BETTER INDIA

MAPPING OF SOCIAL POSSIBILITIES WITH NEIGHBOURHOOD COLLEGES

VIVEKANAND EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY

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Abstract:

There are many locally relevant problems which come across to UGC where the nearby educational institution can play a vital role. Bringing such problems into the notice of nearby educational institution can be thought of as an open-source innovation /crowd-sourced solution. For example, managing traffic or reducing accident rates by the initiative/involvement of an institution in the vicinity. Or, sharing an innovation on water harvesting (an MRP or a Project) and impacting the real saving of water may be mapped. Many student projects can be well aligned to local social problems. We can have a digital tool for such project based collaborations with real impact. We can also map such colleges and link it with the digital platform to share innovations (as mentioned in problem statement 3). This can directly impact the curriculum with the real regional requirement, a way to ensure relevance of learning.

An example: A district has very unfavourable number of old-young ratio of citizens. This clearly indicates the possibility for having a course in geriatrics or assistive healthcare in the colleges in that district.

Currently there is a portal name Grievances portal similar to this.In grievances portal people can share their local problems and their solutions are provided by anyone.But in our portal people can share problems of any region and they are taken up by colleges of region facing problems.This helps a number of institutes to work collaboratively on a large scale.

Introduction:

This report gives scope description and overview about everything included in the Project Report.
The following is the overview:

Purpose:

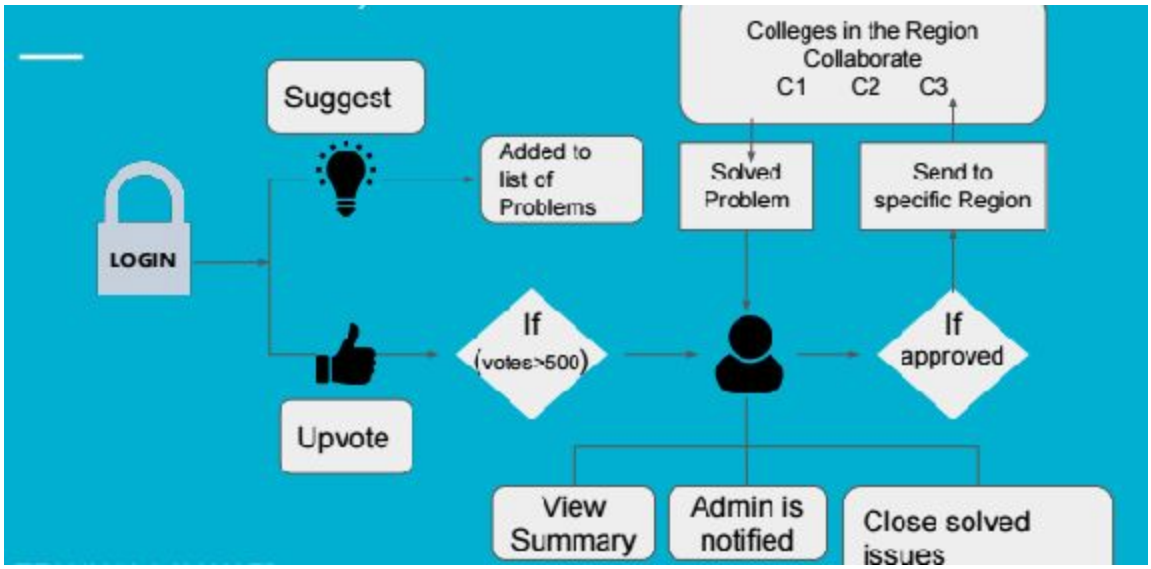
The purpose of this report is to give detailed description of mapping social problems with neighbourhood colleges.It will illustrate the complete declaration and purpose for the development of the system.It will illustrate a interaction,constraints and interface between different users of the system.

