VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi – 590 018

A MINI PROJECT REPORT ON

"PUBLIC ENGAGEMENT PLATFORM"

Submitted in the partial fulfilment for the award of the Degree of

BACHELOR OF ENGINEERING
IN
COMPUTER SCIENCE AND ENGINEERING

Submitted by

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Department of Computer Science and Engineering

CERTIFICATE

It is Certified that the Mini Project work entitled **"Public Engagement Platform"** carried out by **Ms. Spoorthi M S (1BH18CS095)** & **Ms. Vijaya Pandey (1BH18CS103),** Bonafide students of **BANGALORE TECHNOLOGICAL INSTITUTE, Bengaluru,** in partial fulfilment for the award of Bachelor of Engineering in Computer Science Engineering of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY**, Belagavi during the year **2020-2021**. Thus, it is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report submitted to the Department of Computer Science and Engineering. The mini-project report has been approved as it satisfies the academic requirements in respect of Mini-Project work prescribed for the said degree.

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External Viva:

Name of the examiners	Signature with date
1._____	_____
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Department of Computer Science and Engineering

DECLARATION

We the students of Fifth semester **B.E. COMPUTER SCIENCE & ENGINEERING, BANGALORE TECHNOLOGICAL INSTITUTE, BENGALURU**, hereby declare that the project work entitled "**Public Engagement Platform"** has been independently carried out by us at Bangalore Technological Institute, Bengaluru and submitted in partial fulfilment of the requirements for the award of the degree in **Bachelor of Engineering in Computer Science and Engineering** of the Visvesvaraya Technological University, Belagavi during the academic year 2020-21.

We also declare that, to the best of our knowledge and believe the work reported here does not form or part of any other dissertation on the basis of which a degree or award was conferred on an early occasion of this by any other student.

PLACE: Bengaluru

DATE: 28-01-2021

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ABSTRACT

Public Engagement platform is a citizen engagement platform and is our endeavour to promote the active participation of Indian citizens in their country's governance and development. It is also aimed at creating a common platform for citizens (say for a specific constituency) to crowd source governance ideas from citizens also. Using this application user shall be allowed to discuss and to contribute on various government projects and plans. If the people encounter some public issues it also allows users to upload photos of the same and give a brief description about it and thus creating awareness.

ACKNOWLEDGEMENT

Any achievement, be it scholastic or otherwise does not depend solely on the individual efforts but on the guidance, encouragement of intellectuals and elders. We would like to take this opportunity to thank them all.

We are grateful to **Dr. A Prabhakara Reddy, President** and **Sri. C L Gowda, Secretary, Bangalore Technological Institute** for having provided us with a great infrastructure and well-furnished labs.

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INTRODUCTION

1.1 DATABASE

A database is an organized collection of data. A relational database, more restrictively, is a collection of schemas, tables, queries, reports, views, and other elements. Database designers typically organize the data to model aspects of reality in a way that supports processes requiring information, such as (for example) modeling the availability of rooms in hotels in a way that supports finding a hotel with vacancies.

A database is not generally portable across different DBMSs, but different DBMSs can interoperate by using standards such as SQL and ODBC or JDBC to allow a single application to work with more than one DBMS. Computer scientists may classify database-management systems according to the database models that they support; the most popular database systems since the 1980s have all supported the relational model - generally associated with the SQL language.

1.2 DATABASE MANAGEMENT SYSTEM

DBMS stands for Database Management System. We can break it like this DBMS = Database + Management System. Database is a collection of related data and Management System is a set of programs to store and retrieve those data. Based on this we can define DBMS like this: DBMS is a collection of inter-related data and set of programs to store & access those data in an easy and effective manner.

Database systems are basically developed for large amount of data. When dealing with huge amount of data, there are two things that require optimization: Storage of data and retrieval of data.

The primary goal of a DBMS is to provide a way to store and retrieve database information that is both convenient and efficient. By data, we mean known facts that can be recorded and that have implicit meaning. For example, consider the names, telephone numbers, and addresses of the people you know. You may have recorded this data in an indexed address book, or you may have stored it on a diskette, using a personal computer and software such as DBASE IV or V, Microsoft ACCESS, or EXCEL. While information can be transported, stored or shared without many difficulties the same cannot be said about knowledge.

Database systems are designed to manage large bodies of information. Management of data involves both defining structures for storage of information and providing mechanisms for the manipulation of information. In addition, the database system must ensure the safety of the information stored, despite system crashes or attempts at unauthorized access. If data are to be shared among several users, the system must avoid possible anomalous results. The Fig. 1.1 shows the Components of a Database Management System.

Because information is so important in most organizations, computer scientists have developed a large body of concepts and techniques for managing data.

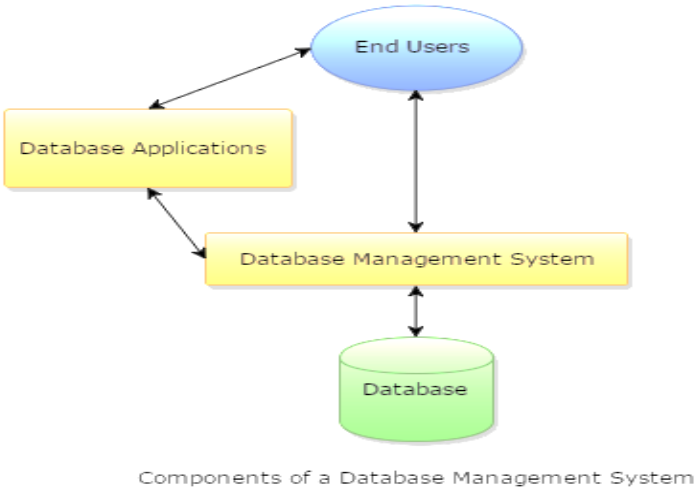

Fig. 1.1 Components of a Database Management System

- Users: Users may be of any kind such as DB administrator, System developer, or database users.
- Database application: Database application may be Departmental, Personal, organization's and / or Internal.
- DBMS: Software that allows users to create and manipulate database access.
- Database: Collection of logical data as a single unit.

1.3 ADVANTAGES OF DBMS

- Data independence
- Efficient data access
- Data integrity and security
- Data administration
- Reduced Application Development Time
- Uniform Administration Procedures for data

1.4 APPLICATIONS

- Airline system: reservations, schedules.
- Telecommunication: calls made, customer details, network usage.
- Education sector: registration, results, grades.
- Sales: products, purchases, customer.
- Banking: store the transaction information of the customer.
- Human resource: For information about employees, salaries, payroll taxes and benefits.
- Industry: Where it is a manufacturing unit, warehouse or distribution centre, each one needs a database to keep the records of ins and outs.
- Manufacturing: For the management of supply chain and for tracking production of items. Inventories status in warehouses.
- Railway reservation system: store the data of ticket bookings, status about train's arrival and departure, also if trains get late people get to know through database update.
- HR Management: Employee paychecks, leaves, deductions, their background information and performance details will be stored.

1.5 RDBMS

RDBMS stands for Relational Database Management Systems. All modern database Microsoft Access are based on RDBMS. It is called Relational Data Base Management System (RDBMS) because it is based on relational model introduced by E.F. Codd.

- **History**

During 1970 to 1972, E.F. Codd published a paper to propose the use of relational database model. RDBMS is originally based on that E.F. Codd's relational model invention. Codd introduced the term in his research paper "A Relational Model of Data for Large Shared Data Banks". In this paper and later papers, he defined what he meant by "relational".

- **First commercially available RDBMS**

The first system sold as an RDBMS was Multics Relational Data Store (June 1976).Oracle was released in 1979 by Relational Software, now Corporation. Ingres and IBM BS12 followed.

1.6 INTRODUCTION TO SQLITE

SQLite is a relational database management system (RDBMS) contained in a C library. SQLite is ACID-compliant and implements most of the SQL standard, generally following PostgreSQL syntax. However, SQLite uses a dynamically and weakly typed SQL syntax .

The SQLite library is linked in and thus becomes an integral part of the application program. Linking may be static or dynamic. The application program uses SQLite's functionality through simple function calls, which reduce latency in database access: function calls within a single process are more efficient than inter-process communication.

SQLite stores the entire database (definitions, tables, indices, and the data itself) as a single cross-platform file on a host machine. It implements this simple design by locking the entire database file during writing. SQLite read operations can be multitasked, though writes can only be performed sequentially.

SQLite database is integrated with the application that accesses the database. The applications interact with the SQLite database read and write directly from the database files stored on disk.

SQLite is self-contained means it requires minimal support from the operating system or external library. This makes SQLite usable in any environment especially in embedded devices like iPhones, Android phones, game consoles, handheld media players, etc.

SQLite is developed using ANSI-C. The source code is available as a big sqlite3.c and its header file sqlite3. h. If you want to develop an application that uses SQLite, you just need to drop these files into your project and compile it with your code.

All transactions in SQLite are fully ACID-compliant. It means all queries and changes are Atomic, Consistent, Isolated, and Durable. In other words, all changes within a transaction take place completely or not at all even when an unexpected situation like application crash, power failure, or operating system crash occurs.

SQLite distinctive features

SQLite uses dynamic types for tables. It means you can store any value in any column, regardless of the data type. SQLite allows a single database connection to access multiple database files simultaneously. This brings many nice features like joining tables in different databases or copying data between databases in a single command. SQLite is capable of creating in-memory databases that are very fast to work with.

1.7 INTRODUCTION TO PROJECT

India is the largest democratic country in the world. Democracy is defined as the government of the people, by the people and for the people. And we all know that, isn't it? So, it is not possible for all the citizens to participate in the government and that is why we select our representatives at regular intervals. But today if we look at it is it really happening? Are we able to communicate with the government? Are all our problems reaching the representatives we select? If no what are real problems we are facing? Not all our problems are reaching the government. Even if they do, the results are null or not satisfactory. And most of the times they are ignored. And the process to file a complaint is quite old and is time consuming.

So, we have solution for all these problems. Our web application helps to overcome these problems.

The main objective of our application is to connect the citizens to Parliamentarians. The main idea is to build a web application which will provide a common platform for the people belonging to a constituency to create awareness about the different public issues. Public issues can be acknowledged to the representative. Promotes active participation of citizens in governance.

CHAPTER 2

LITERATURE SURVEY

2.1 RELATED WORK

The way that politics plays out online is fascinating. Endless polls, endless opinions, rant statuses and little that actually changes in the real world.

There are many citizen engagement platforms founded by the Government of India to promote the active participation of Indian citizens in their country's governance and development. It is aimed at creating a common platform for Indian citizens to "crowdsource governance ideas from citizens". Public engagement requires an active, intentional dialogue between citizens and public decision.

Incredible India application. This app is an effort by the tourism ministry to update domestic and international travellers about registered service providers, recommended places, and warnings of fraud and approved travel agents. The users can use location-based services for information on the place they are visiting and also plan their itineraries on the app. However, when it comes to usage, the app is not very nifty and often lags. The user interface is also pretty monotonous and could do with a facelift.

MEA (Ministry of External Affairs) application. The MEA mobile app, which provides information about ministry's services and activities, has got some surprisingly good reviews. We used the app for a few days and though the foreign media articles were not accessible, the interface and responsive of the app is pretty user friendly. Users can read press releases, Lok Sabha activities, tender notifications and even access passport services through the app. They can also personalize the app and take notes within the app.

But many of the apps mentioned above are effective in reducing the communication gap between the citizens and their very local representatives. None of the applications are concerned about the minute issues about the minute constituencies.

2.2 WHO WILL BENEFIT FROM THIS SERVICE?

We thought of taking a step to solve the problem through a web application where the citizens could indulge and could experience the transparent governance. Our app mainly focusses on the citizen indulgence in creating awareness about the problems they are facing.

