**ONLINE COMPLAINT REGISTRATION SYSTEM**

A PROJECT REPORT

Submitted by

### USHA. R. K

**(Register No: 20PCA504)**

in partial fulfilment of the requirements for the award of the degree of

### MASTER OF COMPUTER APPLICATIONS

**Under the Guidance of**

### Mrs. L. SUJATHA, M.C.A., NET., SET.,



**DEPARTMENT OF COMPUTER APPLICATIONS ST. XAVIER’S COLLEGE (AUTONOMOUS)**

(Recognized as ‘College with Potential for Excellence’ by UGC) (Accredited by NAAC with “A++” Grade with a CGPA of 3.66 out of 4 in IV Cycle)

### PALAYAMKOTTAI – 627002

**DEPARTMENT OF COMPUTER APPLICATIONS ST. XAVIER’S COLLEGE (AUTONOMOUS)**

(Recognized as ‘College with Potential for Excellence’ by UGC) (Accredited by NAAC with “A++” Grade with a CGPA of 3.66 out of 4 in IV Cycle)

### PALAYAMKOTTAI - 627002



**BONAFIDE CERTIFICATE**

This is to certify that the project work entitled **“ONLINE COMPLAINT REGISTRATION SYSTEM”** is the bonafide work of **R. K. Usha (20PCA504)** who carried out the project work under my supervision and submitted during the academic year 2021-22.

The Viva-voce held on ………………..

**INTERNAL EXAMINER EXTERNAL EXAMINER**

## ACKNOWLEDGEMENT

At first I extend my deepest gratitude to the **ALMIGHTY** for providing me all the requirements for completing this project.

I extend my deepest sense of gratitude to **Rev. Dr. S. Mariadoss S.J.,** Principal, St. Xavier’s College (Autonomous), Palayamkottai, **Dr. B. Xavier Innocent**, Deputy Principal (Shift-II) and **Dr. S. Chidambaranathan** and **Mrs. A. Dhana Praveena**, Vice Principals (Shift-II) for having permitted me to carry out this project work.

No one grows tired to thank, **Dr. S. Saraswathi**, M.C.A., M.Phil., Ph.D., Head of the Department, Department of Computer Applications, who has been a source of inspiration, all time motivator and played a major role in the conduct of my project work.

I wish to express my deep sense of gratitude to my Internal Guide**, Mrs. L. Sujatha**, M.C.A., NET., SET., for the guidance and useful suggestions, which helped me in completing the project work on time.

Words are inadequate in offering my thanks to all the **faculty members** of the Department of Computer Applications, for their encouragement and cooperation in carrying out the project work.

Finally, yet importantly, I would like to express my heartfelt thanks to my beloved

**Parents** for their blessings and wishes for the successful completion of this project.

### 20PCA504

**R. K. USHA**

## ABSTRACT

The “Online Complaint Registration System” is a web application for registering complaints regarding street light, water pipe leakage, drainage system, roads etc. In olden days, people used to send complaints through post or have to visit the office to file a complaint. The Online Complaint Registration system helps the public to solve their problems through online without going to the office directly. The complaints can be registered anywhere and anytime easily.

The user who wants to file a complaint must register all the necessary details and then login into the website. Once the user logs in, he/she may post a complaint with proper description of the problem along with a clear photograph of the current situation representing the problem. After the admin approves the complaints, the complaints will be forwarded to the Officer-in-Charge.

The login details for the Officer-in-Charge will be provided by the admin. The Officer-in-Charge can view the complaints which are only approved by the admin. After proper action is taken for the complaint registered by the user, the status of the complaint will be updated. A proof of completion will also be uploaded by the Officer-in-Charge.

In addition, this system enables to generate yearly or monthly reports based on the status or category of the problem which enhances the proper working of the system. This web application is developed using HTML and PHP as frontend and MYSQL as backend.

# TABLE OF CONTENTS

**INDEX**

|  |  |  |
| --- | --- | --- |
| **SL.NO.** | **DESCRIPTION** | **PAGE NO.** |
| 1 | INTRODUCTION | 1 |
| 2 | SYSTEM STUDY   * 1. Existing System   2. Proposed System   3. Problem Definition and Project Description | 2  2 |
|  | 3 |
| 3 | SYSTEM ANALYSIS   * 1. Requirements Specification   2. Feasibility Study | 4  5 |
|  | SYSTEM DESIGN   * 1. Architectural Design   2. Data Flow Diagram   3. Data Dictionary   4. User Interface Design   5. Normalization | 7 |
| 4 | 8  10 |
|  | 14 |
|  | 26 |
|  | SYSTEM TESTING   * 1. Types of Testing   2. Types of Validations   3. Error Messages | 28 |
| 5 | 30  31 |
| 6 | USER MANUAL   * 1. Installation Manual   2. Operational Manual | 32  32 |
| 7 | SYSTEM IMPLEMENTATION  7.1 Special features of the languages | 34 |
| 8 | FUTURE ENHANCEMENT | 38 |
| 9 | CONCLUSION | 39 |
| 10 | BIBLIOGRAPHY | 40 |
| 11 | APPENDIX   * 1. Sample Screen Layouts   2. Sample Codings | 41 |
|  | 50 |

# INTRODUCTION

ONLINE COMPLAINT REGISTRATION SYSTEM

## INTRODUCTION

Online Complaint Registration System is a web based application developed in PHP and HTML using MYSQL as database server. It provides an online way of solving the problems faced by the public by saving time. The main purpose of the project is to develop a software application for reporting complaints related to roads, street lights, drainage system, water pipe leakage etc., through online. The objective of the complaints management system is to make complaints easier to coordinate, monitor, track and resolve, and to provide an effective tool to identify, target problem areas and monitor complaints.

It is a management technique for assessing, analyzing and responding to customer complaints. This system helps the public in getting their problems solved without going to the office regularly. It also facilitates better management of complaints which improves efficiency. The complaints registered are approved by the admin and are viewed by the corresponding officers to take further action. The Status of the complaints will be updated by the officers and can be viewed by the users, which provides complete satisfaction to the users.

Department of Computer Applications, St. Xavier’s College (Autonomous), Palayamkottai Page 1

# SYSTEM STUDY

## SYSTEM STUDY

* 1. **EXISTING SYSTEM**

Present system is manual. People have to visit the office to file a complaint or can send complaints through post. The records are stored manually.

The following are the disadvantages of the existing system:

* + - Need of more resources to maintain efficiency since all processes are manual
    - Requires more man power
    - There are chances for the Officers-in-Charge to forget user complaints
    - It is more time consuming
    - There are chances that the user problems may not be solved since there is no monitoring

## PROPOSED SYSTEM

The existing manual system is replaced to a web application changing the way of maintaining the complaints which proves to be beneficial, improves efficiency and saves us time.

The following are the advantages of the proposed system:

* + - The complaints can be registered easily from anywhere at any time
    - The complainers are aware of the progress of the complaints registered by them
    - Feedback can be provided by the complainers which helps the Officers-in-charge to manage complaints more efficiently
    - History of complaints can be viewed in need of time
    - There is no chance for the complaints to be unsolved since the progress of the complaints are monitored

## PROBLEM DEFINITION AND PROJECT DESCRIPTION

The project titled as “ONLINE COMPLAINT REGISTRATION SYSTEM” is a web based application which provides facilities for reporting complaints regarding roads, street lights, water pipe leakage, drainage systems etc. Maintenance of all data using pen and paper is a tedious job. So to reduce the manual effort, the “ONLINE COMPLAINT REGISTRATION SYSTEM” will be of great help. This software has different modules which enhances the proper working of the system and they are

* Admin
* Officer-in-Charge
* User

### ADMIN MODULE

* Manage User details
* Manage Officer details
* View and approve posted complaints
* Upload alert messages and view feedback

### OFFICER-IN-CHARGE MODULE

* View complaints and update status of complaints
* Upload proof of completion in case of problems getting solved
* View alert messages and reply them
* View feedback posted by the complainers

### USER MODULE

* Post complaints with a valid proof
* View the status of the complaints to know the progress of complaints registered by them
* Post feedback on progress of the complaints

# SYSTEM ANALYSIS

## SYSTEM ANALYSIS

### REQUIREMENTS SPECIFICATION HARDWARE REQUIREMENTS

Processor : Intel

Ram : 4.00 GB (3.89 GB usable)

Hard disk : 40 GB

Monitor : 15’’mVGA monitor

Keyboard : 104 keys Keyboard

Mouse : Optical mouse

### SOFTWARE REQUIREMENTS

Operating System : 64-bit OS

Local Host Server : Wamp Server Database Connectivity : PhpMyAdmin Front End : Html and PHP

Back End : MYSQL

## FEASIBILITY STUDY

A feasibility analysis is conducted to decide if the solution considered to meet the criteria is feasible and workable in the software. During the feasibility study, information such as resource availability, cost estimates for software production, advantages of the software to the enterprise after its development, and cost to be expended on its maintenance is determined. The feasibility study aims to ascertain why developing software is appealing to users, adaptable to change, and compliant with applicable requirements. The system has been tested for feasibility in the following points:

* + - Technical Feasibility
    - Operational Feasibility
    - Economic Feasibility

### TECHNICAL FEASIBILITY

Technical feasibility evaluates the available infrastructure (such as hardware and software) and technologies needed to meet the user needs of software under time and budget constraints. The following are the activities often performed by technical feasibility.

* Examines whether there are technical guarantees of accuracy, reliability, ease of access and data security.
* Determines whether the application infrastructure is well-established.
* Ensures whether the proposed system provides adequate response to inquiries, regardless of the number or location of users

The current system developed is technically feasible as it provides the technical guarantee of accuracy, reliability, security and easy access to the users.