System Overview:

Better India takes the problems faced by local people of India as input in the form of upvotes or posting a problem.All users have to login using Google authentication or facebook or any social media platform.This helps to keep the track of users participating.The institute first have to register so that it is possible to keep a track of which colleges are participating.All the passwords of institutes are encoded using **md5** and the colleges can then take up the problems pertaining in a particular locality and can do collaborative projects inorder to solve them.The solutions are generally

provided in the form of videos which is easily understandable to local public.But before posting solutions ,the colleges have to first check for the authenticity of the problems.They can mark any solution as duplicate or bogus.This ensures any unrelevant problems from reaching admin and the system is thus maintained. Finally, a report is generated in the form of excel sheet that helps admin to have knowledge of problems existing in our country.This file can be downloaded as well.

Model of Solution:



Goals:

The Systems aim for a semantic text/web page classifications.Better India provides a better and comprehensible platform for posting problems and finding solutions.It is extremely user friendly and easy to use.

Objective / Future scope:

- Define mechanism to decide *count_of_votes_needed_to_approve_an_issue*
    - This should be actually based on population density of that locality
    - There should be a minimum value to it (say 1000)
        - Define mechanism to decide *count_of_votes_needed_to_approve_a_solution*
    - This should be percentage of *count_of_votes_needed_to_approve_an_issue*
    - Define mechanism to decide this percentage value
        - For now it's assumed to be 30%
- Once an voting is closed for an issue i.e. when the issue is upvoted by number of users equal to *count_of_votes_needed_to_approve_an_issue* , then the upvote facility will be closed and system immediately send notification to all the related institutes.
- There should be a way to maintain "Reputed Institutes"

    - Based on their contribution and also approved Solutions
    - This may serve denial of a bogus issue swiftly as if we wait for all the Institutes to deny, it will take long time
- Admin should be able to see which Institutes are working on that problem.
    - And since when
    - There should be partial submissions / Periodic reports
- Each problem should have a thread on which registered users may discuss its solution or upvote or downvote the solutions also.
- The emails of users sending "bogus approved issues" may be blocked when marked as bogus as colleges

Functional and nonfunctional requirements:

In **Better India** website there are three types of users:

- Citizens of India
- Institute
- Admin

All users get same view of website with similar functionalities but they all perform different tasks.

Functional Requirements:

User Functions

1. Sign Up
    - use Open Authentication
    - This takes him to dashboard for following options
        - To upvote an issue
            - Say when the user reaches here through URL
            - What user may do :
                - reads the issue description
                    - System should show it to the user
                - Clicks on upvote
                    - Gets a confirmation pop up.
        - To like a solution
            - Say when system sends him/her an update about the availability of the solution
            - What user may do :
                -
        - Normal login
            - If user has not updated his profile there should be an appropriate message
            - What user may do :

2. Can change his/her profile
3. To add an issue
    - Will enter State, District, Region (optional), Pincode (optional)
    - A user will quote the problem statement in 100 characters (A good suggestion is shown as an example)
    - Enters ADD
        - Is now shown with matching issues.
            - If the issue is present there he upvotes one (his problem is discarded then)
                - Needs authentication for upvote.
            - Else he choses to add his own problem
        - He adds complete description of the problem. (Max 1500 characters)
        - Will enter his email
        - An authentication code is sent on his email id with problem title and description.
        - He verifies to add the issue.

4. User may also look for issues in any region
    - He enters State, District, Region (optional), Pincode (optional)
    - Puts some keywords (Max 100 characters)
    - Clicks on search
    - Listed with the issues
        - Similar to google search results
            - Three filters
                - Solved Issues
                    - User can't do anything
                - Issues with solutions
                    - Can approve solution if he has upvoted for the issue earlier.
                - Unsolved Issues (with following categories)
                    - Voting Closed
                        - Can't do anything
                    - Voting Open
                        - Can upvote
        - Can browse them on click
            - Can upvote
                - Needs authentication.
5. Can visit a problem description directly through a url and upvote for it.
    - Needs authentication.
6. User cannot upvote same issue more than once.
7. Will be notified through email to approve if any solution is available for any of the problems he has upvoted for.
    - He can approve the solution