In addition to this, the app provides many other services. So, one may think "all sounds good, but how will you get the politicians to use it?". Because PEP is specifically designed for political communications, it is just as valuable to the politicians as it is to the constituents. To maintain good relations and take the subjects into confidence, there should be accountability between the politicians and the citizens. The accountability linkage breaks down when the politicians can't deliver what voters demand or when they can't convince voters that they should demand what politician are prepared to deliver to them. The collapse of this linkage of political accountability is an ever-present danger in democracies with potentially grave consequences for politicians. That is why we say this app will surely help politicians to maintain accountability by knowing the problems which they couldn't come to know due to communication gap.

2.3 PROGRAM DESIGN

The design of the system aims to detect the procedures which must be present in the system, the considerations and specifications of these procedures and to connect with one another to deliver the craved results. Toward the final of the framework plan all the real information structures, document organizations, yield organizes and also significant modules in the framework and their particulars are chosen.

System architecture is the conceptual model that defines the structure, behaviour, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structures and behaviours of the system. A system architecture can comprise system components, the expand systems developed that will work together to implement the overall system. There have been efforts to formalize languages to describe system architecture; collectively these are called architecture description languages (ADLs).

To give the idea a reality, a development platform is to be used. In this case, Django has been opted for development of Public Engagement Platform. Django is a high-level web framework that enables rapid development of secure and maintainable web applications. Django provides many modules and packages that ease the functionality of web application.

Common people (citizens), Public Representatives (MLA, MP, and Corporators) are the end Admin have to register themselves first. Id and password will be given to the Public users. To avail the services of PEP, the public other than the Public

Representatives and Representatives and the Admin so that they don't have to register. With respect to the constituency, they belong to, the users will get the news updates of their constituencies. Admin adds the news and it will be unique from one constituency to another. The user is going to get all the information about his constituency. For this purpose, the section 'Assembly' has been included. If a user has a public concerned issue, he can go to 'Complaints' section where he will be provided many sectors to choose. He can choose one and can post the complaint and giving brief description about it and can upload its related image. This helps to create awareness. All the complaints registered can be seen by all other.

Users in 'Polling' section: In the Polling section all the complaints registered can be seen and if any user feels that even he has gone through or facing the same issue, he can up-vote it. Finally, all the complaints will be acknowledged to the Public Representatives. Based on the number of up votes the seriousness of the problem can be understood. This helps the Public Representatives to serve the need of the people. Politicians get benefitted through this since it helps to maintain the accountability. The Admin has the authority to add news, view and delete the complaints if found it is irrelevant. Admin can also block the user if it is notified that he is creating chaos. The last service the user can avail is 'Query' section. Here Admin can post a query and User can answer it to crowdsource ideas from citizens. The last service the users can avail is 'RTI' section. Here awareness is created about the RTI like its importance and how it can be used.

Finally, when the application is ready several tests must be carried out to fix the bugs and issues in the code. Before releasing it out to the world, a sample must be tried and reviewed by a small group, like people in the neighbourhood and collect those neighbour's feedback regarding the system. If negative feedbacks or similar statements arrive, then they have to be implemented and rectified in the system and tested again.

2.4 DATA DESIGN

The Entities participating in PEP are Constituency, User, Newsfeed, Sector, Complaint, Query, and Answer. The entities User and Constituency, User and Newsfeed follow many to One Relationship. User and Complaint follow many to Many Relationship. User and Query, User and Answer follow many to One Relationship. There is a hierarchy followed by data fields. Example: User will branch out further as user name, user constituency, user email and so on.

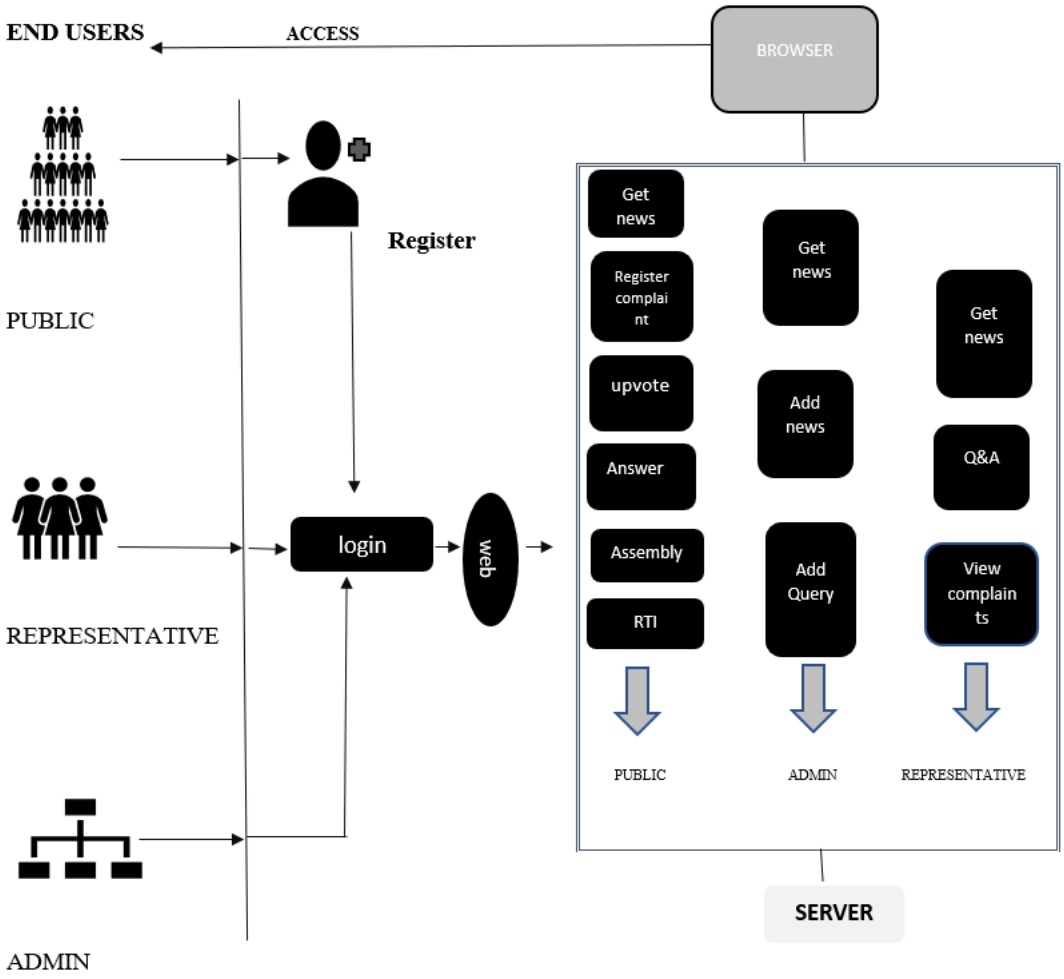

Fig. 2.1 Data Design

2.5 SUMMARY

Table 2.1 Summary

Sl. No.	Work and Author	Methodology (Features)	Published date	Drawbacks
1	Incredible India Application by Mr. K.J. Alphons	App is an effort by the tourism ministry to update domestic and international travellers about registered service providers, recommended places, and warnings of fraud and approved travel agents. The users can use location-based services for information on the place they are visiting and also plan their itineraries on the app.	27-September - 2019	When it comes to usage, the app is not very nifty and often lags. The user interface is also pretty monotonous and could do with a facelift.
2	MEA (Ministry of External Affairs) application	Gives information about ministry's services and activities. This is a pretty user-friendly application.	9-December-2014	The app is not very nifty and often lags. Not concerned about minute issues about minute constituencies.
3	Meerkat Application by Ben Rubin Life on Air, Inc.	Helped to reduce citizen barriers to access information and events , making it the latest tool for furthering public participation in civic affairs.	2- May-2015	Difficult to find relevant streams in application. Limited browser capabilities. Can't save streams online.

4	Narendra Modi App – Connect with the PM	The official app of the Prime Minister of India Narendra Modi	9- June-2015	Does not include local representatives and can't address minute problems of the constituencies.
5	MyGov app by Govt. Of India	Touted as the killer app for Digital India campaign, MyGov's major aim is to include citizens in governance initiatives, take polls and form groups around topics of interest.	26- July-2014	Does not include local representatives and can't address minute problems of the constituencies.

CHAPTER 3

PROBLEM STATEMENT

Not all our problems are reaching the government. Even if they do, the results are null or not satisfactory. And most of the times they are ignored. And the process to file a complaint is quite old and is time consuming.

Citizens have disengaged and stopped holding elected officials accountable to representing their interests. Most people in this country feel like their voice and their vote don't count, so why should they bother? The local representatives don't come to know what the real problem is. The main objective of our application is to connect the Citizens to the Parliamentarians.

3.1 EXISTING SYSTEM

India is the largest democratic country in the world. It's very difficult to address each of the problems.

Let us consider a constituency. If there is a public issue there is no common platform which is effective in acknowledging it to the representative. And we cannot expect the representatives all the times to make time to listen to each of the problems. Once the problem is addressed, its progression should be intimidated to the public which in many cases could not happen. The process to file a complaint is too sluggish. There are many other citizen engagement apps. One such app is MODI app and PMO app is also very similar. These apps are another step from the PM to make him more accessible to citizens. And other similar app is MyGov, a Government funded app is other endeavour. But these apps somewhere fail to address the minute issues of minute constituencies and also fail to involve the local representatives.

3.1.1 DISADVANTAGES

The main disadvantages of existing system are:

- No common platform that would bring the citizens and local representatives together.
- The process of filing a complaint is too outdated.
- Sometimes even if the problem reaches the government, no intimidation to the public about the progress made.

3.2 PROPOSED SYSTEM

The main idea is to build a web application which will provide a common platform for the people belonging to a constituency to create awareness about the different public issues. So, our web application facilitates the user to achieve the same.

PEP's main features are:

1. News Feed: Gives user the updates on their constituencies.
2. Assembly: User can get all the information of their constituency.
3. Complaint: If any public issue, complaint can be registered and same can be used by other users
4. Polling: Registered complaints can be up voted by others also if they are facing the same issue.
5. Query: To crowd source ideas from citizens.
6. RTI: Users get all the information about the RTI and thus awareness is created.