### OPERATIONAL FEASIBILITY

The proposed system is beneficial only if it can be turned out into information system which will meet the operating requirements of the organization. The extent to which the required software completes a sequence of steps to address challenges and requirements of the developer and users respectively is measured by operational viability. The following are the operations carried out by operational feasibility:

* + Determines whether sufficient support for the organization is provided from the users.
  + Ensures proper working of the system if it is being developed and implemented.
  + Checks whether there will be any resistance from the users that will ruin the possible benefits of the application

This Online Complaint Registration System would ensure the optimal utilization of computer resources and would help in the improvement of performance status.

### ECONOMIC FEASIBILITY

A system can be developed technically and that will be used if installed must still be a good investment for the organization. Economic feasibility needs to consider the expenses made on purchasing, such as hardware purchasing and required activities to carry out software development. It is also necessary to consider the benefits that can be achieved by developing the software. Software is economically feasible when it focuses on the issues listed below.

* + - Expense incurred on software development for achieving long-term gains for an organization.
    - Expenses required to conduct elicitation and requirements analysis
    - Hardware and software cost, development team, and training cost.

This system is economically feasible. Since this system is developed using the existing resources and technologies, there is nominal expenditure which ensures the economic feasibility of the system.

# SYSTEM DESIGN

* 1. **ARCHITECTURAL DESIGN**

1. **SYSTEM DESIGN**

**Online Complaint Registration System**

### Admin

**Officer-in-Charge**

### User

View User Details

View Complaints

Registration

View Officer Details

Update Status of Complaints

Update Profile

View and Approve Complaints

Upload Proof of Completion

Post Complaints

Upload Alert Messages

View Alert Messages

Upload Proof of Complaint

View Feedback

Upload Reply Messages

View Status of Complaints

Complaint Reports

View Feedback

Post Feedback

Graphical Reports

Category Wise Reports

### DATA FLOW DIAGRAM DFD Level 0

Online Complaint

Registration System

Database

User

Officer-in-Charge

Admin

**DFD Level 1**

View User Details

tblregister

View Officer Details

tblofficerdetails

View and Approve

Complaints

tblpostcomplaint

Upload Alert Messages

tblalert

View Feed Back

tblfeedback

Complaint Reports

tblpostcomplaint, tbldata

Admin

View Complaints, Update Status and Upload Proof of

Completion

tblpostcomplaint

View Alert

Messages

tblalert

Upload Reply

Messages

View Feedback

tblfeedback

Officer in Charge

Register

tblregister

Update Profile

Post Complaints

and View Status of Complaints

tblpostcomplaint

Post Feedback

tblfeedback

User

### DATA DICTIONARY

**Table Name:** tblregister

**Purpose:** To store the details of registered users

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Data type** | **Size** | **Constraint** | **Description** |
| 1 | UserId | Int | 10 | Primary Key | User Id |
| 2 | Name | Varchar | 50 | Not Null | First name |
| 3 | Gender | Varchar | 15 | Not Null | Gender |
| 4 | Address | Varchar | 100 | Not Null | Address |
| 5 | District | Varchar | 15 | Not Null | District |
| 6 | Occupation | Varchar | 20 | Not Null | Occupation |
| 7 | Proof | Varchar | 50 | Not Null | Id Proof of User |
| 8 | Mobile | Varchar | 15 | Not Null | Mobile Number |
| 9 | YearofRegistration | Int | 10 | Not Null | Year of registration |
| 10 | Username | Varchar | 30 | Not Null | Username |
| 11 | Password | Varchar | 30 | Not Null | Password |

**Table Name:** tbllogin

**Purpose:** To store the username and password of the users along with their type

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Data type** | **Size** | **Constraint** | **Description** |
| 1 | Id | Int | 10 | Primary Key | Login Id |
| 2 | Username | Varchar | 30 | Not Null | Username |
| 3 | Password | Varchar | 20 | Not Null | Password |
| 4 | Type | Int | 5 | Not Null | Type of User |

**Table Name:** tblfeedback

**Purpose:** To store the feedback given by the users

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Data type** | **Size** | **Constraint** | **Description** |
| 1 | FId | Int | 10 | Primary Key | Feedback Id |
| 2 | Name | Varchar | 50 | Not Null | Name of User |
| 3 | EmailId | Varchar | 30 | Not Null | Mail Id of User |
| 4 | DateOfFeedback | Date | 10 | Not Null | Feedback given date |
| 5 | TypeOfComplaint | Varchar | 20 | Not Null | Type of Complaint |
| 6 | DepartmentName | Varchar | 50 | Not Null | Name of the Department |
| 7 | Feedback | Varchar | 500 | Not Null | Feedback of User |

**Table Name:** tblpostcomplaint

**Purpose:** To store the complaints registered by the users

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Data type** | **Size** | **Constraint** | **Description** |
| 1 | CId | Int | 10 | Primary Key | Complaint Id |
| 2 | CName | Varchar | 50 | Not Null | Name of User |
| 3 | EmailId | Varchar | 30 | Not Null | Mail Id of User |
| 4 | ResidentialAddress | Varchar | 100 | Not Null | Address of User |
| 5 | ComplaintType | Varchar | 30 | Not Null | Type of Complaint |
| 6 | DepartmentName | Varchar | 50 | Not Null | Name of Department |
| 7 | DateOfComplaint | Date | 10 | Not Null | Date of Complaint |
| 8 | DateOfApproval | Date | 10 | Null | Date of Approval |
| 9 | DateOfUpdation | Date | 10 | Null | Date of Updation |
| 9 | ProofOfComplaint | Varchar | 50 | Not Null | Complaint Proof |
| 10 | ComplaintDescription | Varchar | 500 | Not Null | Complaint Description |
| 11 | LocationAddress | Varchar | 100 | Not Null | Address of Location |
| 12 | Status | Varchar | 30 | Not Null | Status of Complaints |
| 13 | StatusDescription | Varchar | 100 | Not Null | Description of Status |
| 14 | ProofOfCompletion | Varchar | 50 | Null | Proof of Completion |

**Table Name:** tblofficerdetails

**Purpose:** To store the details of the Officers-in-Charge

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Data type** | **Size** | **Constraint** | **Description** |
| 1 | D\_Id | Int | 10 | Primary Key | Officer Id |
| 2 | Name | Varchar | 50 | Not Null | Name of Officer |
| 3 | Gender | Varchar | 15 | Not Null | Gender |
| 4 | DepartmentName | Varchar | 50 | Not Null | Department Name |
| 5 | Designation | Varchar | 30 | Not Null | Designation of Officer |
| 6 | OfficialAddress | Varchar | 100 | NotNull | Official Address |
| 7 | Mobile | Varchar | 15 | Not Null | Contact Number |
| 8 | Username | Varchar | 30 | Not Null | User name of Officer |
| 9 | Password | Varchar | 30 | Not Null | Password for Login |

**Table Name:** tblalert

**Purpose:** To store the alert messages given by admin

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Data type** | **Size** | **Constraint** | **Description** |
| 1 | AId | Int | 10 | Primary Key | Alert Id |
| 2 | EmailId | Varchar | 30 | Not Null | Email Id Of User |
| 3 | NameOfUser | Varchar | 50 | Not Null | Name of User |
| 4 | ComplaintType | Varchar | 30 | Not Null | Type of Complaint |
| 5 | DepartmentName | Varchar | 50 | Not Null | Department Name |
| 6 | ComplaintDescription | Varchar | 500 | Not Null | Complaint Description |
| 7 | LocationAddress | Varchar | 100 | Not Null | Location Address |
| 8 | Status | Varchar | 30 | Not Null | Status |
| 9 | DateOfAlert | Date | 10 | Not Null | Date of Alert Message |
| 10 | AlertMessage | Varchar | 100 | Not Null | Given Alert Messages |
| 11 | DateOfReply | Date | 10 | Null | Date of Reply Message |
| 12 | ReplyMessage | Varchar | 100 | Null | Reply Messages |

**Table Name:** data

**Purpose:** To store the total count of approved complaints

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Data type** | **Size** | **Constraint** | **Description** |
| 1 | DataId | Int | 10 | Primary Key | Id of each complaint |
| 2 | ComplaintType | Varchar | 20 | Not Null | Type of Complaint |
| 3 | Count | Int | 10 | Not Null | Total count of approved complaints |

### USER INTERFACE DESIGN

**Home Page**

|  |
| --- |
| ONLINE COMPLAINT REGISTRATION SYSTEM  Let’s straighten things out… |
|  |
| Home Login Register |
| Welcome to our Website!!! |

### Admin Login

**LOGIN**

Username: Password:

**LOGIN**

**Dashboard**

**DASHBOARD**

**Complaints**

Roads

25%

Street Light 25%

Drainage

25%

Water Leakage

25%

### View Users

**USER DETAILS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.No.** | **Name** | **Address** | **Mobile** | **Email** | **Action** |
| 1 | Reena S | 21, RK Nagar Manoor. | 9983456987 | [ree@gmail.com](mailto:ree@gmail.com) | Delete |
| 2 | Sam E | 1B, A Colony Palayamkottai | 8797654678 | [lin@gmail.com](mailto:lin@gmail.com) | Delete |
|  |  |  |  |  |  |

**Add and View Officers**



**OFFICER DETAILS**

Name:

Gender:

Male Female Others

Department Name:

Designation: Official Address:

Contact No:

Email: Password:

**ADD**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.No.** | **Name** | **Mobile** | **Email** | **Action** | |
| 1 | Mr. P. Mani | 9879887678 | [mani@gmail.com](mailto:mani@gmail.com) | Update | Delete |
| 2 | Mrs. R. Rama | 9087357654 | [rama@gmail.com](mailto:rama@gmail.com) | Update | Delete |
|  |  |  |  |  |  |

### View Complaints

**COMPLAINT DETAILS**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Name** | **Complaint Type** | **Complaint Description** | **Location Address** | **Action** | | | | |
| 1 | Sam E | Road | Roads are in bad condition | Anbu Nagar, Palay | Approve |  | Alert | Delete |  |
|  |  |  |
| 2 | Reena S | Street light | Street light is too dim | 1st Street, TVS Nagar | Approve | Alert | | Delete | |

**Approve Complaint**

**COMPLAINT APPROVAL**

Name: EmailId:

Type of Complaint: Department Name: Complaint Description:

Location Address: Proof of Complaint:

Date of Complaint: Date of Approval: Status:

Status Description:

**UPDATE STATUS**

### Upload Alert Messages

**Alert Message Upload**

Email Id:

Name:

Type of Complaint: Department Name: Complaint Description:

Location Address: Status:

Date of Alert: Alert Message:

**UPLOAD ALERT**

**View Feedback**

**View Feedback**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.No.** | **Name** | **Email** | **Date** | **Feedback** | **Action** |
| 1 | Sam E | [sam@gmail.com](mailto:sam@gmail.com) | 08/08/21 | Thank you Sir for taking action immediately | Delete |
|  |  |  |  |  |  |

### View Alert and Reply Messages

**VIEW ALERT & REPLY**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Email** | **Name** | **Type** | **Alert** | **Reply** | **Action** |
| 1 | [ree@gmail.com](mailto:ree@gmail.com) | Reena S | Street light | Kindly take immediate action | Ok Sir | Delete |
|  |  |  |  |  |  |  |

**Officer View Complaints**

**COMPLAINT DETAILS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Name** | **Complaint Type** | **Complaint Description** | **Location Address** | **Status** | **Status Desc** | **Action** |
| 1 | Sam E | Roads | Roads are in bad condition | Anbu Nagar, Palay | Approved | To be followed | Update |
| 2 | Reena S | Roads | Roads are in bad condition | 1st Street, TVS Nagar | Completed | The work is comple  -ted | Update |

### Officer Update Status

**UPDATE COMPLAINT STATUS**

Name: EmailId:

Type of Complaint: Department Name: Complaint Description:

Location Address: Proof of Complaint:

Date of Complaint: Date of Approval: Date of Completion: Status:

Status Description:

**UPDATE STATUS**

**Officer View Alert**

**VIEW ALERT & REPLY**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Email** | **Name** | **Type** | **Alert** | **Reply** | **Action** |
| 1 | [ree@gmail.com](mailto:ree@gmail.com) | Reena S | Street light | Kindly take immediate action |  | Reply |
|  |  |  |  |  |  |  |

### Upload Reply Message

**Upload Reply**

Email Id:

Name:

Type of Complaint: Department Name: Complaint Description:

Location Address: Status:

Date of Alert: Alert Message: Date of Reply:

Reply Message:

**UPLOAD REPLY**

**Officer View Feedback**

**View Feedback**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Name** | **Email** | **Date** | **Feedback** |
| 1 | Sam E | [sam@gmail.com](mailto:sam@gmail.com) | 08/08/21 | Thank you Sir for taking action immediately |
|  |  |  |  |  |

### User Login

**LOGIN**

Username: Password:

**LOGIN**

**User Registration**



**REGISTRATION**

Name:

Gender:

Male

Female

Others

Address:

District:

Occupation: Proof:

Browse

Mobile No:

Year of Registration: Username (Email): Password:

**REGISTER**

### Post Complaint



**POST COMPLAINT**

Name:

Email Id: Residential Address:

Type of complaint: Department Name: Date of Complaint:

Proof of Complaint:

Browse

Complaint Description:

Location Address:

Status:

Status Description:

**POST**

To be approved by the Official

To be Approved

**User View Complaints**

**COMPLAINT DETAILS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Complaint Type** | **Complaint Description** | **Location Address** | **Status** | **Status Desc** | **Action** |
| 1 | Road | Roads are in bad condition | Anbu Nagar, Palay | Approved | To be followed | Update |
|  |  |  |  |  |  |  |

### Upload Feedback

**USER FEEDBACK**

Name:

Email Id: Date:

Type of Complaint: Department Name: Feedback:

**POST FEEDBACK**

* 1. **NORMALIZATION**

Normalization is the process of organizing the data in the database. Normalization is used to minimize the redundancy from a relation or set of relations. It is also used to eliminate the undesirable characteristics like Insertion, Update and Deletion Anomalies. Normalization divides the larger table into the smaller table and links them using relationship. The normal form is used to reduce redundancy from the database table.

### First Normal Form (1NF)

For a table to be in the First Normal Form, it should follow the following 4 rules:

* + - It should only have single(atomic) valued attributes/columns
    - Values stored in a column should be of the same domain
    - All the columns in a table should have unique names
    - And the order in which data is stored, does not matter

### Second Normal Form (2NF)

For a table to be in the Second Normal Form,

* + - It should be in the First Normal form
    - And, it should not have Partial Dependency. Partial Dependency occurs when a non-prime attribute is functionally dependent on part of a candidate key

### Third Normal Form (3NF)

A table is said to be in the Third Normal Form when,

* + - It is in the Second Normal form.
    - And, it doesn't have Transitive Dependency.

### Boyce and Codd Normal Form (BCNF)

Boyce and Codd Normal Form is a higher version of the Third Normal form. This form deals with certain type of anomaly that is not handled by 3NF. A 3NF table which does not have multiple overlapping candidate keys is said to be in BCNF. For a table to be in BCNF, following conditions must be satisfied:

* + - R must be in 3rd Normal Form
    - For each functional dependency ( X → Y ), X should be a super Key.

### Fourth Normal Form (4NF)

A table is said to be in the Fourth Normal Form when,

* + - It is in the Boyce-Codd Normal Form.
    - And, it doesn't have Multi-Valued Dependency.

# SYSTEM TESTING

* 1. **TYPES OF TESTING**

1. **SYSTEM TESTING**

Testing is the major quality measure technique employed during software development process. After the coding phase, computer programs are available that can be executed for testing purpose. Testing not only has to uncover errors introduced during coding, but also locates errors committed during the previous phase. Thus the aim of testing is to uncover requirements, design or coding errors in the program.

The basic types of testing are:

* + - Unit testing
    - Integration testing
    - Validation testing
    - Output testing
    - User Acceptance testing

### UNIT TESTING

This is the first level of testing. In this different modules are tested against the specification produced during the design of the modules. Unit testing is done for the verification of code produced during the coding of single program module in an isolated environment. Unit testing first focuses on the modules independently of one another to locate errors.

### INTEGRATION TESTING

After the modules are tested individually, they must be tested in combination with each other to be sure that the interfaces are correct. This is known as integration testing. Hence, we consider interfacing of various modules. Thus in the integration testing step, all the errors uncovered are corrected for the next testing steps.

### VALIDATION TESTING

Validation testing gives the final assurances that the software meets all functional, behavioural and performance requirements. The software is completely assembled as a package. Validation succeeds when the software functions in a manner in which the user expects. Validation refers to the process of using software in a live environment in order to find errors. If the password was given wrongly by customers then it shows the check password error. Then if the username and password are not typed correct then it shows check username and password error. In the field, medicine quantity if the customers type any character other than numbers then it displays a warning message to give only numbers.

### OUTPUT TESTING

After performing the validation testing the next step is output testing of the proposed system since no system could be useful if it does not produce the required output generated or considered in to two ways, one is on screen and another is printed format. The output format on the screen is found to be correct as the format was designed in the system design phase according to the user needs. If the user gives their correct username and password then it logins to the corresponding page.

### USER ACCEPTANCE TESTING

User acceptance of a system is the key factor for the success of any system. The system under consideration is tested for user acceptance by constantly keeping in touch with the prospective system users at the time of developing and making changes where required.

### TYPES OF VALIDATIONS

A Validation control enables to validate an input and display an error message if necessary.

Validation types are given below

### REQUIRED FIELD VALIDATION

The Required Field Validator is actually very simple, and yet very useful. One can use it to make sure that the user has entered something in a Text Box control. In every form required field validator is assigned to fulfil all the specification.

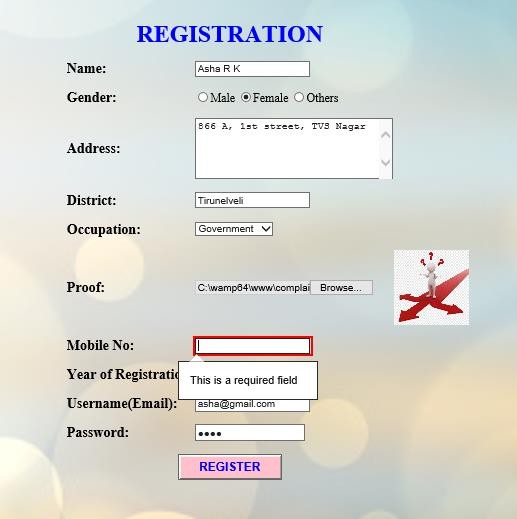
### REGULAR EXPRESSION VALIDATION

Regular Expression Validator is one of the most useful validators, because it can be used to check the validity of any kind of string. In this project regular expression validator is assigned for email checking entries.