Institute Functions

1. Institutes will have login
2. After login they will be able to see the issues of **their region only** like
    a. Unsolved issues (approved)
        i. Can “Report as Bogus” an issue
            1. If “number“ of Institutes “Report as Bogus”
                a. Message will be sent to all the people who upvoted for transparency
        ii. Can upload multiple solution for same problem.
        iii. Can upload video solution of one or more problems
            1. Video solutions are the best form of solutions as it can incorporate a running software presentation, a ppt, or any other idea in general.
            2. The solution will be uploaded in the video format on youtube
            3. A youtube link will be provided in response to an issue as its solution
    b. Issues with solutions
        i. Can add more solutions.

System Functions

1. Knows list of Institutes per district
2. Gets added issues and stores
    - Issue Id
    - Date added by User (Timestamp)
    - Approval Date (Timestamp)
        - Is the date when required number of people upvoted for it and it is intimated to institutes
    - Added By (uid)
    - Location
3. Keeps a track of upvotes per issue
    - Once upvotes reach a *threshold* the issue is notified to all the Institutes in that region or district via email. (Institutes can see approved issues of their region via their login as well)
        - Problems of a district may be shown to that region instead of that district
        - Institutes of nearby districts may fall under same region.
        - Or simply it can be forwarded to the Institutes falling in the same district.

4. Once a Institute submits a solution, system notifies all the users who upvoted for that issue.So that they may approve the solution.
5. Will know how many solutions a Institute has provided.
    - How many of them are solved issues.
6. Long pending issues should be notified to UGC who then will notify the Institutes
7. Institute should be notified when their solution is approved.

Administrator Function

1. Reports to be generated
    a. All issues (For entire country) : Column Heads
        i. State
        ii. District
        iii. Issue Title
        iv. Issue Description
        v. Adding Date
        vi. Count of Solutions
        vii. Approved Solutions
    b. based on a region
    - In the order of votes
        - This can seriously help in syllabus revision.
    - Bifurcating solved and unsolved issues
    - Reports based on keywords(optional)

Hardware Requirements:

To access the web portal of this application,its only need a PC/Laptop with updated web browser.

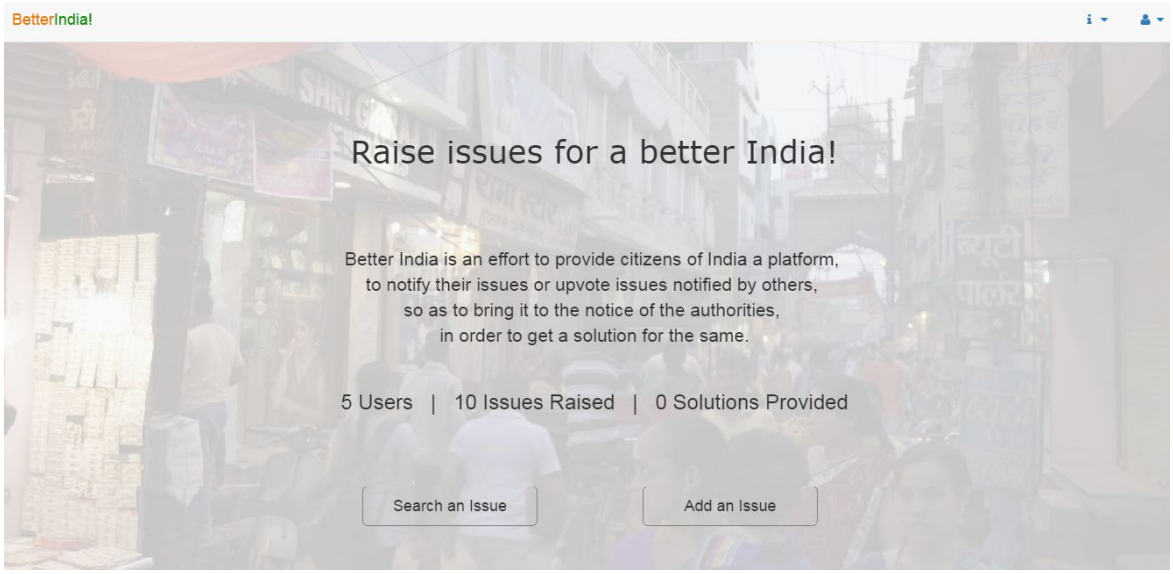
WEB BROWSER: Chrome,Firefox,IE-9.