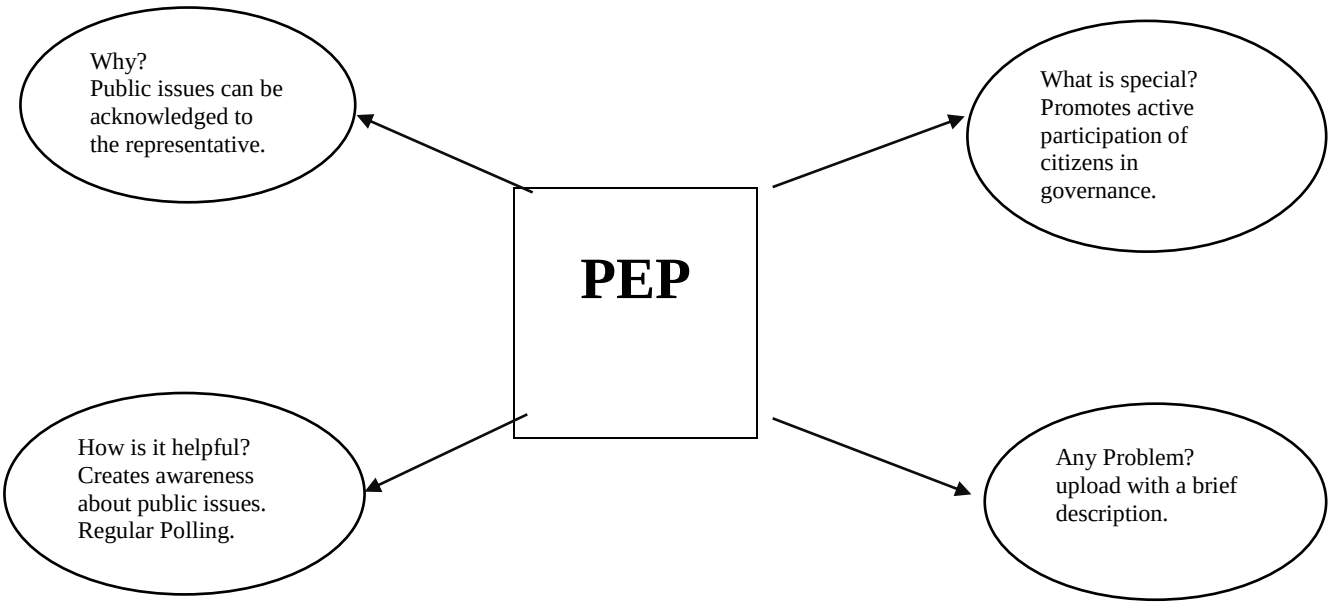

Fig. 3.1 Proposed System

3.2.1 ADVANTAGES

- Provides a citizen engagement platform.
- Ideas to report and solve basic public issues can be invited from the masses.
- Awareness about problems.
- Public issues can be acknowledged to the representative.
- Promotes active participation of citizens in governance.
- To address the minute issues of minute constituencies and also to involve the local representatives.

CHAPTER 4

REQUIREMENT SPECIFICATION

4.1 HARDWARE REQUIREMENTS

- System : Pentium IV 2.4 GHz.
- Hard Disk : 500 GB.
- Ram : 4 GB.

Any desktop / Laptop system with above configuration or higher level

4.2 SOFTWARE REQUIREMENTS

- Client-Side Technologies : HTML 5, CSS 3, Bootstrap 4, JavaScript.
- Server-side Technologies : Django
- IDE/Workbench : Visual Studio Code
- Other Libraries : jQuery (JavaScript Library), AJAX

CHAPTER 5

IMPLEMENTATION

Implementation is the stage of the project when the theoretical design is turned out into a working system. Thus, it can be considered to be the most critical stage in achieving a successful new system and in giving the user, confidence that the new system will work and be effective. The implementation stage involves careful planning, investigation of the existing system and its constraints on implementation, designing of methods to achieve changeover and evaluation of changeover methods. The execution period of any undertaking advancement is the most imperative stage as it yields the last arrangement, which takes care of the current issue. The execution stage includes the genuine emergence of the thoughts, which are communicated in the examination report and grew in the configuration stage. Usage ought to be flawless mapping of the outline archive in a suitable programming dialect to accomplish the vital last item. Frequently the item is executed because of erroneous programming dialect decided for usage or inadmissible technique for programming. It is better for the coding stage to be straightforwardly connected to the configuration stage in the sense if the outline is as far as item situated terms then usage ought to be ideally completed in an article arranged manner. The variables concerning the programming dialect and stage picked are portrayed in the following couple of areas.

5.1 MODULAR DESIGN

Modular Design or "modularity in design", is a design approach that subdivides a system into smaller parts called modules or skids that can be independently created and then used in different systems. In this project there are three modules:

Modules:

There are majorly 3 modules.

- Admin module
- Representative module
- Public module

5.1.1 Admin Module

This is the main module of the system. Admin has the authority to add the news. He also has the authority to add a query section to the public. The public will get the news when they login. Admin can view the Feedbacks given by the public.

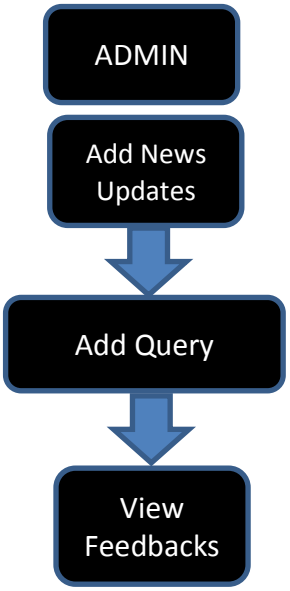

Fig. 5.1 Admin Module

5.1.2 Representative Module

The representative gets all the news updates about his constituency. He can view the complaints registered by the public thus can understand the seriousness of the problem. He can share his views and can intimidate the public with the development that is happening in his constituency.

Fig. 5.2 Representative Module

5.1.3 Public Module

The public to avail the services of the PEP he has to first register by giving the valid credentials. After which he can login and get the news updates in the home page of his account. The public can register a complaint, up vote any issue in the polling section if he is going through the same problem. He can answer to the Query posted by the Admin of the Constituency. He can get all the information of his constituency in the Assembly Section.

Fig. 5.3 Public Module

Signup code

```
@csrf_exempt
def get_signup_data(request):
    if request.method == 'POST':
        name = request.POST.get('user_name')
        email = request.POST.get('user_email')
        pwd = request.POST.get('user_password')
        mobile = request.POST.get('user_mobile')
        constituency =request.POST.get('user_constituency')

        if(name and email and pwd and constituency):

            # get id of the constituency
            const_id = get_object_or_404(Constituency,constituency_name=con
stituency).constituency

            # save the record into users table
            try:
                if not User.objects.filter(uemail=email).exists():
                    if not User.objects.filter(username=name).exists():
                        reg = User(const_id=const_id,username=name,uemail=e
mail,upassword=pwd,umobile=mobile,uconsname=constituency,usertype='public')
                        regstatus = reg.save()
                        # send HttpResponse
                        responseData = {
                            'code': 200,
                            'message': 'Successfully registered',
                            'data' :{
                               'user_email': email,
                               'user_name' : name,
                               'constituency_id': const_id,
                               'constituency_name': constituency
                            }
                        }
                        return JsonResponse(responseData)
                    else:
                        # send HttpResponse
                        responseData = {
                            'code': 400,
                            'message': 'This Username has already been take
n',
                        }
                     # return redirect('login')
                        return JsonResponse(responseData)
                else:
                    # send HttpResponse
                    responseData = {
                        'code': 400,
```

```
                        'message': 'This Email has already been registered'
,
                    }
                    return JsonResponse(responseData)
            except Exception as e:
                # log the exceptions
                responseData = {
                    'code': 500,
                    'message': 'Something went wrong!!'+str(e),
                }
                return JsonResponse(responseData)
        else:
            responseData = {
                'code': 400,
                'message': 'No input field can be empty!!!!',
            }
            return JsonResponse(responseData)

    else:
        return render(request,'appdb/signupp.html')
```

signup.html

```
<!DOCTYPE html>
{% load static%}
<body>
    <form id="signup-form">{% csrf_token %}
        <h1>Sign Up</h1>
        <fieldset>
            <div style="text-align:center">
                <legend><b>Your basic info</b></legend>
            </div><br>
            <label for="user_name"><b>Name</b></label>
            <input type="text" id="user_name" name="user_name" class="form-
control" pattern="[A-Za-z]{1,15}"
                title="Username can only contain 1 to 15 letters" required>

            <label for="user_email"><b>Email</b></label>
            <input type="email" id="user_email" name="user_email" class="fo
rm-control" placeholder="emailxyz@123"
                pattern="[a-z0-9._%+-]+@[a-z0-9.-]+\.[a-z]{2,}$" required>
            <label for="user_password"><b>Password</b></label>


<input type="password" id="user_password" name="user_password" width="48" c
lass="form-control"

pattern=".{6,}" title="six or more characters" placeholder="password@123" r
equired>
```

```
        <input type="checkbox" onclick="myFunction()">Show Password<br><br>
            <label for="user_mobile"><b>Phone number</b></label>
            <input type="text" id="user_mobile" name="user_mobile" class="form-control" placeholder="9898989898"
                maxlength="10" minlength="10">

            <label for="user_constituency"><b>Select Constituency</b></label>
            <select id="user_constituency" name="user_constituency" class="form-control" required>
                <option value="Basavangudi">Basavanagudi</option>
                <option value="Bommanahalli">Bommanahalli</option>
                <option value="BTM Layout">BTM Layout</option>
                <option value="Jayanagar">Jayanagar</option>
                <option value="Mahadevapura">Mahadevapura</option>
                <option value="RRNAGAR">RR Nagar</option>
                <option value="Vijaynagar">Vijayanagar</option>
                <option value="Yeshwanthpur">Yeshwanthpur</option>
            </select>
            <button type="submit" class="btn btn-info" id="signup" type="submit">Create an
                account now</button>
    </form><br><br>
    <div class="status" style="text-align:center">
        <p>Already have an account?</p>
        <a href="/login">Login</a>
        <a href="home">Home</a>

    </div>

</body>

</html>
```

5.2 DATABASE TABLES

❖ Constituency

Field	Datatype	Size	Constraint
constituency_id	INTEGER		Primary Key
constituency_name	VARCHAR	20	Not Null
constituency_description	VARCHAR	1500	Not Null

❖ User

Field	Datatype	Size	Constraint
constituency_id	INTEGER		Foreign Key
user_name	VARCHAR	40	Not Null
user_email	EMAIL		Primary Key
user_password	VARCHAR	20	Not Null
user_mobile	VARCHAR	10	
user_constituency	VARCHAR	20	Not Null
user_type	VARCHAR	20	Not Null

❖ News_feed

Field	Datatype	Size	Constraint
feed_id	INTEGER		Primary Key
feed_title	VARCHAR	50	Not Null
feed_description	VARCHAR	400	Not Null
feed_date	DATETIME		
constituency_id	INTEGER		Foreign Key
constituency_name	VARCHAR	20	Not Null

❖ **Sector**

Field	Datatype	Size	Constraint
sector_id	INTEGER		Primary Key
sector_name	VARCHAR	20	Not Null
sector_scope	VARCHAR	300	Not Null

❖ **Complaint**

Field	Datatype	Size	Constraint
complaint_id	INTEGER		Primary Key
complaint_subject	VARCHAR	50	Not Null
complaint_details	VARCHAR	300	Not Null
posted_by_name	VARCHAR	50	Not Null
constituency_id	INTEGER		Foreign Key
constituency_name	VARCHAR	20	Not Null
sector_id	INTEGER		Foreign Key
sector_name	VARCHAR	30	Not Null
no_of_upvotes	INTEGER		
upvoted_by_name	VARCHAR	50	

❖ **Query**

Field	Datatype	Size	Constraint
query_id	INTEGER		Primary Key
query	VARCHAR	100	Not Null
posted_by_name	VARCHAR	50	Not Null

constituency_id	INTEGER		Foreign Key
constituency_name	VARCHAR	20	Not Null
answered_by_name	VARCHAR	50	
query_date	DATETIME		

❖ **Answer**

Field	Datatype	Size	Constraint
answer_id	INTEGER		Primary Key
answer	VARCHAR	200	Not Null
query_id	INTEGER		Foreign Key
answered_by_name	VARCHAR	50	Not Null
answered_date	DATETIME		

❖ **Feedback**

Field	Datatype	Size	Constraint
feedback_id	INTEGER		Primary Key
subject	VARCHAR	20	Not Null
message	VARCHAR	100	Not Null
name	VARCHAR	50	Not Null
email	EMAIL		Not Null
date	DATETIME		
contact_number	VARCHAR	10	Not Null
constituency_name	VARCHAR	20	Not Null
constituency_id	INTEGER		Foreign Key

5.3 ER DIAGRAM

An entity relationship model, also called an entity-relationship (ER) diagram, is a graphical representation of entities and their relationships to each other, typically used in computing in regard to the data within databases or information systems.

An ER Diagram shows the relationships among Entity sets and shows complete logical structure of the Database.