### RANGE VALIDATION

The Range Validator does exactly what the name implies; it makes sure that the user input is within a specified range. It is used to validate numbers, strings and dates, which can make it useful in a bunch of cases. In this poject, range validator is assigned for checking phone numbers.

* 1. **ERROR MESSAGES**



# USER MANUAL

## USER MANUAL

### INSTALLATION MANUAL

* + - Download the required software.
    - Unzip the files.
    - Install all the software one by one.
    - Install MYSQL.
    - Install Apache.
    - Open the web browser and type ‘localhost’ as the address.
    - Unzip the PHP file and copy it to the C disk.
    - Find the file named ‘httpd.conf” at ‘C:
    - Open the htdocs folder at ‘C:
    - Open your web browser and enter ‘localhost/test.php’ as the address.

If the browser shows the PHP version and other things, it means the PHP is successfully installed.

### OPERATIONAL MANUAL

* + - Open the project and open the home page
    - First click on login and enter Username and Password
    - After entering the admin page, click View Users to view the details of the registered users
    - Next click Officer Details to add and view the details of the Officers
    - In View Complaints, admin can view the complaints registered by the users. The complaints can be approved and the alert messages can be uploaded by the admin
    - Admin can view feedback given by the users in View Feedback and can view reply messages in View Reply
    - Then the Admin can logout from the page
    - The Officers can log in by using the Username and Password provided by the Admin
    - In View Complaints, the Officers can view the complaints and can update the status of the complaints
    - Officers can view the alert messages in View Alert and can upload Reply messages
    - Feedback can be viewed in View Feedback
    - Then the Officers can logout from the page
    - The Users has to first register and then login by entering the Username and Password given at time of registration
    - The User can register complaint in Register Complaint and can view the status of the complaints posted by them in View Complaints
    - Feedback can be uploaded by the users in Post Feedback
    - Then the Users can logout from the page

# SYSTEM IMPLEMENTATION

## SYSTEM IMPLEMENTATION

### SPECIAL FEATURES OF THE LANGUAGES PHP

Hypertext Preprocessor (or simply PHP) is a general-purpose programming language originally designed for web development. It was originally created by Rasmus lerdorf in 1994; the PHP reference implementation is now produced by the PHP group. PHP originally stood for personal home page, but it now stands for the recursive initialism. PHP code may be executed with a command line interface (CLI), embedded into HTML code, or it can be used in combination with various web template systems, web content management systems, and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in a web server or as a common gateway interface executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page.PHP can be used for many programming tasks outside of the web context, such as standalone graphical applications and robotic drone control

The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP license. PHP has been widely ported and can be deployed on most web servers on almost every operation system and platform, free of charge.

The PHP language evolved without a written formal specification or standard until 2014, with the original implementation acting as the de facto standard which other implementations aimed to follow PHP specification.

### UNIQUE FEATURES OF PHP

**Simple, Familiar and ease of use:** It is popularly known for its simplicity, familiarity and easy to learn the language as the syntax is similar to that of ‘C’ or Pascal language. So the language is very logical and well organized general-purpose programming language. Even people with a normal programming background can easily understand and capture the use of language. PHP is very advantageous for new users as its a very reliable, fluent, organized, clean, demandable and efficient.The main strength of PHP is the availability of rich pre-defined functions.

**Loosely typed language:** PHP encourages the use of variables without declaring its data types. So this is taken care at the execution time depending on the value assigned to the variable. Even the variable name can be changed dynamically.

**Flexibility:** PHP is known for its flexibility and embedded nature as it can be well integrated with HTML, XML, Java script and many more. PHP can run on multiple operating systems like Windows, Unix, Mac OS, Linux, etc. The PHP scripts can easily run on any device like laptops, mobiles, tablets, and computer. It is very comfortably integrated with various Databases. Desktop applications are created using advanced PHP features. The executable PHP can also be run on command-line as well as directly on the machine. Heavyweight applications can be created without a server or browser. It also acts as an excellent interface with relational databases.

**Cross-platform compatibility:** PHP is multi-platform and known for its portability as it can run on any operating System and windows environments. The most common are XAMPP and LAMP. As PHP is platform-independent, it’s very easy to integrate with various databases and other technologies without re-implementation. It effectively saves a lot of energy, time and money.

**Open Source:** All PHP frameworks are open sources, No payment is required for the users and its completely free. User can just download PHP and start using for their applications or projects. Even in companies, the total cost is reduced for software development providing more reliability and flexibility. It supports a popular range of databases like MySQL, SQLite, Oracle, Sybase, Informix, and PostgreSQL

**Error reporting and exceptions:** PHP supports more errors reporting constants to generate errors and relevant warning at runtime. For example**,** E\_ERROR, E\_WARNING, E\_PARSE, E\_STRICT**.**

**Active community support:** PHP is very rich with many diverse online community developers to help beginners for web-based applications. These worldwide volunteers contribute many features as well as new versions for PHP libraries. Even they contribute a translation in different languages to help out programmers. There is a bundle of third-party open-source libraries which provide basic functionalities. Even the documentation given by the official site helps in implementing new features providing access to a variety of creative imagination.

**Maintenance:** When dealing with big projects, maintenance of code is also an important aspect of the web development process. There are many PHP frameworks for example MVC (Model View Controller) which makes development and maintenance of code easier. Files belonging to the different module are maintained separately.

**PDO Class:** PHP Data Objects are created by PDO class which gives a good abstraction layer for database drivers. The PDO Classes are enriched with functions which are database independent. It means the same functions are used for similar actions for different databases without re-development as long as it supports PDO. In this way, the application becomes more portable saving lot of time and effort. Use of PDO helps the application from SQL injection attacks.

**Memory and CPU usage information:** PHP can provide memory usage information from functions like memory\_get\_usage() or memory\_get\_peak\_usage(), which can help the developers optimize their code. In the similar way, the CPU power consumed by any script can be retrieved for further optimization.

**Object oriented features:** PHP supports object-oriented programming features, resulting in increased speed and introducing added features like data encapsulation and inheritance at many levels.

### MySql

MySql is an open source relational database management system (RDMBS). It’s name is a combination of “My”, the name of co-founder Michael Widenius’s daughter, and “SQL”, the abbreviation for structured Query Language.

MySql is free and open-source software under the terms of the GNU general public license, and is also available under a variety of proprietary licenses. MySql was owned and sponsored by the Swedish company MySql AB, which was bought by sun Microsystems. In 2010 when oracle acquired sun, Widenius forked the open-source MySql project to create MariaDB.

MySql is a component of the lamp web application software stack, which is an acronym for Linux, Apache, MySql, and Perl. MySql is used by many database-driven web applications, including drupal, joomla, phpBB, and Word Press. MySql is also used by many popular websites, including Google, face book, Twitter and You Tube. The main features of MySql includes

**Easy to use**: MySQL is easy to use. We have to get only the basic knowledge of SQL. We can build and interact with MySQL by using only a few simple SQL statements.

**It is secure**: MySQL consists of a solid data security layer that protects sensitive data from intruders. Also, passwords are encrypted in MySQL.

**Client/ Server Architecture**: MySQL follows the working of a client/server architecture. There is a database server (MySQL) and arbitrarily many clients (application programs), which communicate with the server; that is, they can query data, save changes, etc.

**Free to download**: MySQL is free to use so that we can download it from MySQL official website without any cost.

**Compatible on many operating systems**: MySQL is compatible to run on many operating systems, like Novell NetWare, Windows\* Linux\*, many varieties of UNIX\* (such as Sun\* Solaris\*, AIX, and DEC\* UNIX), OS/2, FreeBSD\*, and others. MySQL also provides a facility that the clients can run on the same computer as the server or on another computer (communication via a local network or the Internet).

# FUTURE ENHANCEMENT

ONLINE COMPLAINT REGISTRATION SYSTEM

## FUTURE ENHANCEMENT

The project “Online Complaint Registration System” can have the further updates. The application can be extended further by connecting all the departments of a city or a state or a country. The Complaint locations can be shared using the google map by the user through online.

The status of the complaints posted by the Officer can be sent through email to the corresponding user. There will be no need to login the website to view the status of complaints posted.

Department of Computer Applications, St. Xavier’s College (Autonomous), Palayamkottai Page 38

# CONCLUSION

ONLINE COMPLAINT REGISTRATION SYSTEM

## CONCLUSION

The arrival of technology and the escalating use of internet have reduced our burden of work. The complaints can be posted and the status of those complaints can be viewed anywhere and at anytime by the user. All the processes are transparent to the admin. In comparison with the manual system, the benefit under a computer system is considerable in saving man power, working hours and efforts.

Various validation techniques have been used to implement accuracy of data in all formats of input. Updating of information becomes so easier. The system has produced all the reports required for the management. It is concluded that the application works well and satisfies the users.

The application is tested very well and errors are properly debugged. The project works according to the restrictions provided to the users respectively. Further enhancements can be made to the application, so that the “Online Complaint Registration System” can be functioned more efficiently than the present one.