Technology stack used:

Backend: PHP.

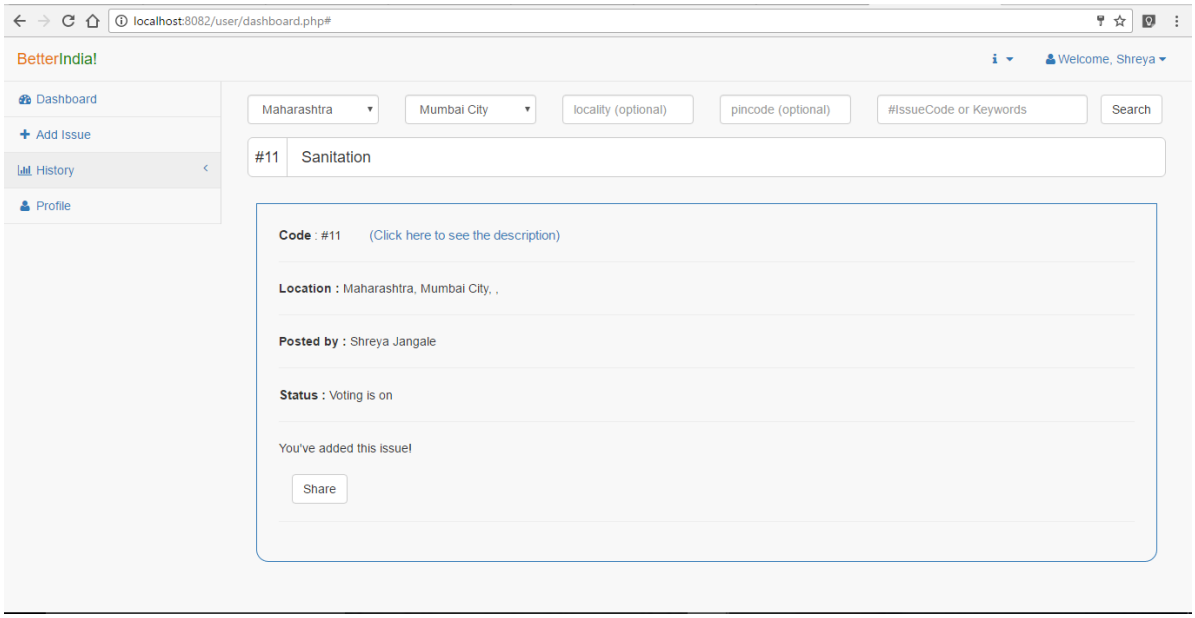
Frontend: Html , Jquery , javascript , Ajax , bootstrap.

Screen designs:

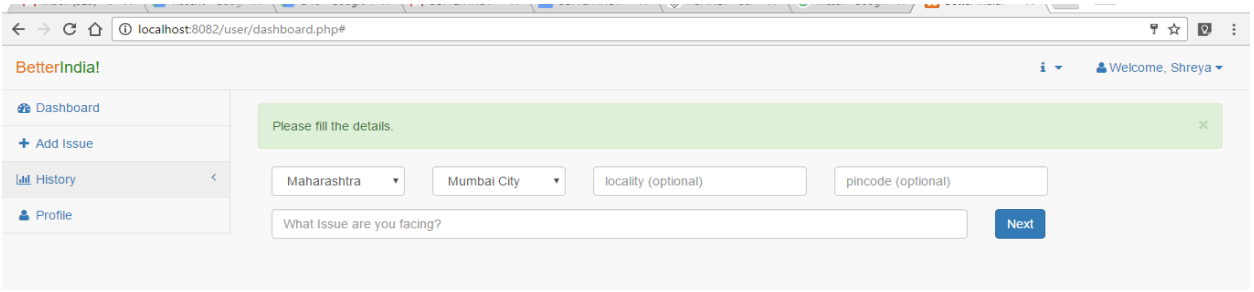


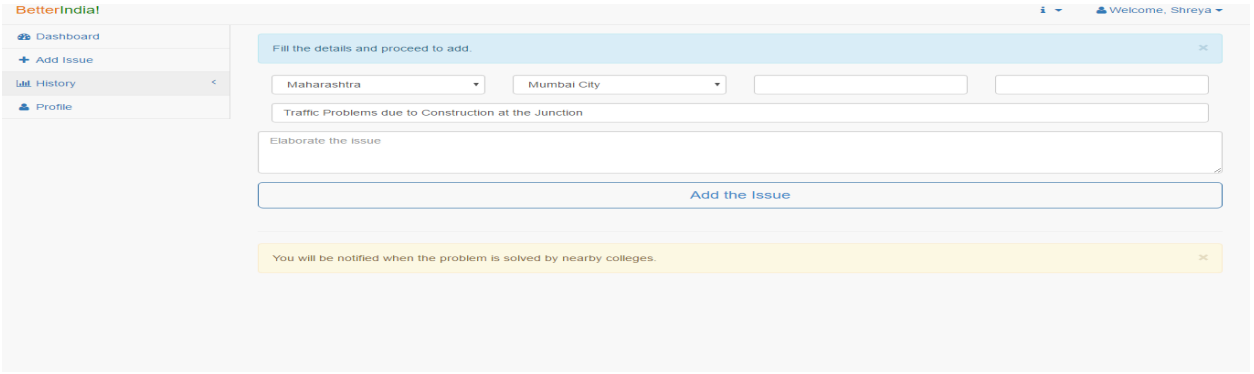
User:

Dashboard



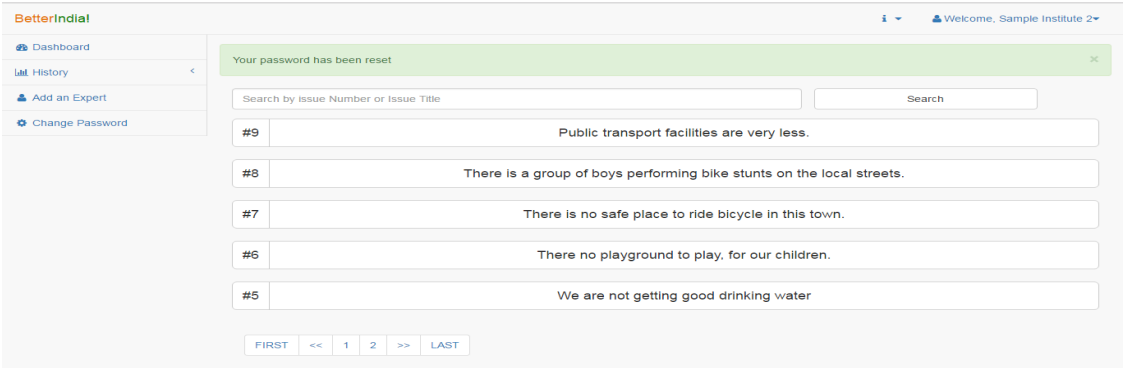
To add an issue :