- ER diagrams can be used by database designers as a blueprint for implementing data in specific software applications.
- The database designer gains a better understanding of the information to be contained in the database with the help of ERP diagram.
- ERD Diagram allows you to communicate with the logical structure of the database to users. The ER diagram of this project is as shown below

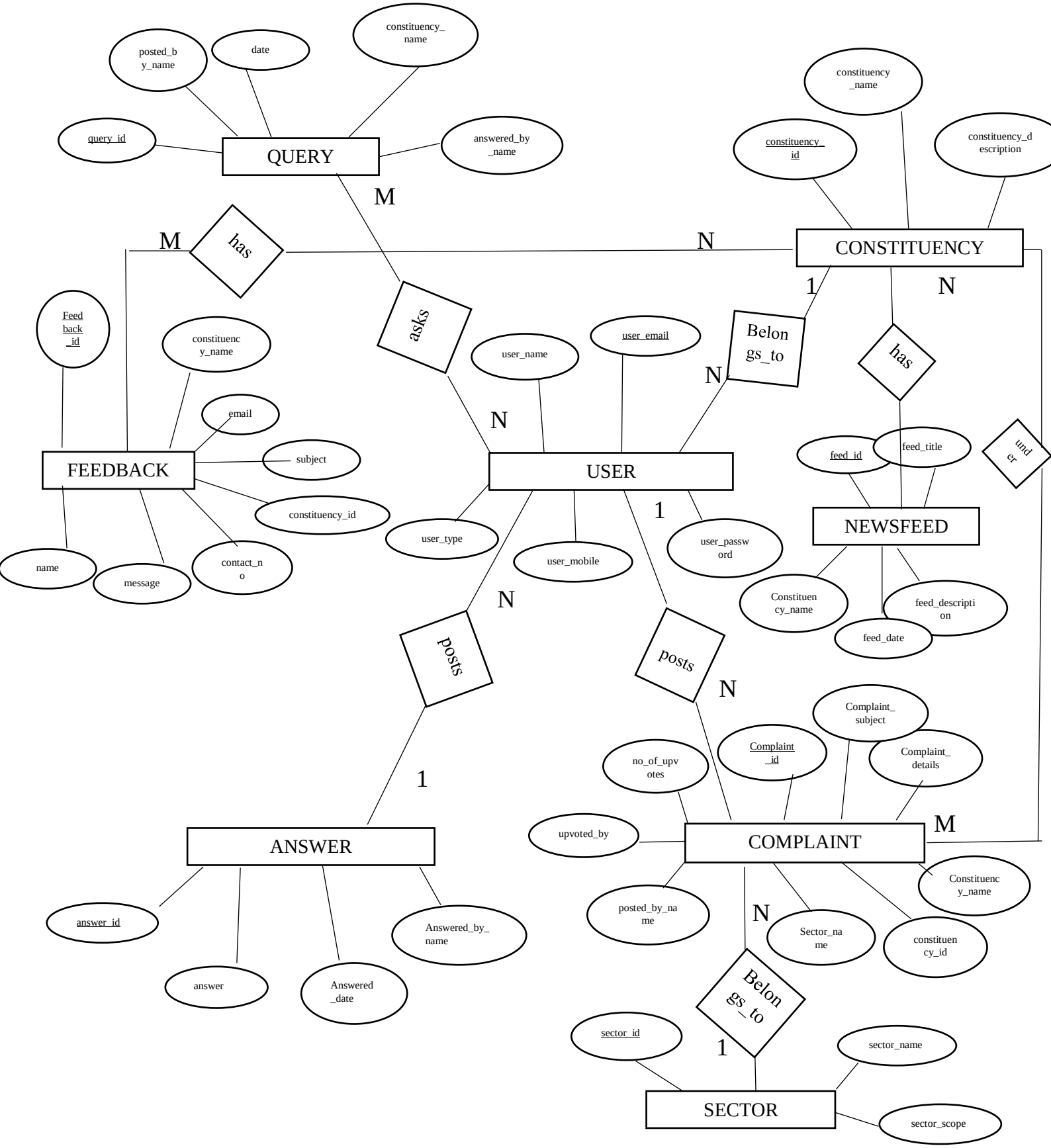

Fig. 5.4 ER Diagram

5.4 SCHEMA DIAGRAM

A database schema is the skeleton structure that represents the logical view of the entire database. It defines how the data is organized and how the relations among them are associated. It formulates all the constraints that are to be applied on the data. The term "schema" refers to the organization of data as a blueprint of how the database is constructed (divided into database tables in the case of relational databases). The formal definition of a database schema is a set of formulas (sentences) called integrity constraints imposed on a database. These integrity constraints ensure compatibility between parts of the schema. All constraints are expressible in the same language. A database can be considered a structure in realization of the database language. The states of a created conceptual schema are transformed into an explicit mapping, the database schema. This describes how real-world entities are modelled in the database. “A database schema specifies, based on the database administrator's knowledge of possible applications, the facts that can enter the database, or those of interest to the possible end-users.”. The notion of a database schema plays the same role as the notion of theory in predicate calculus. A model of this "theory" closely corresponds to a database, which can be seen at any instant of time as a mathematical object. Thus, a schema can contain formulas representing integrity constraints specifically for an application and the constraints specifically for a type of database, all expressed in the same database language. In a relational database, the schema defines the tables, fields, relationships, views, indexes, packages, procedures, functions, queues, triggers, types, sequences, materialized views, synonyms, database links, directories, XML schemas, and other elements.

A database generally stores its schema in a data dictionary. Although a schema is defined in text database language, the term is often used to refer to a graphical depiction of the database structure. In other words, schema is the structure of the database that defines the objects in the database.

SCHEMA DIAGRAM

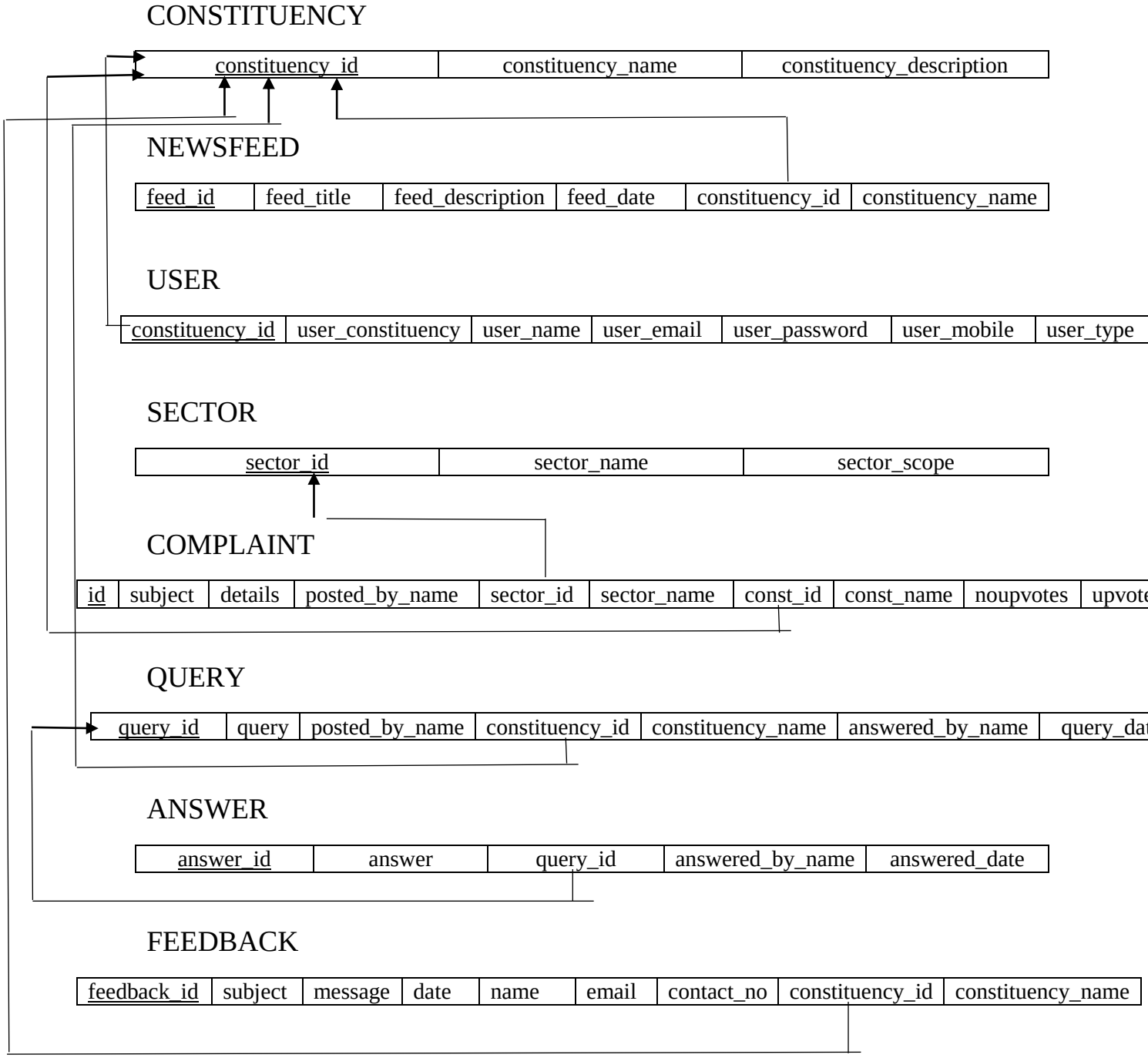

Fig. 5.5 Schema Diagram

CHAPTER6

RESULTS

After executing this application, the results obtained are listed and explained here.

6.1 ADMIN MODULE

This is the main module of the system. Admin has the authority to add the news. He also has the authority to add a query section to the public. The public will get the news when they login. Admin can view the Feedbacks given by the public.