Department of Computer Applications, St. Xavier’s College (Autonomous), Palayamkottai Page 39

# BIBLIOGRAPHY

ONLINE COMPLAINT REGISTRATION SYSTEM

## BIBLIOGRAPHY

### BOOK REFERENCES

* + - Robin Nixon, “Learning **PHP**, MySQL, JavaScript, and CSS: A Step-by-Step Guide to Creating Dynamic Websites”, Second Edition, O’Reilly Publications, 2012
    - Thomas Powell, “The Complete Reference: HTML and XHTML”, Fifth Edition, Tata McGraw Hill Publication, 2010
    - Paul Hudson, “PHP in a Nutshell”, O’Reilly Publications, 2005
    - Roger S. Pressman, “Software Engineering: A Practitioner Approach”, Eighth Edition, McGraw Hill, 2015
    - William E, Perry, “Effective Methods for Software Testing”, Third Edition, John Wiley, 2015

### WEBSITE REFERENCES

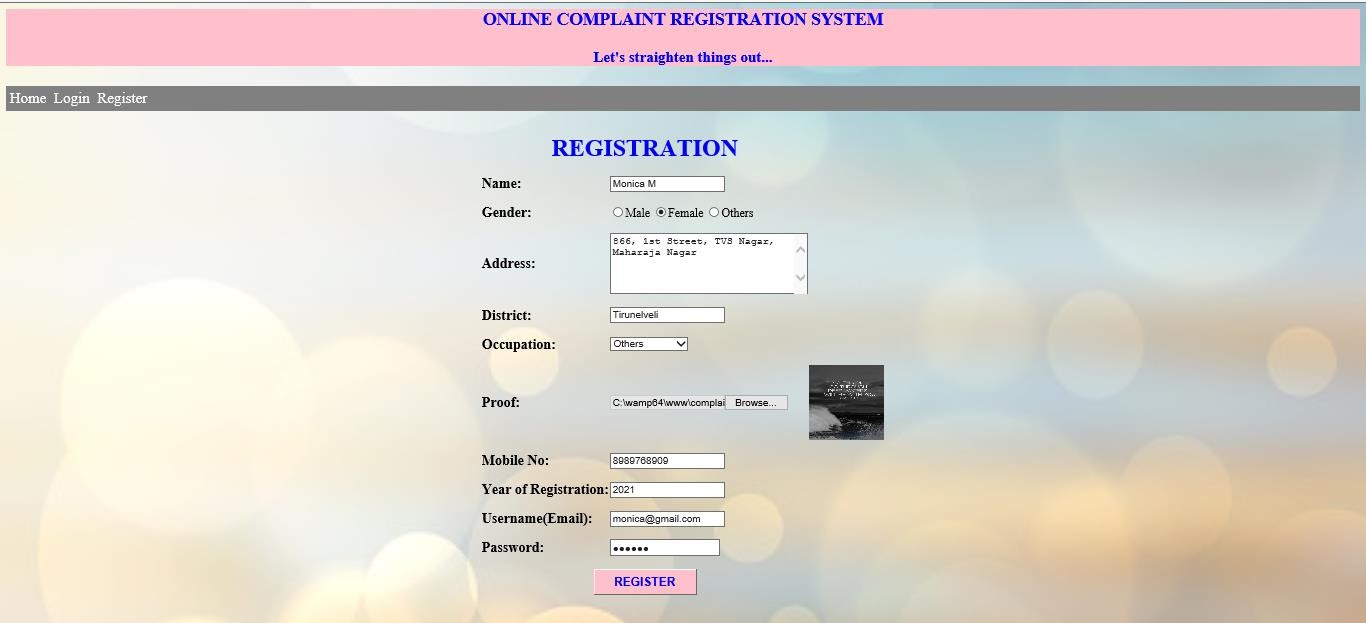
* [www.tutorialspoint.com](http://www.tutorialspoint.com/)
* [www.codexworld.com](http://www.codexworld.com/)
* [www.codecademy.com](http://www.codecademy.com/)
* [www.stackoverflow.com](http://www.stackoverflow.com/)
* [www.w3schools.com](http://www.w3schools.com/)

Department of Computer Applications, St. Xavier’s College (Autonomous), Palayamkottai Page 40

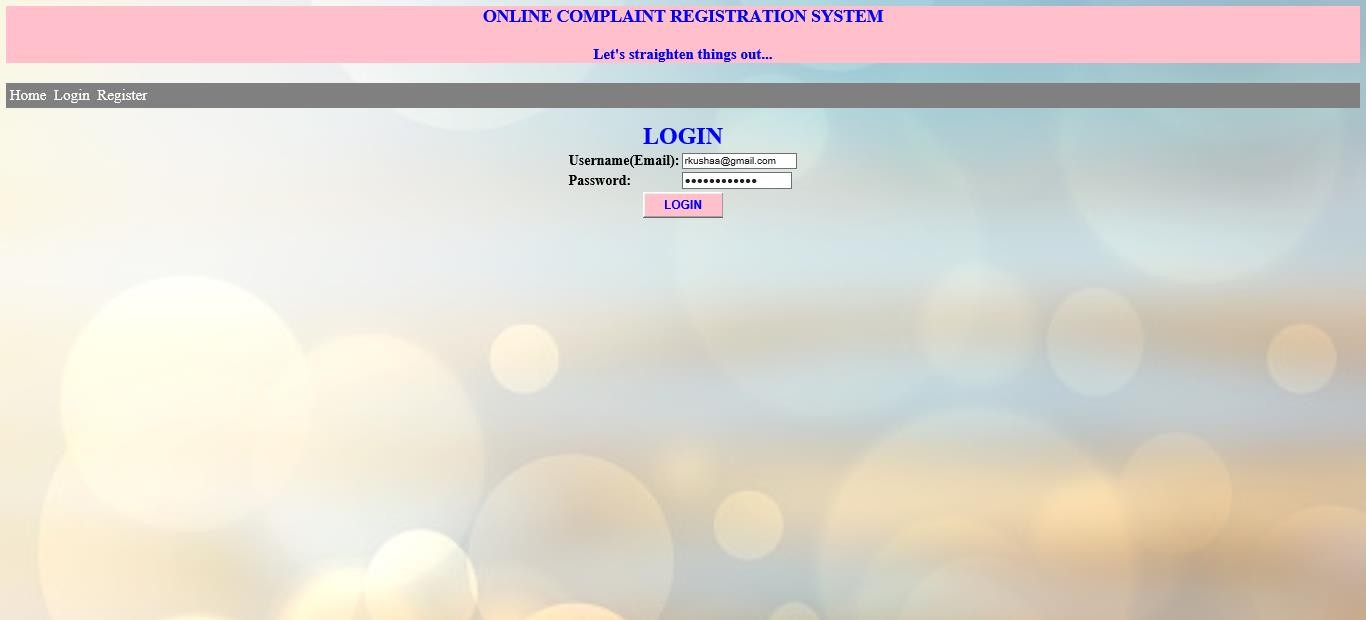
# APPENDIX

## APPENDIX

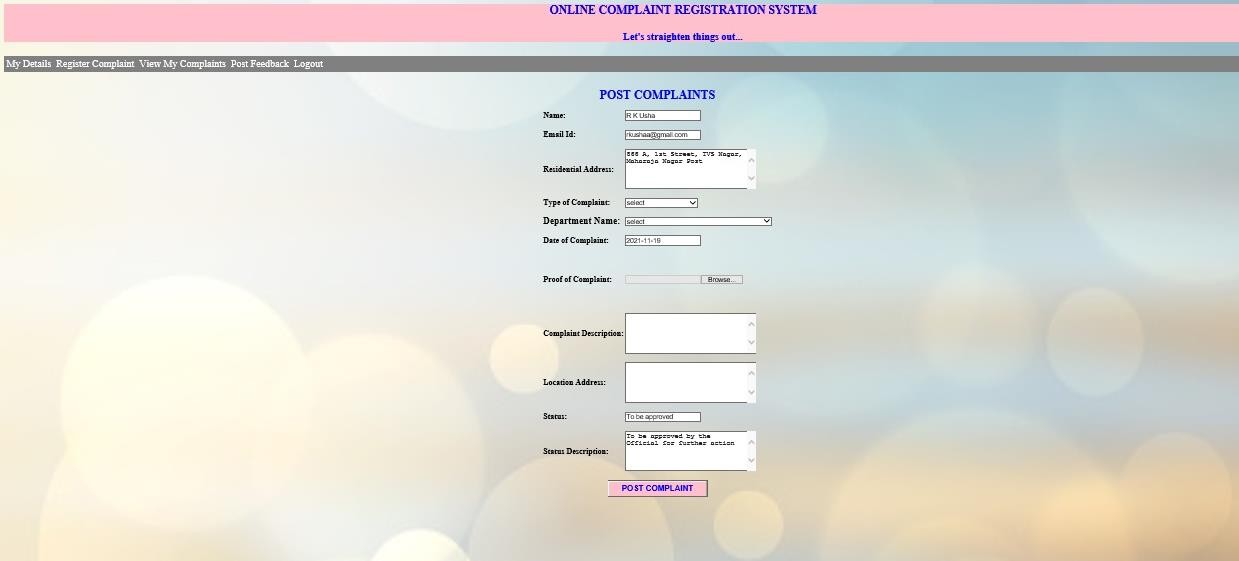
### SAMPLE SCREEN LAYOUTS User Registration