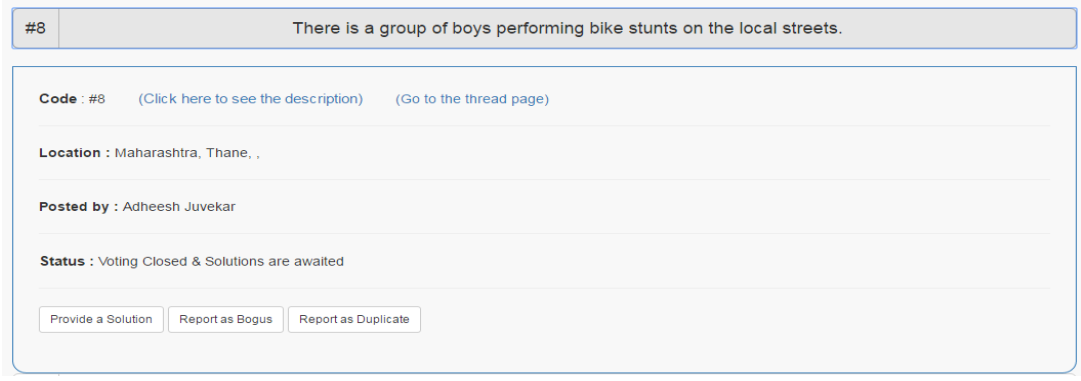


INSTITUTE

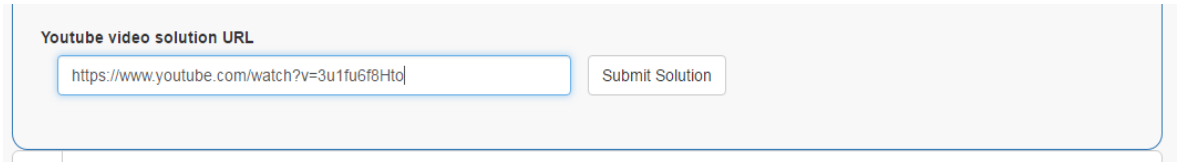
INSTITUTE DASHBOARD WITH LOGIN :



PROBLEM MODAL WHERE INSTITUTE CAN MARK IT AS BOGUS , DUPLICATE OR PROVIDE A SOLUTION

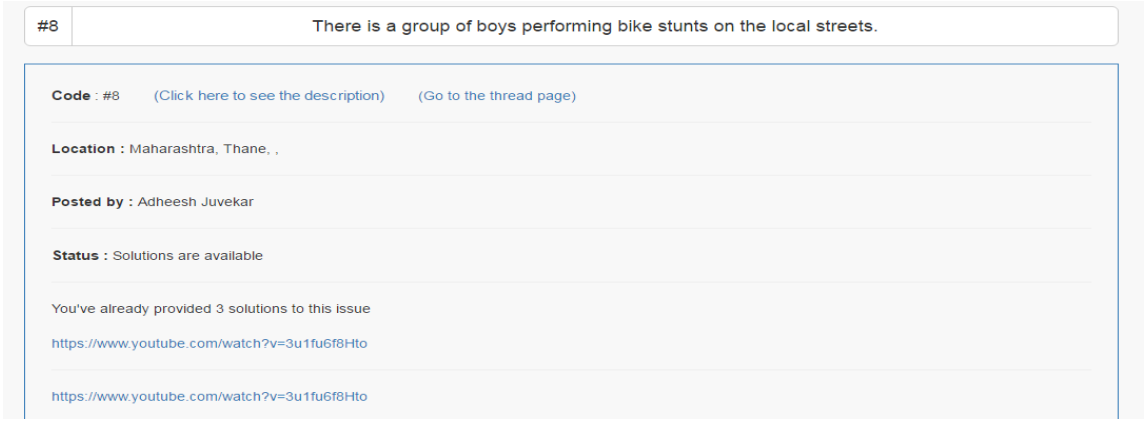


SOLUTION TO BE GIVE IN A FORM OF URL :