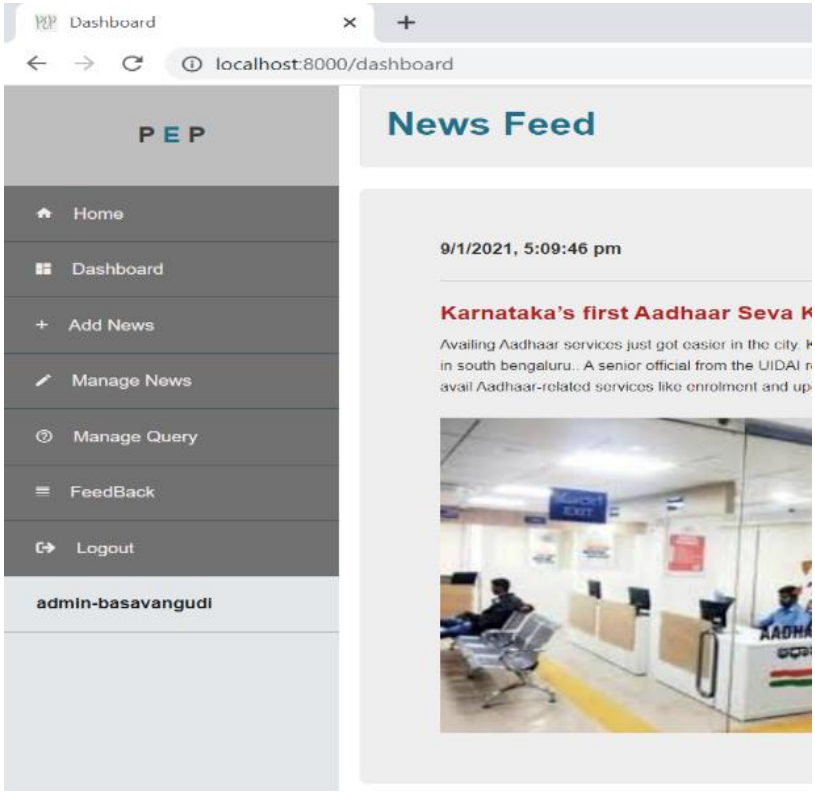

Fig. 6.1 Admin Module

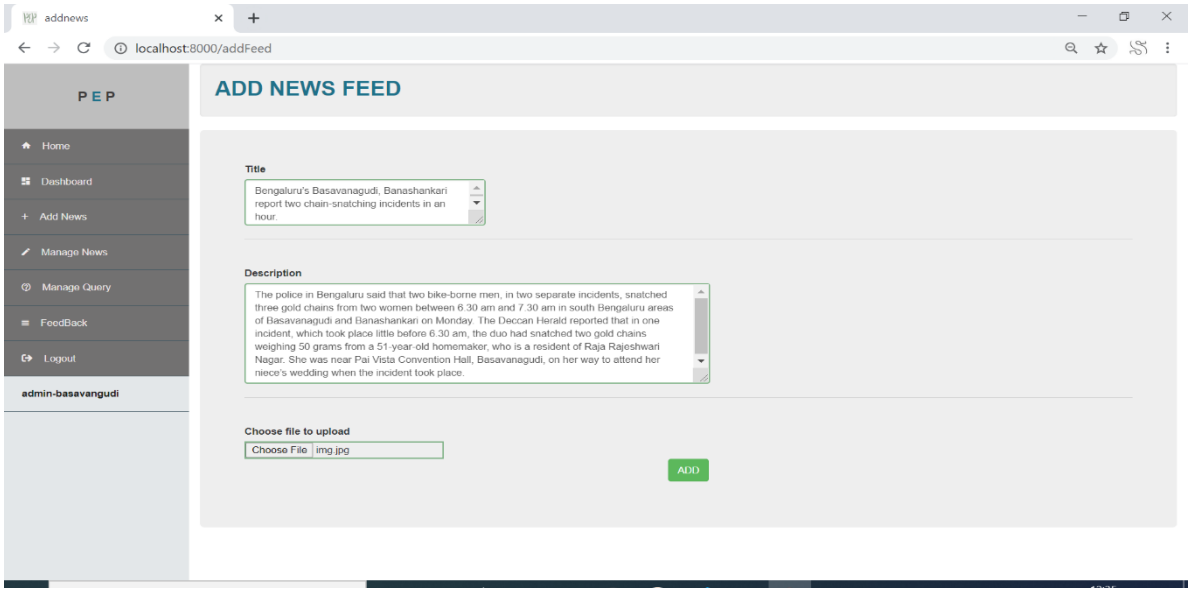

Fig. 6.2 Adding News by Admin

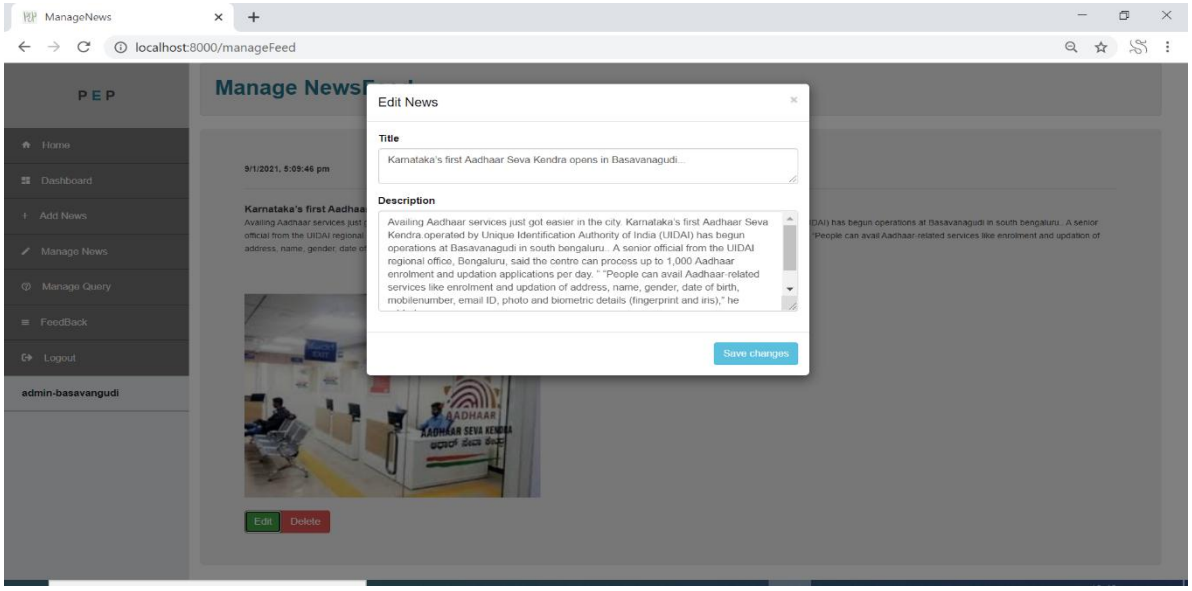

Fig. 6.3 Managing News by Admin

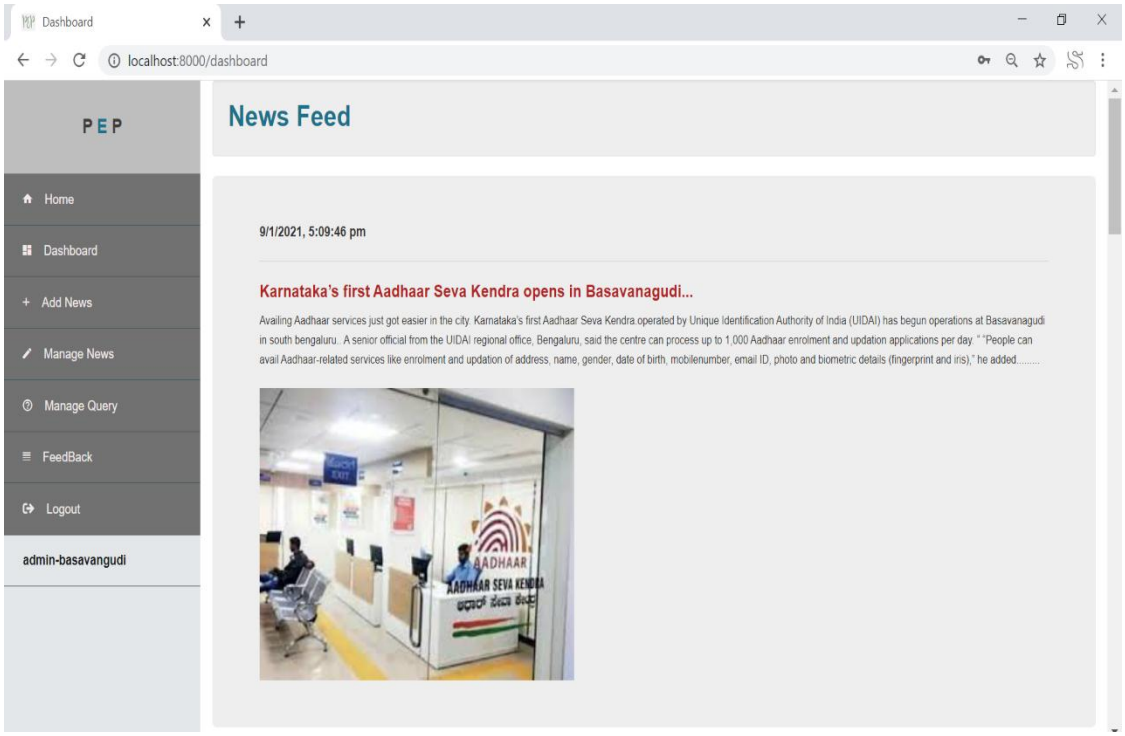

Fig. 6.4 News Updates

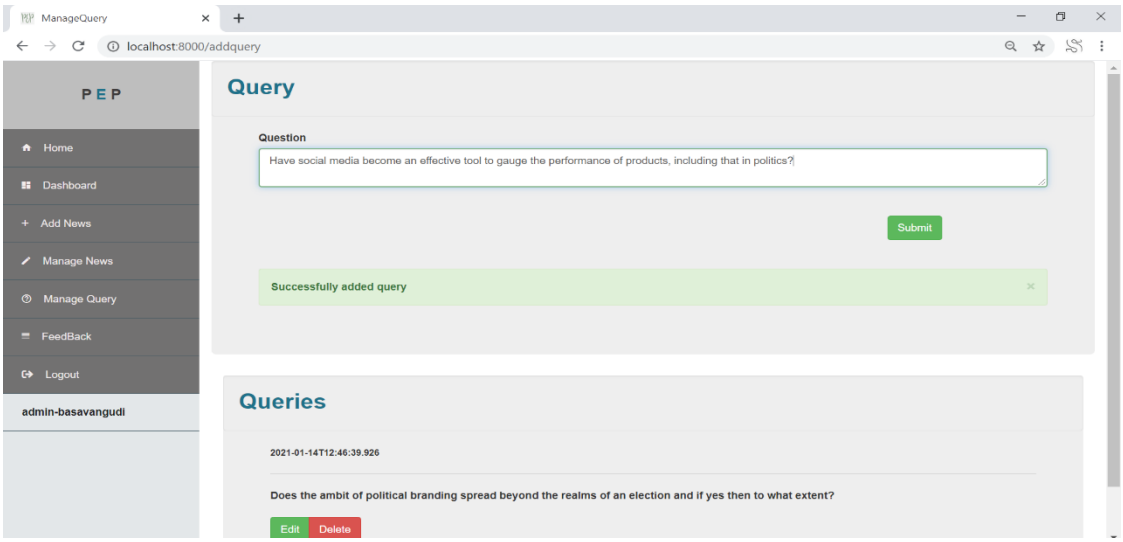

Fig. 6.5 Adding Query by Admin

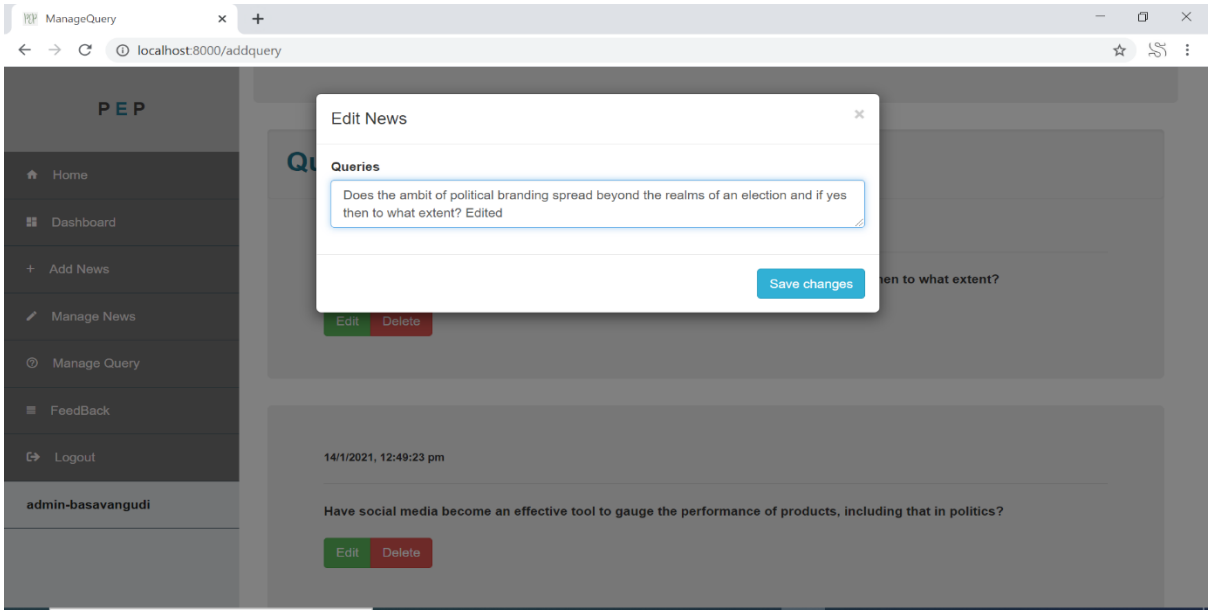

Fig. 6.6 Manage Query by Admin

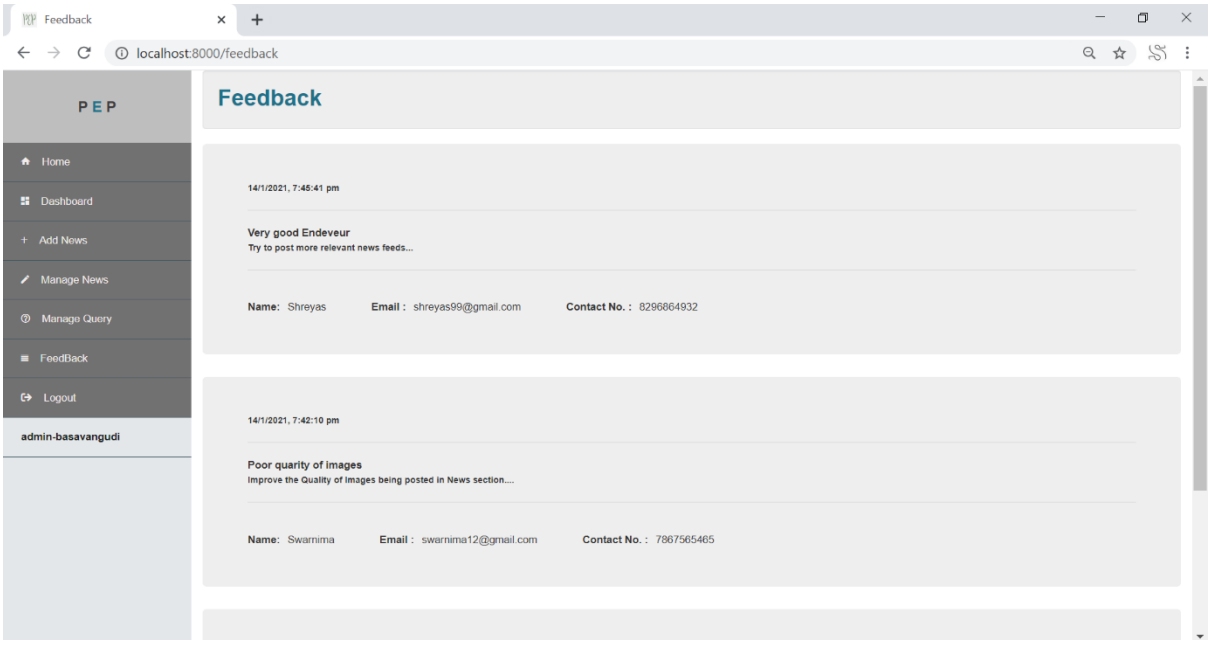

Fig. 6.7 View Feedbacks of Users by Admin

6.2 PUBLIC MODULE

The public to avail the services of the PEP he has to first register by giving the valid credentials. After which he can login and get the news updates in the home page of his account. The public can register a complaint, up vote any issue in the polling section if he is going through the same problem. He can answer to the Query posted by the Admin of the Constituency. He can get all the information of his constituency in the Assembly Section.

