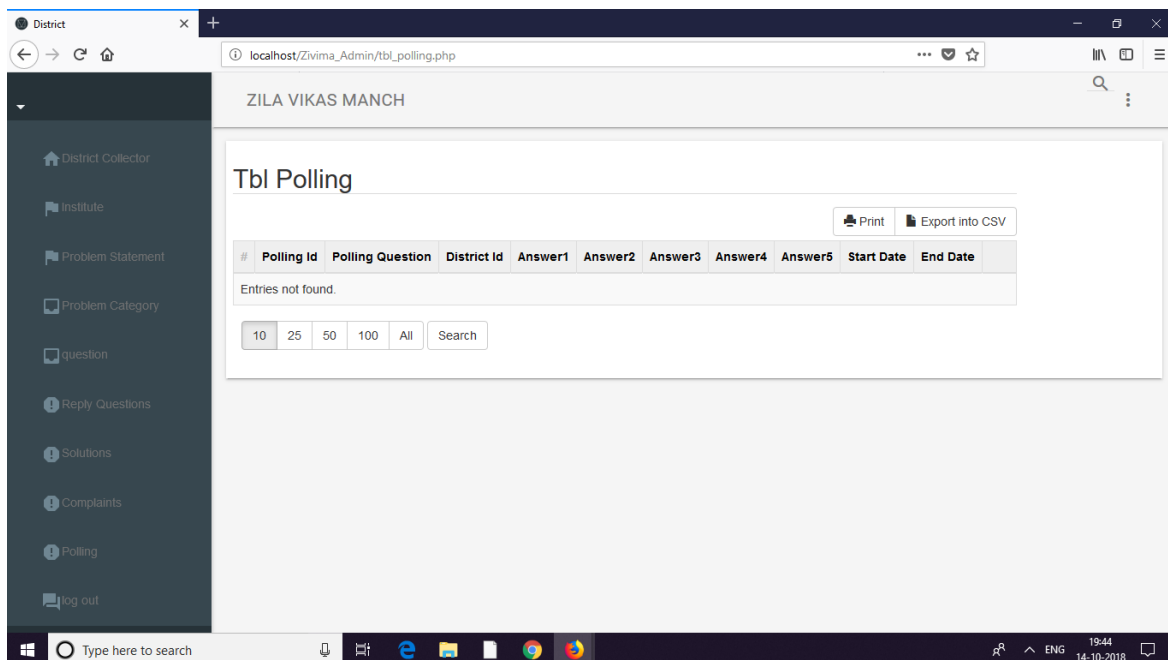


Figure 13. District side – polling module

ZILA VIKAS MANCH

TbI Problem Statement

| # | Problem Id | Problem Title | District Id | Problem Description | Category Id | Budget Start Amount | Budget End Amount | Added Datetime | Deadline |
|---|------------|---------------|-------------|--|-------------|---------------------|-------------------|---------------------|---------------------|
| 1 | 1 | agriculture | 5 | technology to enable seamless marketing of ... | 1 | 10000 | 20000 | 12/09/2018 00:00:00 | 26/09/2018 00:00:00 |
| 2 | 2 | software | 1 | translate weather information to actionable... | 2 | 100000 | 300000 | 11/09/2018 00:00:00 | 19/09/2018 00:00:00 |
| 3 | 3 | medicine | 2 | real time identification of crops,weeds, diseases... | 3 | 20000 | 30000 | 26/09/2018 00:00:00 | 22/09/2018 00:00:00 |
| 4 | 4 | agriculture | 6 | marketing a network for agriculture commodities... | 1 | 59999 | 90000 | 11/09/2018 00:00:00 | 28/09/2018 00:00:00 |
| 5 | 5 | software | 5 | development of multiingual mobile app for deep... | 2 | 50000 | 70000 | 02/09/2018 00:00:00 | 28/09/2018 00:00:00 |