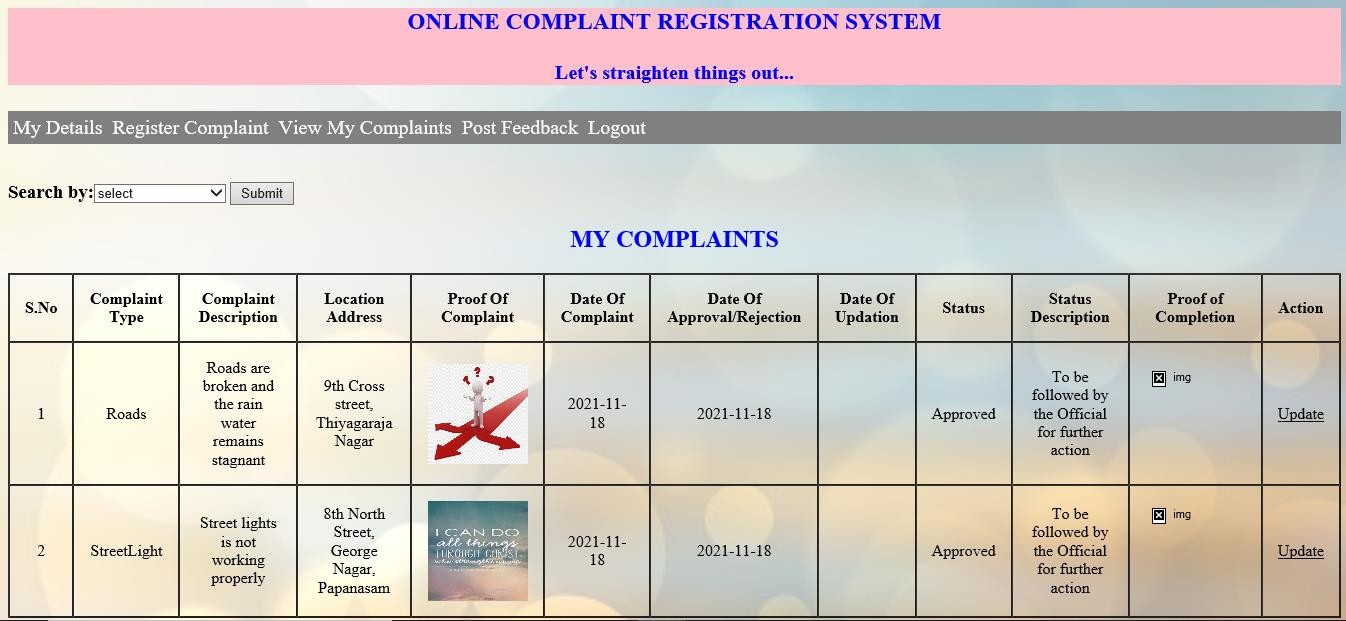
**Login Page**



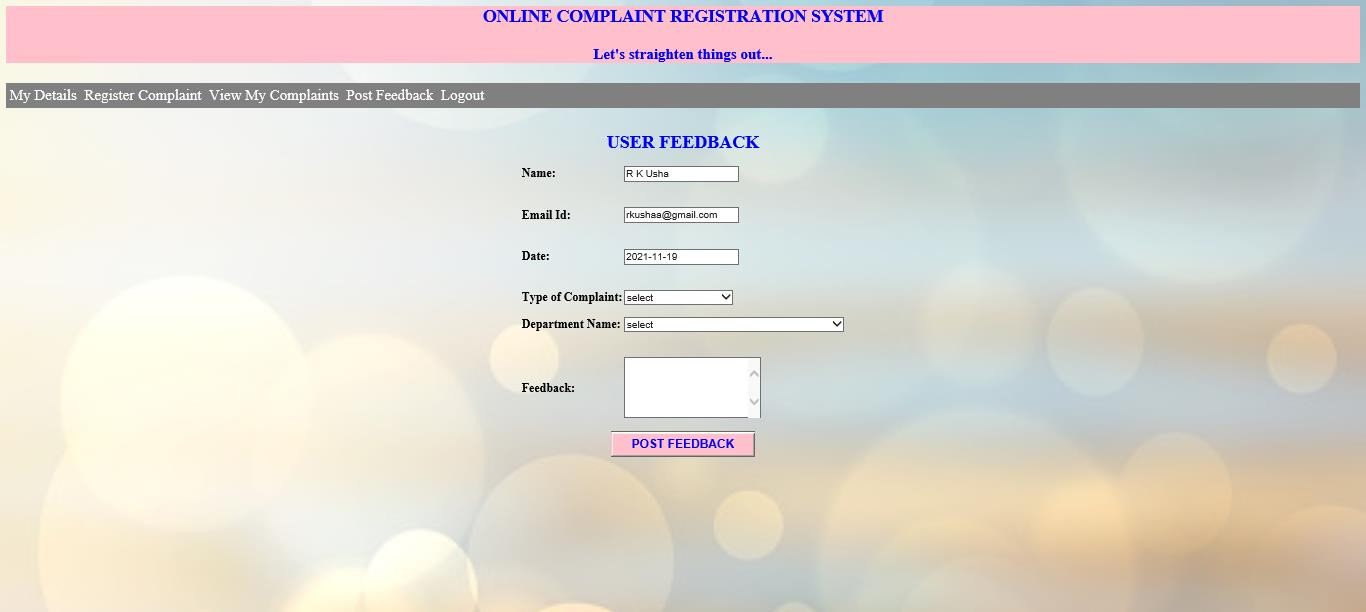
### User Post Complaint



**User View Complaints**



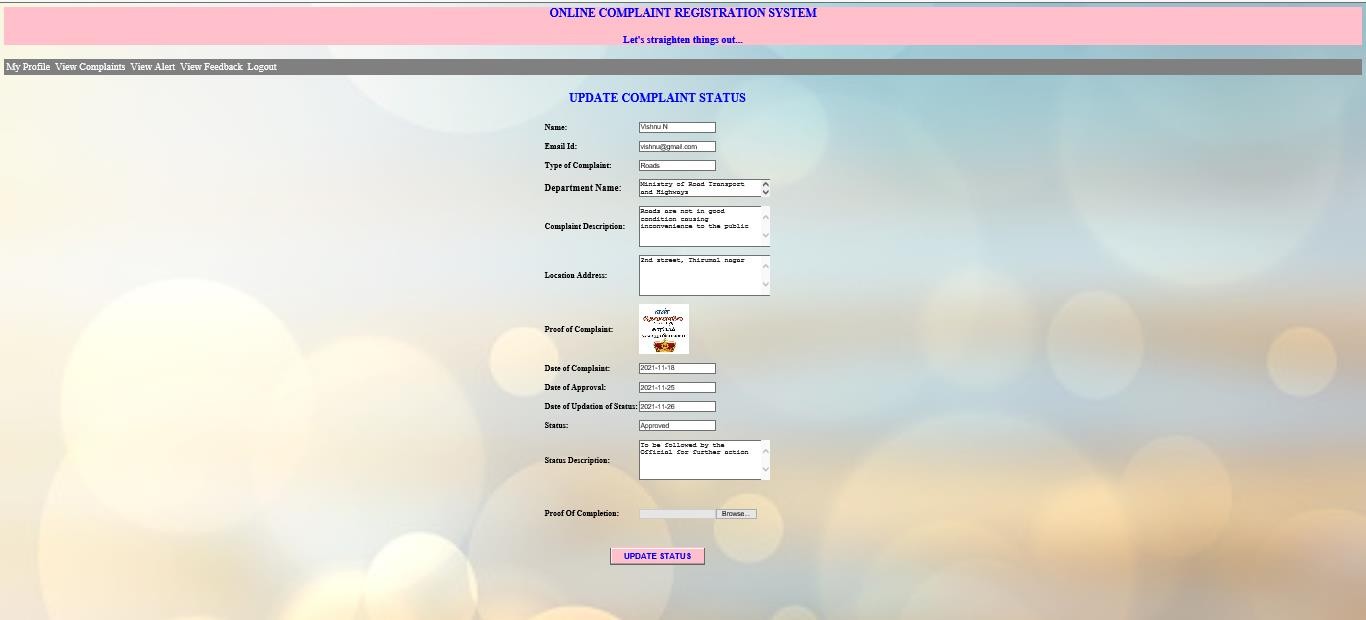
## User Upload Feedback



### Officer View Complaints



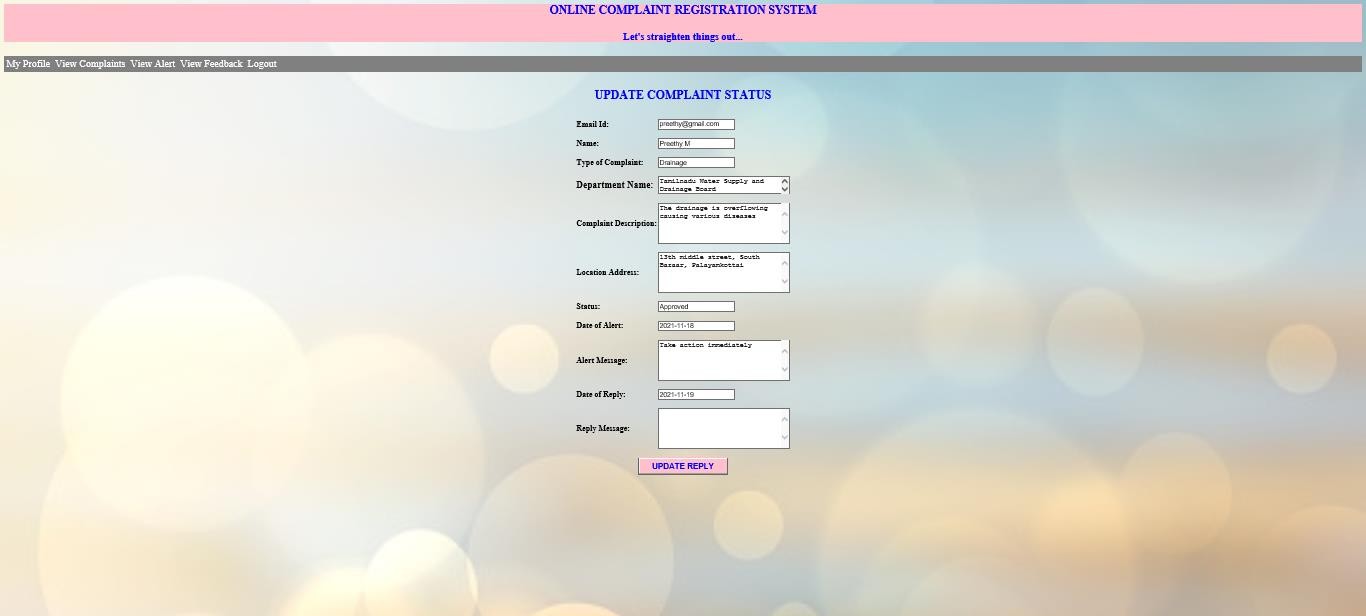
**Officer Update Complaint Status**



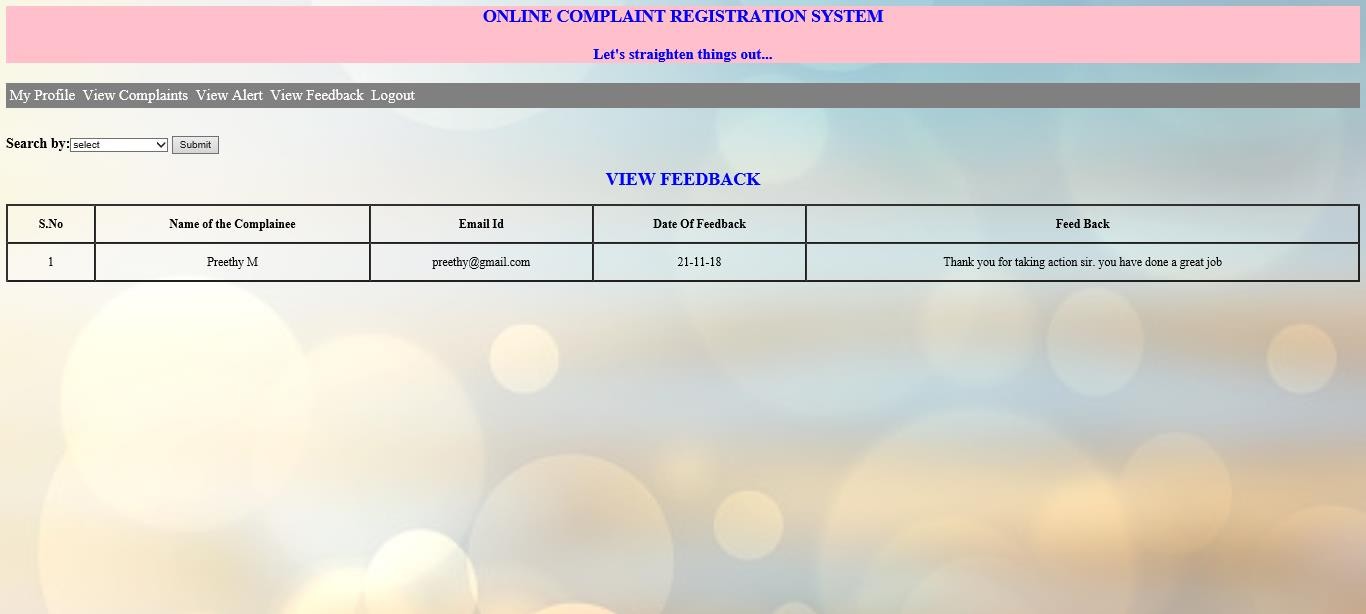
### Officer View Alert Messages



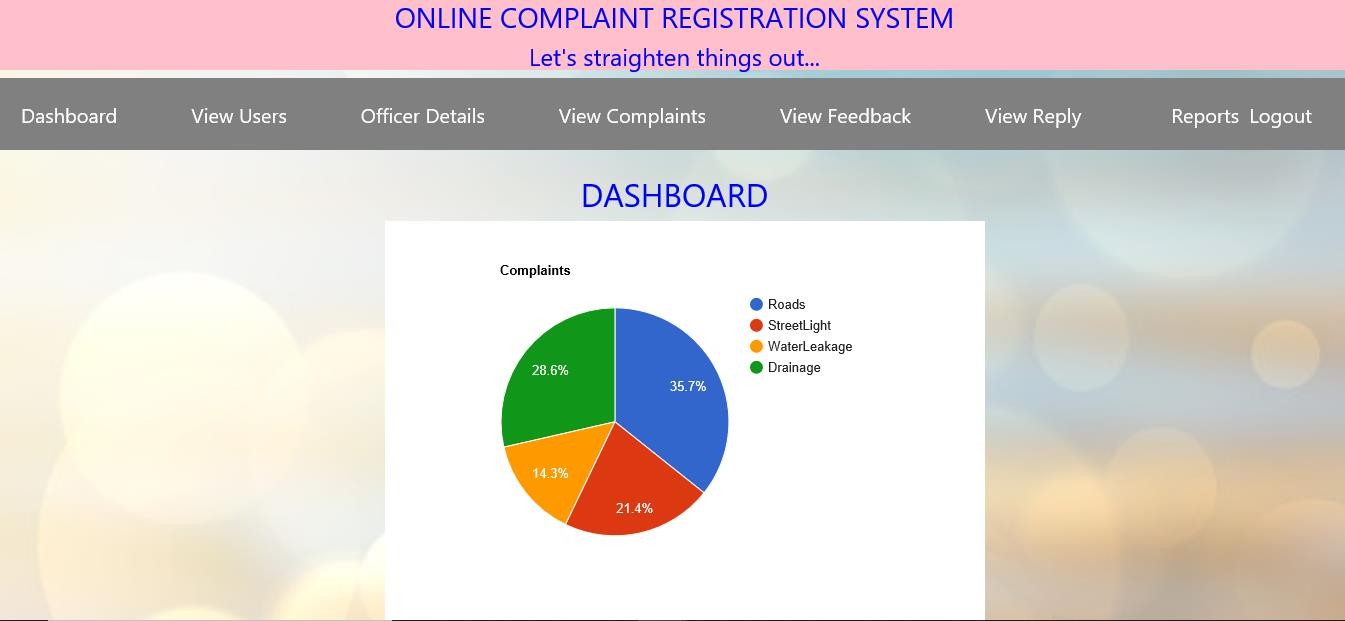
**Officer Upload Reply Messages**



### Officer View Feedback



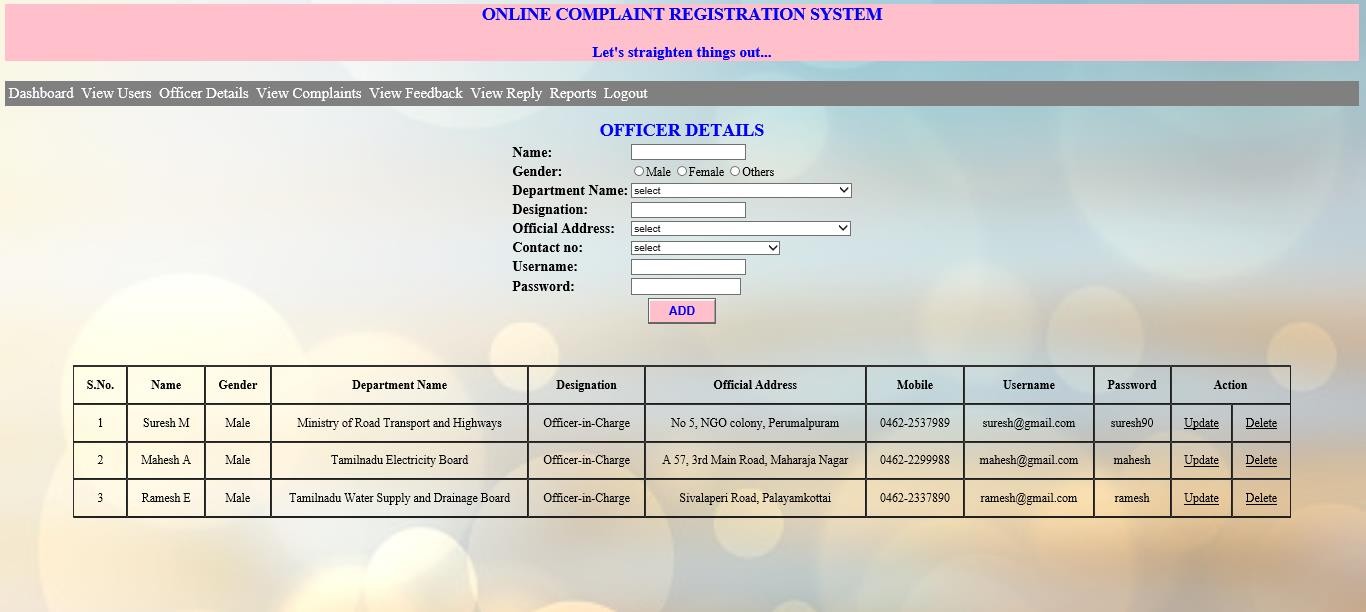
**Admin Dashboard**



## Admin View Users



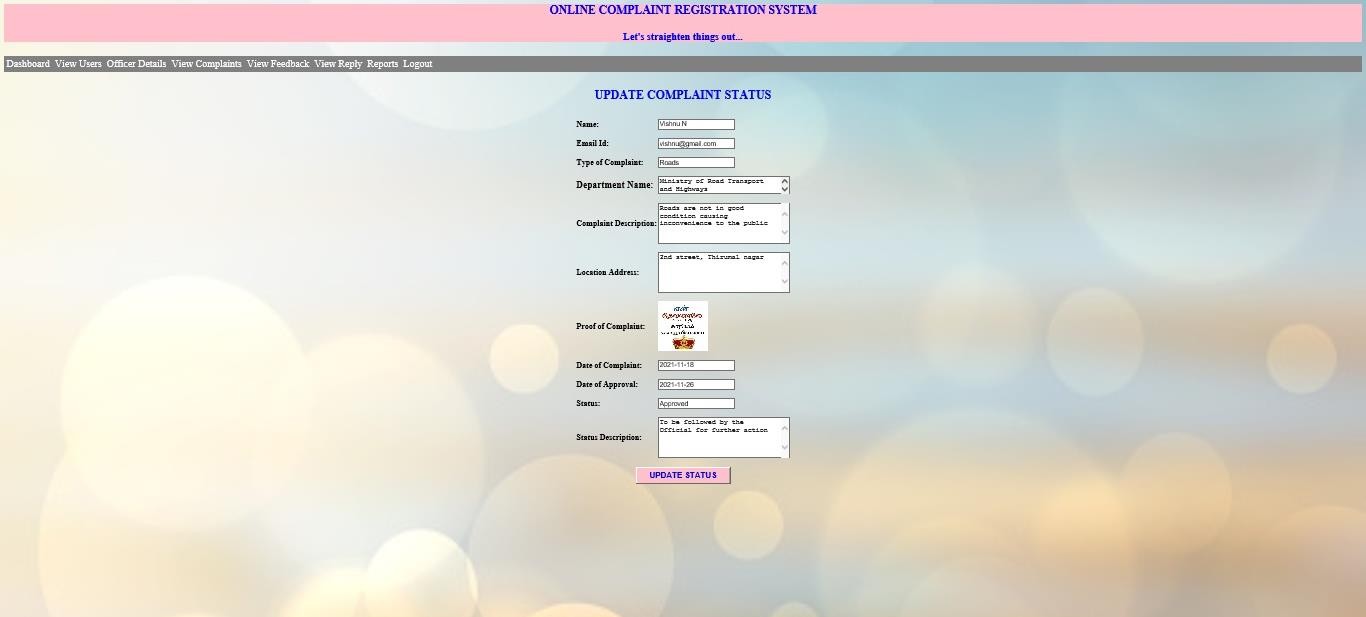
### Admin Add and View Officer Details



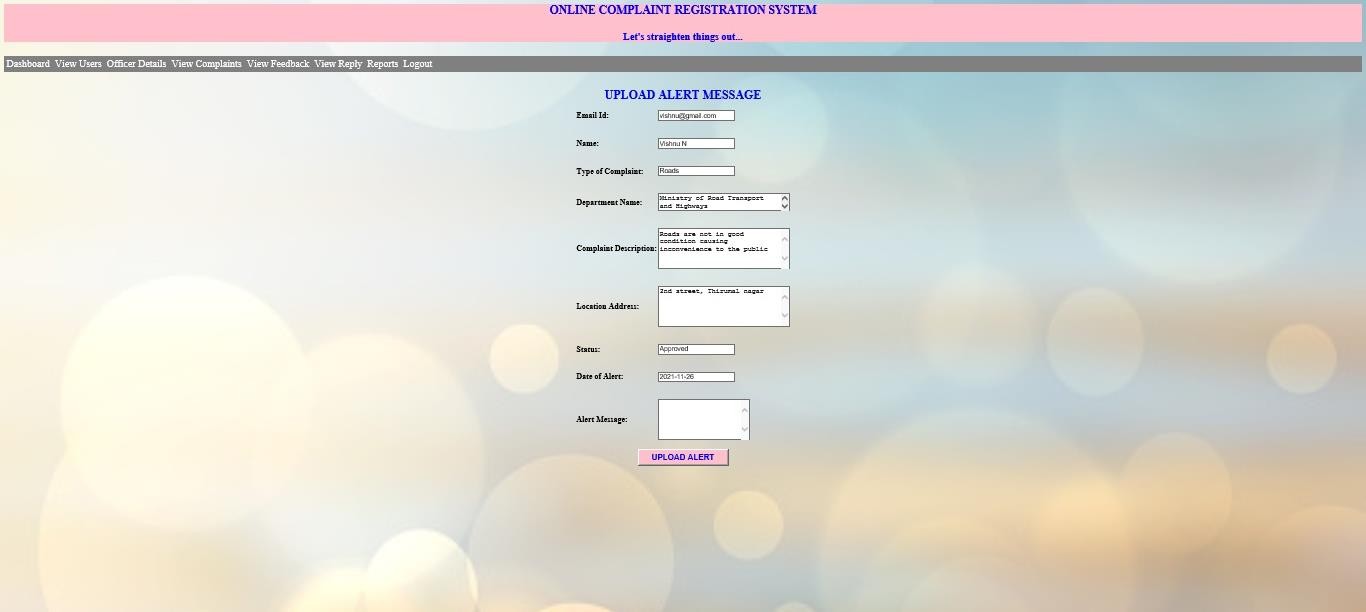
**Admin View Complaints**



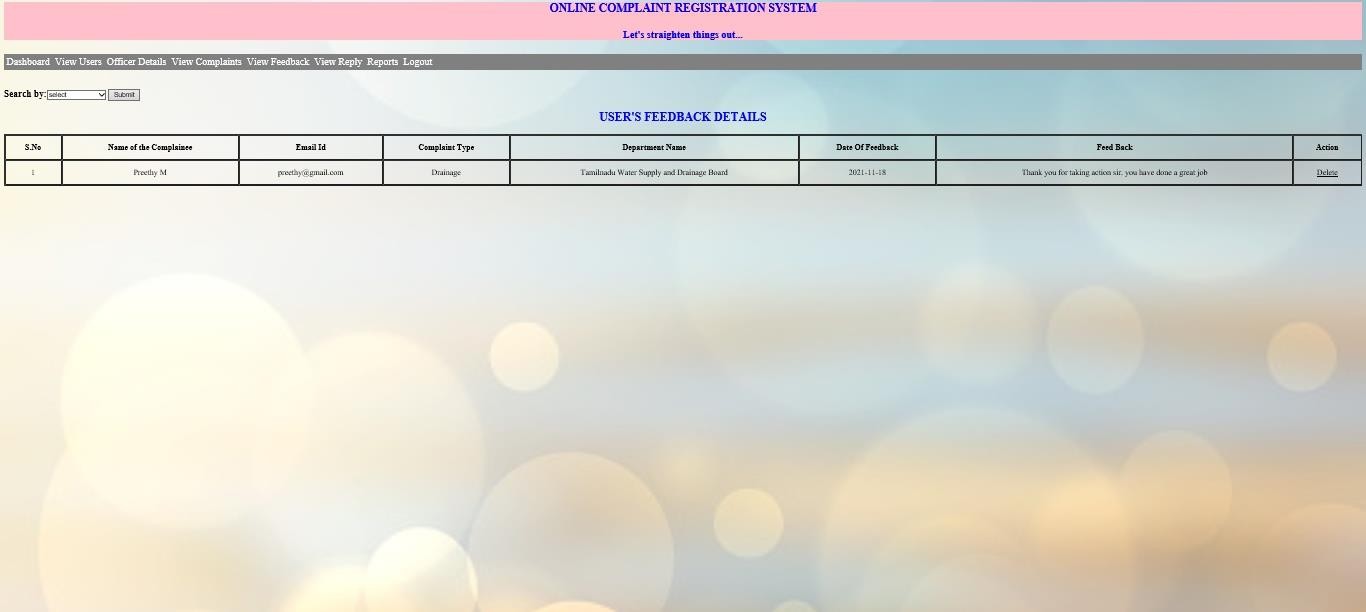