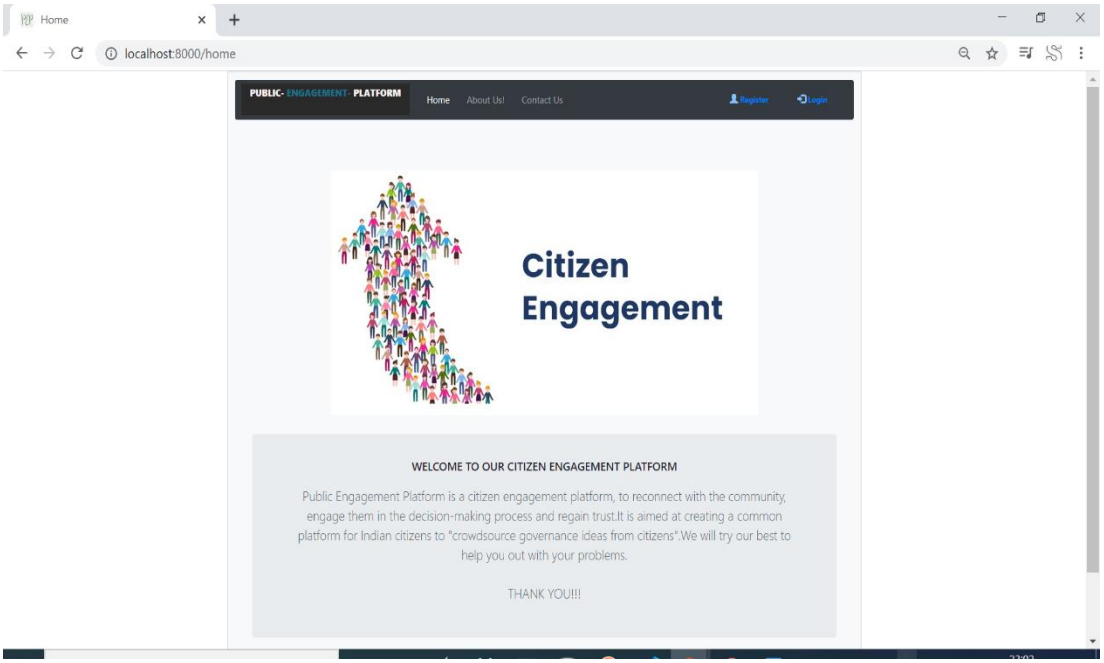

Fig. 6.8 Home Page

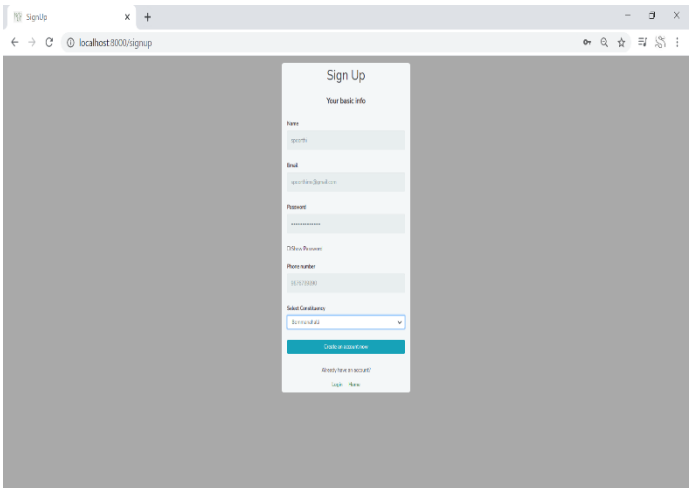

Fig. 6.9 Signup Page

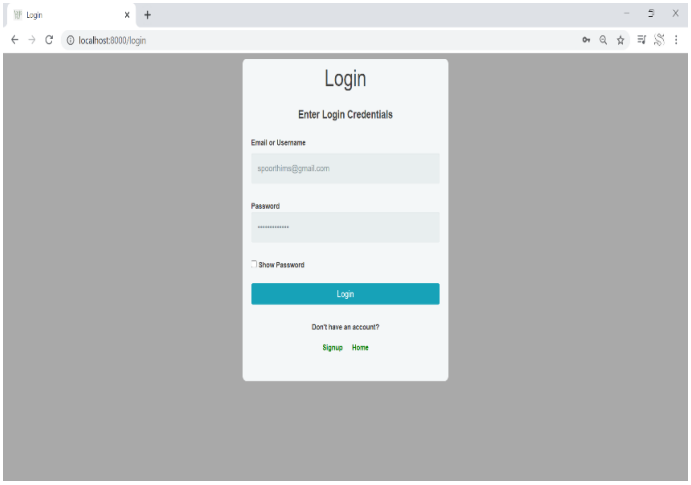

Fig. 6.10 Login Page

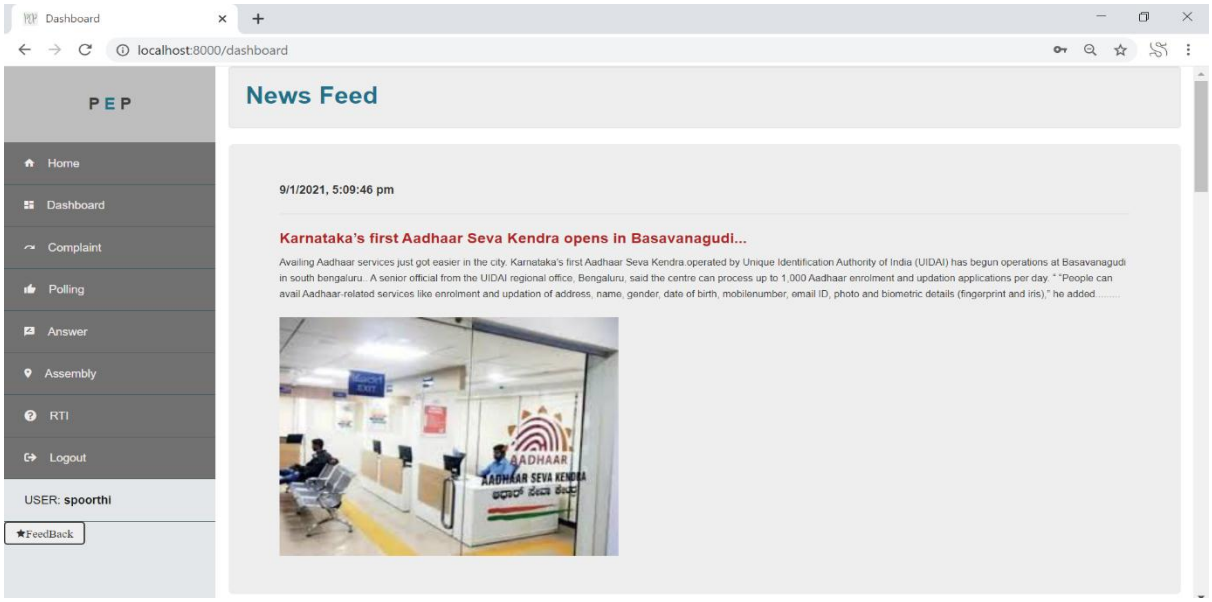

Fig. 6. 11 News Updates

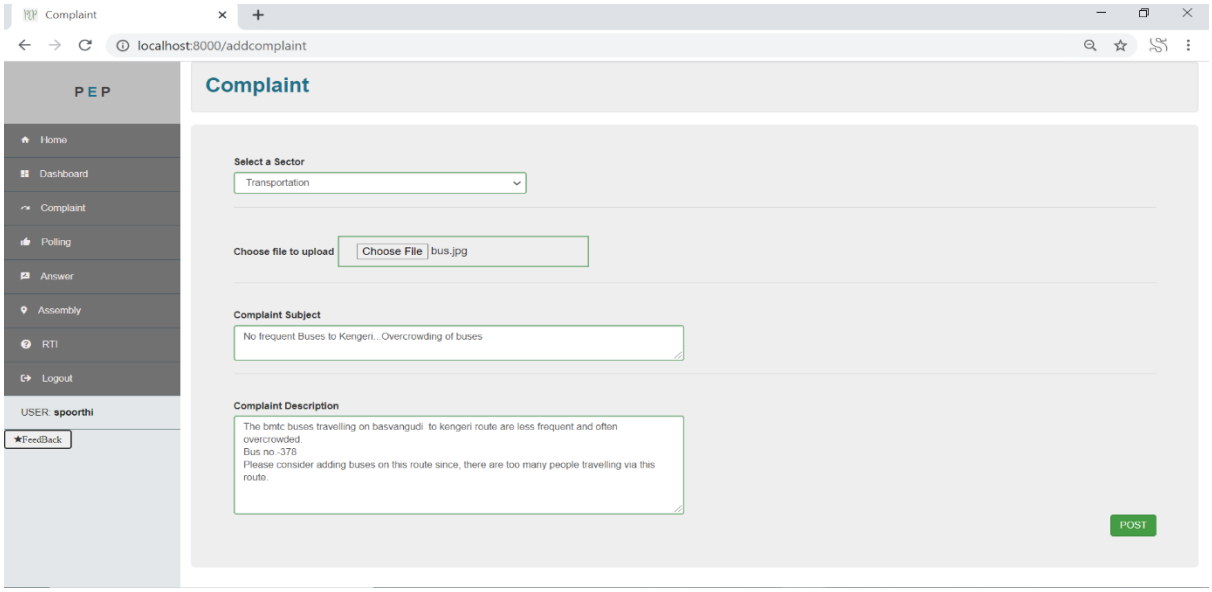

Fig. 6.12 Complaint Registration for user

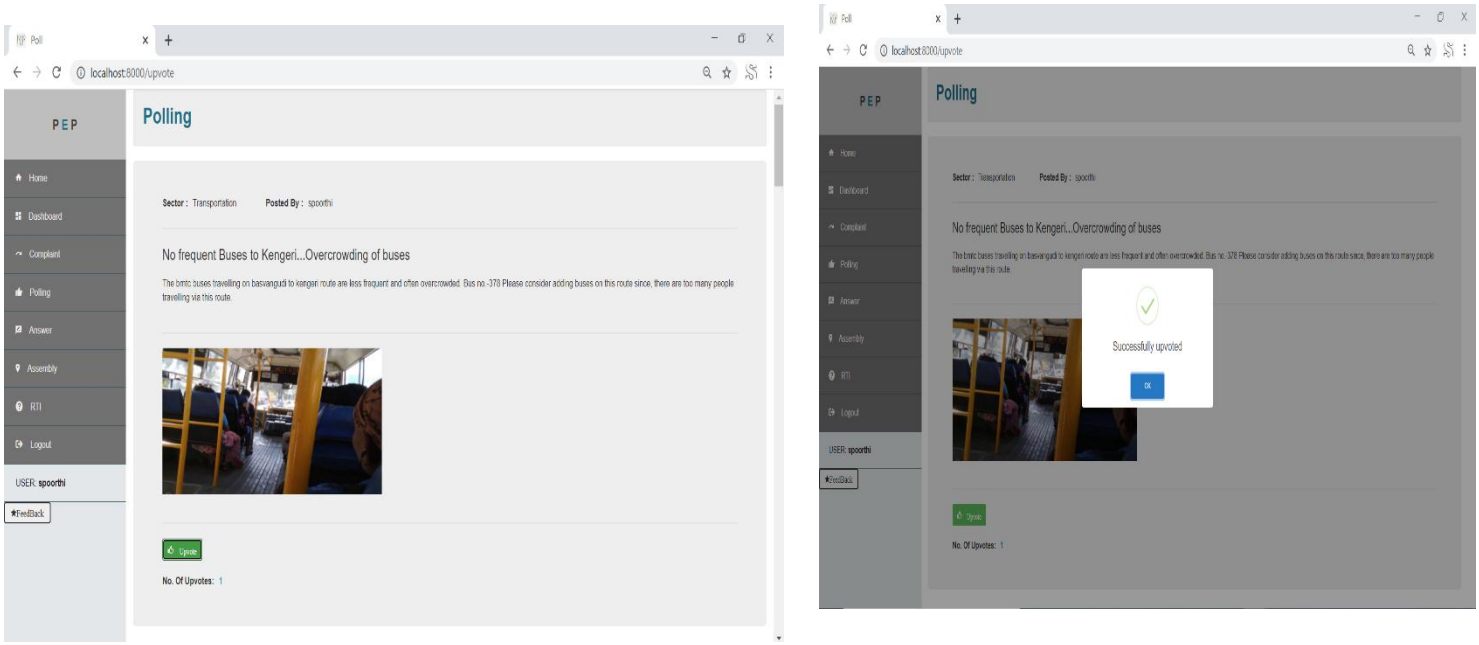

Fig. 6.13 Polling

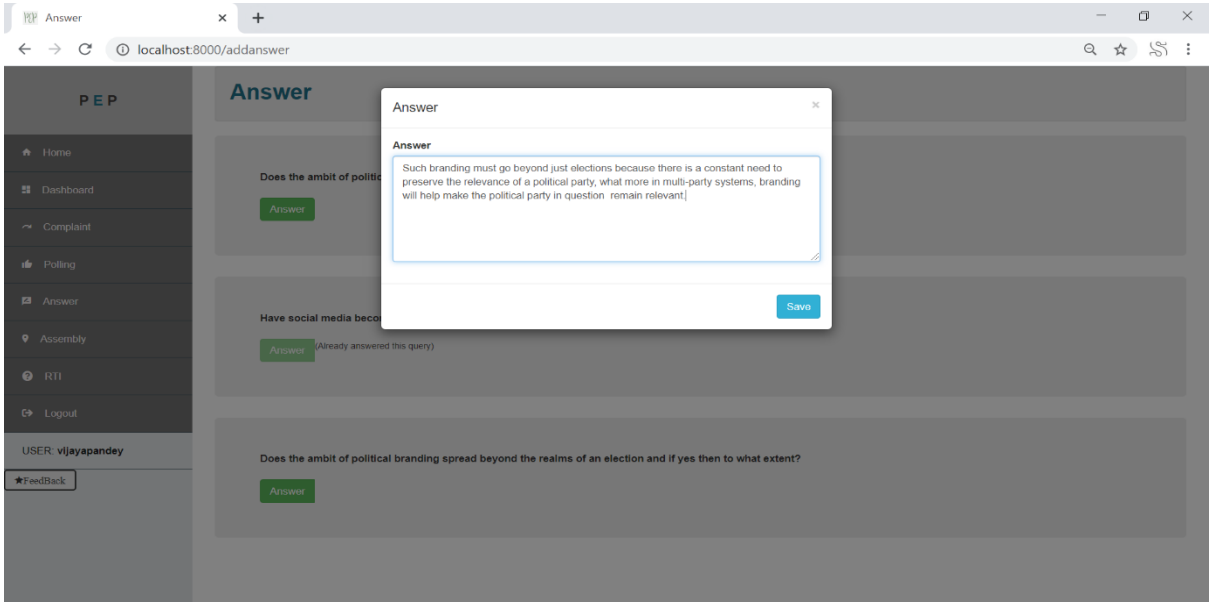

Fig. 6.14 Answer Section for user