Figure 14. Student side – problem statement module

ZILA VIKAS MANCH

TbI Problem Category

[Add](#) [Print](#) [Export into CSV](#)

| # | Category Id | Category Name | Category Icon | Isactive |
|---|-------------|---------------|---------------|----------|
| 1 | 1 | agriculture | | No |
| 2 | 2 | software | | No |
| 3 | 3 | medicine | | No |

10 25 50 100 All Search

Figure 15. Student side – problem category module

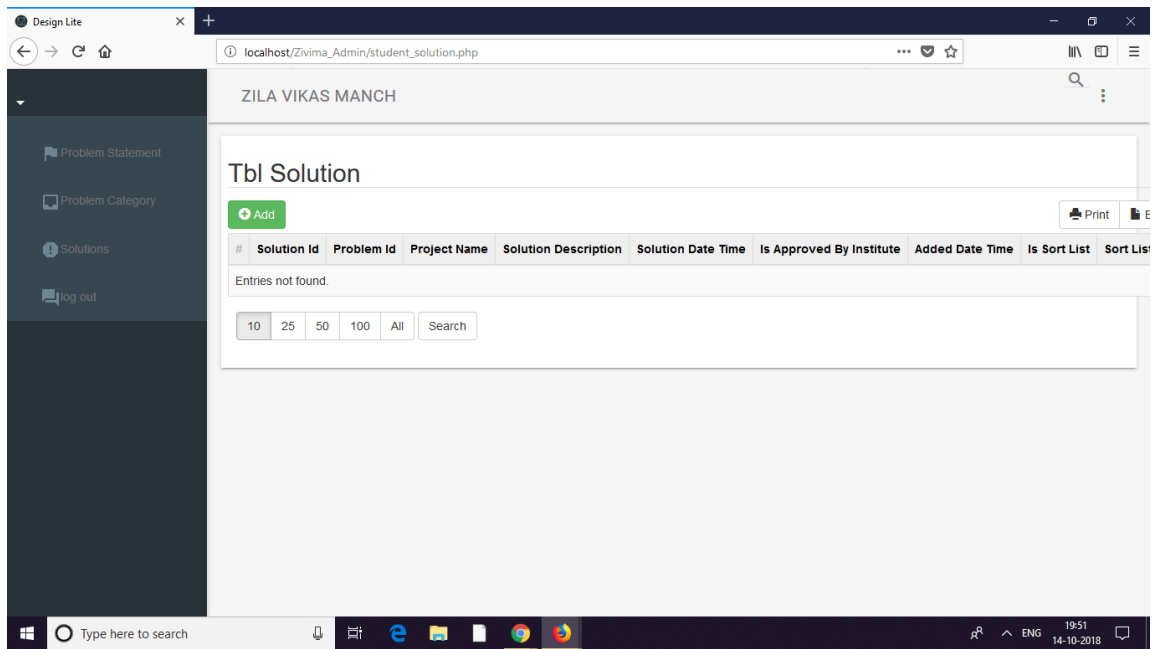


Figure 16. Student side – solution module

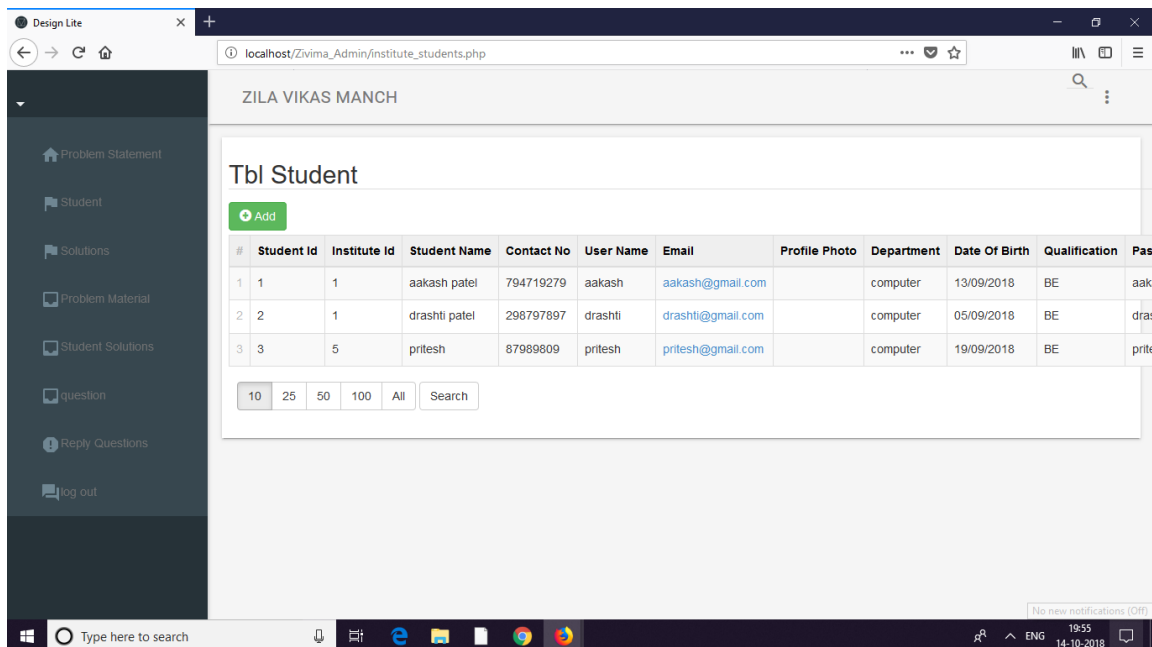


Figure 17. Institute side – student module

4 Conclusion

We have implemented various modules named Super Admin, State Admin, District Collector, Institutes on the web portal which will help super admin, state admin, district collector and institutes to collaborate with each-other. This web portal will help its users to add, update, delete and view data according to the privileges granted.

We have also made an android application which helps people of districts to add complain which will be visible to students of various institutions for which they can provide solution. Other features like geo-tagging, polling are also implemented.

Overall, our project will facilitate people of districts to easily communicate their problems on global platform as well as will provide a golden opportunity to young budding minds of India to showcase their ideas on global platform and the student with the best feasible idea will be granted recognition by government of India.

4.1 Test case

4.1.1 Form Name: Registration Form

| | Input Field | Input Value | Valid/Invalid | Message |
|----|-------------|---|---------------|---|
| 1. | Name | Blank | Invalid | Error message should be generated that Please Enter Name. |