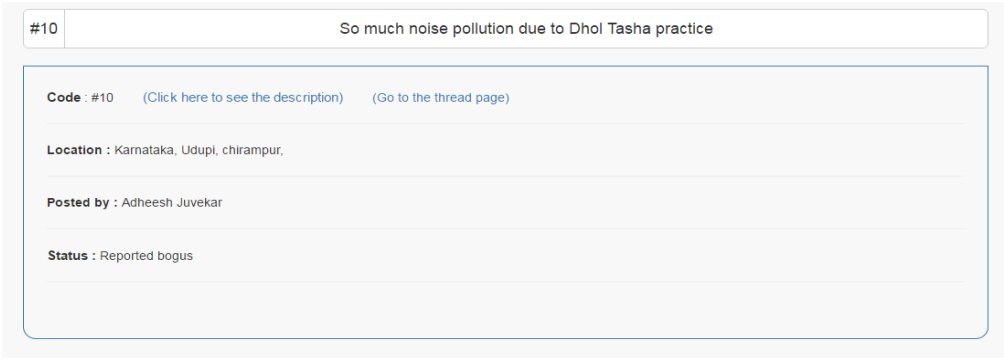


HISTORY OF THE INSTITUTE :

A) SOLUTION PROVIDED :

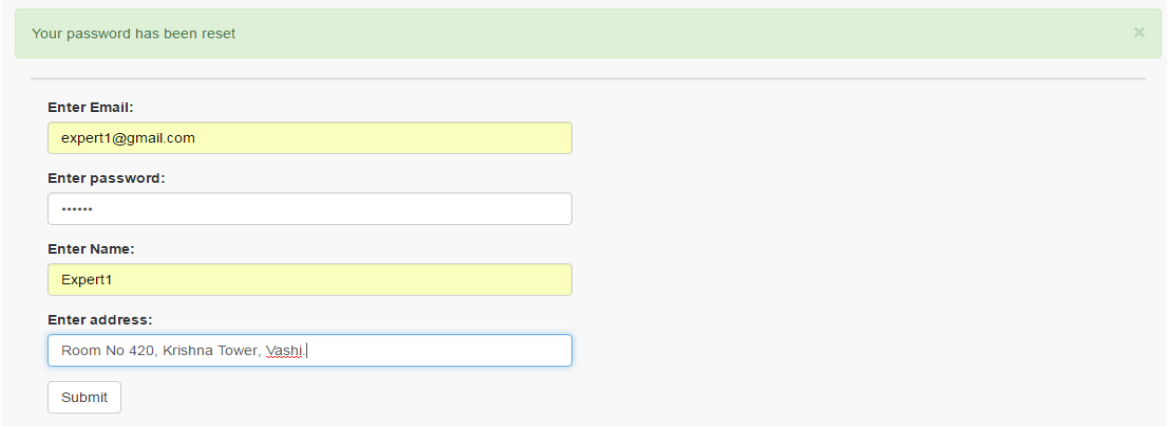


B) REPORTED AS BOGUS :



C) REPORTED AS DUPLICATE :

INSTITUTE CAN ADD AN EXPERT :



Implementation strategy:

1. Initially, the whole template was designed to suit our requirement.
2. Bootstrap was used for the development of the template of this website (SB Admin 2)
3. All pages were then linked which made the division of work easier.
4. The whole backend was made using PHP.
5. There were various event listeners used in this system like onfocus, onclick, onchange, etc., which were implemented using JS and Jquery.
6. Almost all pages had same page refresh and reload for which we have used AJAX.

Conclusion:

1. **Our team has successfully completed a Web Application**
2. **Product Design was a crucial point in the development**
3. **We now have a complete understanding of how a website works from start to end**
4. **We leant a new language - AJAX. We also strengthened our knowledge in PHP, JS and Jquery.**
5. **Most importantly, we learnt how to work in a team.**
6. **The future scope of our specified in the Goals -> Objectives section.**