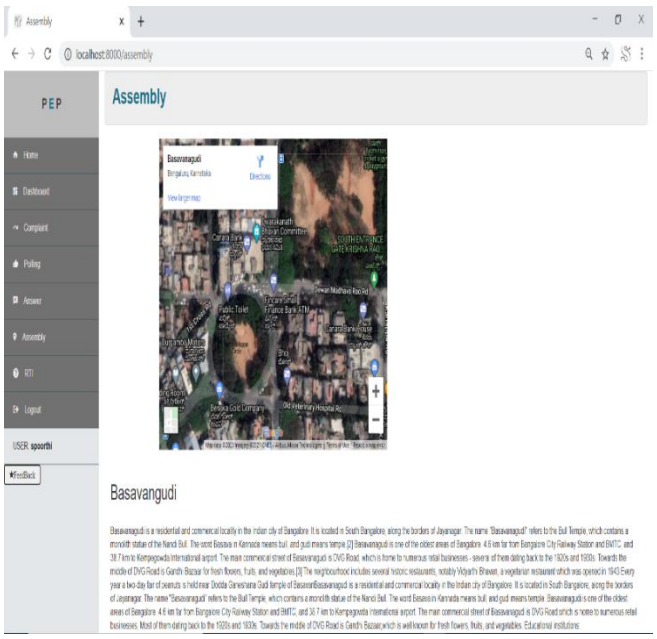

Fig. 6.15 Assembly

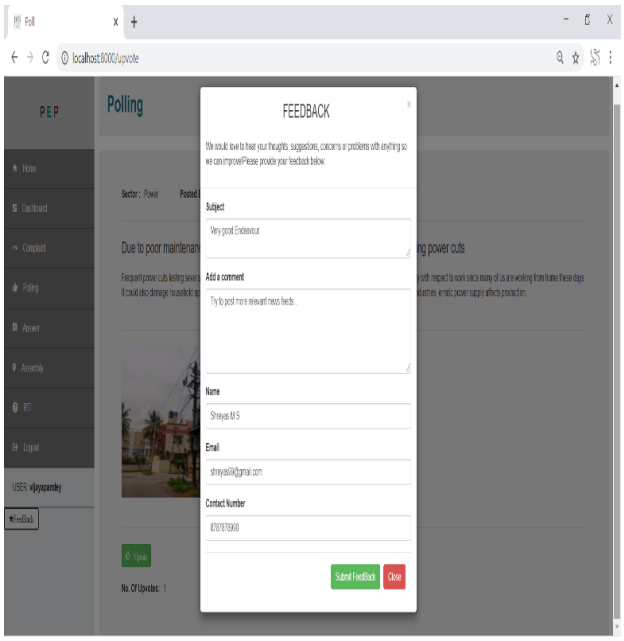

Fig. 6.16 Feedback by user

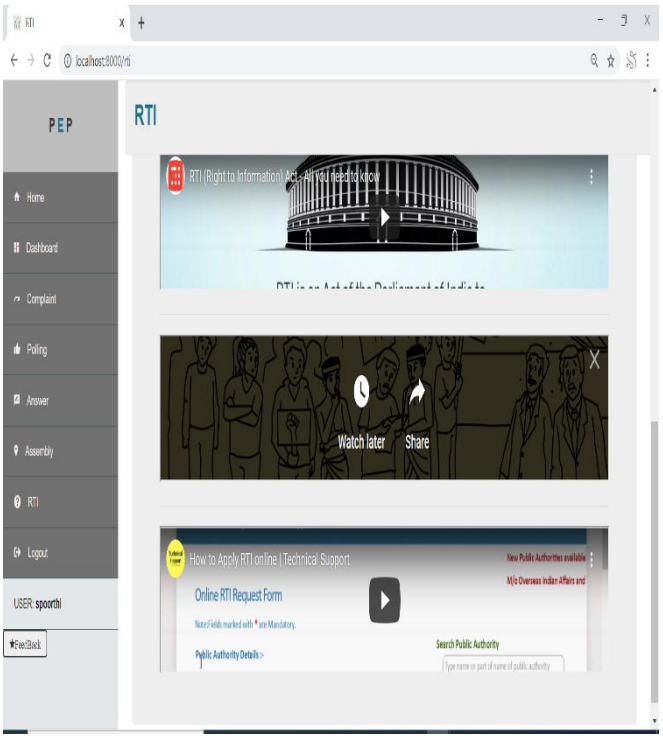

Fig. 6.17 RTI

6.3 REPRESENTATIVE MODULE

The representative gets all the news updates about his constituency. He can view the complaints registered by the public thus can understand the seriousness of the problem. He can share his views and can intimidate the public with the development that is happening in his constituency.