| | | Rutu | Valid | No Error Message |
| 2. | Address | Blank | Invalid | Error message should be generated that Please Enter Address |
| | | A-11, Spring Valley Row House, City light | Valid | No Error Message |
| 3. | City | Blank | Invalid | Error message should be generated that Please Enter City |

| | | | | |
|----|------------------|--|---------|--|
| 4. | Pin Code | Blank | Invalid | Error message should be generated that Please Enter Pin Code |
| | | 395009 | Valid | 6 Digit Number Then No Error Message |
| 5. | Phone Number | Blank | Invalid | Error message should be generated that Please Enter Phone Number |
| | | 2459470 | Valid | 7 Digit Number Then No Error Message |
| | | 9033525237 | Valid | 10 Digit Number Then No Error Message |
| 6. | Email | abc@gmail.com | valid | No error message |
| | | xyz#%@#.com | Invalid | Enter valid email address |
| 7. | Password | Blank | Invalid | Error message should be generated that Please Enter Password Up To 8 Digit |
| | | 12345678 | Valid | No Error Message |
| 8. | Confirm password | 1234 | Invalid | Both the password does not match |
| | | 12345678 | Valid | No error message |

Table 2 Form Name: Registration Form

4.1.2 Form Name: Login

| | Input Field | Input Value | Valid/Invalid | Message |
|--|-------------|-------------|---------------|---------|
|--|-------------|-------------|---------------|---------|

| | | | | |
|----|----------|-------|---------|--|
| | | | | |
| 1. | Username | Blank | Invalid | Error message should be generated Wrong Username |
| | | Hiral | Valid | |
| 2. | Password | Blank | Invalid | Error message should be generated Wrong Password. |
| | | 123 | Valid | Go to homepage |

Table 3 Form Name: Login

References

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