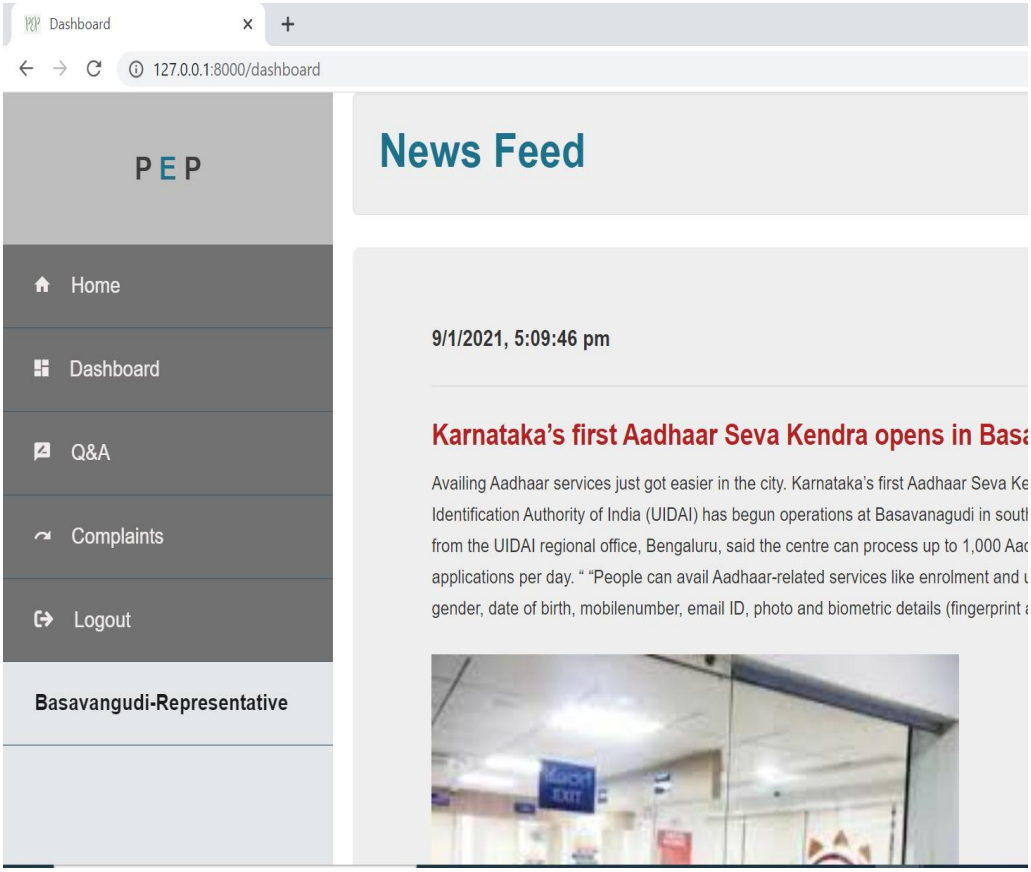

Fig. 6.18 Representative Module

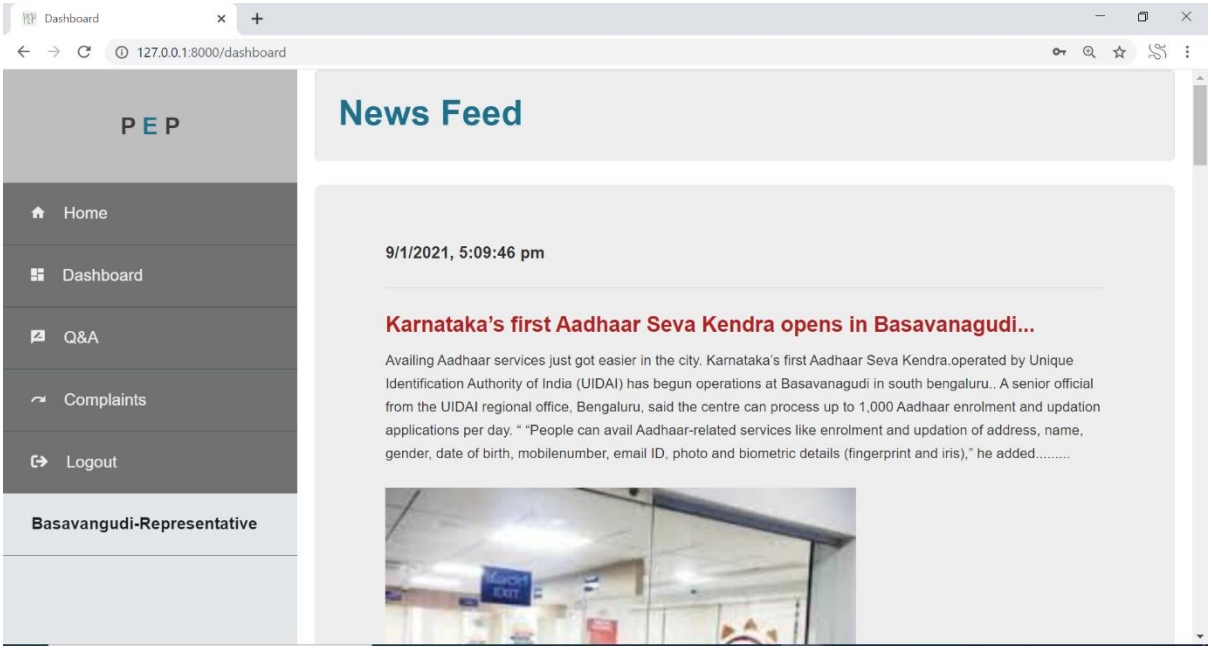

Fig. 6.19 News Updates

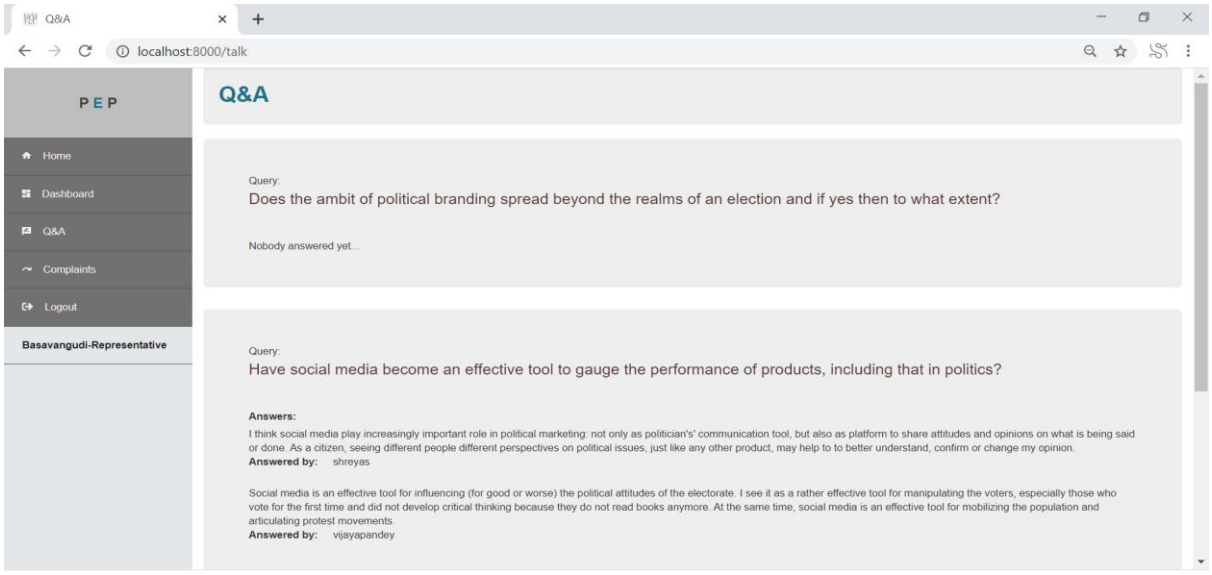

Fig. 6.20 Q and A

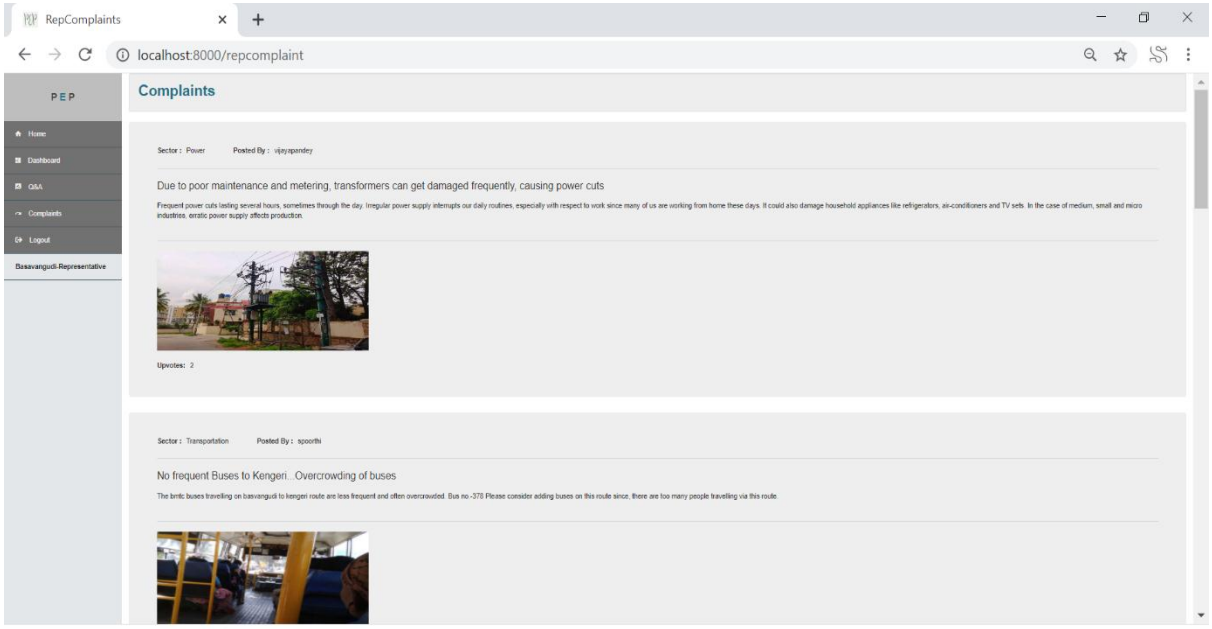

Fig. 6.21 Complaints Registered by users

CHAPTER 7

CONCLUSION AND FUTURE WORK

7.1 CONCLUSION

The way that politics plays out online is fascinating. Endless polls, endless opinions, rant statuses and little that actually changes in the real world. Political accountability refers to the responsibility or obligation of government officials to act in the best interests of society or face consequences. Public officials should be held responsible for their actions. And Accountability is important in evaluating the on-going effectiveness of public officials or bodies ensures that they are performing to their full potential, providing value for money, instilling confidence in the government and being responsive to the community. Public Engagement Platform is a citizen engagement platform and is our endeavor to promote the active participation of Indian citizens in their country's governance and development. It is also aimed at creating a common platform for citizens (say for a specific constituency) to crowd source governance ideas from citizens also. Using this application user shall be allowed to discuss and to contribute on various government projects and plans. If the people encounter some public issues it also allows users to upload the same and give a brief description about it and thus creating awareness and which will reach the representatives easily.

7.2 FUTURE WORK

- Aadhar authentication API can be used for verifying the common man who has to register.
- Login can be facilitated through social networking sites such as Facebook.

CHAPTER 8

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