### Admin Complaint Approval



**Admin Upload Alert Message**



### Admin View User Feedback



**Admin View Alert and Reply Messages**



### SAMPLE CODINGS

**Registration**

<?php

include "condb.php";

$targetDir = "uploads/";

$Name=mysqli\_real\_escape\_string($con,$\_POST["cname"]);

$Gender=mysqli\_real\_escape\_string($con,$\_POST["gender"]);

$Address=mysqli\_real\_escape\_string($con,$\_POST["address"]);

$District=mysqli\_real\_escape\_string($con,$\_POST["district"]);

$Occupation=mysqli\_real\_escape\_string($con,$\_POST["occupation"]);

$filename = basename($\_FILES["file"]["name"]);

$Mobile=mysqli\_real\_escape\_string($con,$\_POST["mobile"]);

$YearofRegistration=date('Y');

$Username=mysqli\_real\_escape\_string($con,$\_POST["uname"]);

$Password=mysqli\_real\_escape\_string($con,$\_POST["password"]);

$targetFilePath = $targetDir . $filename;

$fileType = pathinfo($targetFilePath,PATHINFO\_EXTENSION); if(isset($\_POST["register"]) && !empty($\_FILES["file"]["name"]))

{

$allowTypes = array('jpg','jpeg','png'); if(in\_array($fileType, $allowTypes))

{

if(move\_uploaded\_file($\_FILES["file"]["tmp\_name"], $targetFilePath))

{

$sql="insert into tblregister(Name,Gender,Address,District,Occupation,Proof,Mobile,YearofRegistration,Username,Pas sword) values

('$Name','$Gender','$Address','$District','$Occupation','$filename','$Mobile','$YearofRegistrati on','$Username','$Password')".mysqli\_error($con);

$insert=mysqli\_query($con,"Insert into tbllogin(Username,Password,Type) values ('$Username','$Password','3')");

if(mysqli\_query($con,$sql))

}

}

else

{

{

}

else

{

}

header("location:register.php?msg=3"); echo msg;

header("location:register.php?msg=4"); echo msg;

header("location:register.php?msg=5"); echo msg;

}

}

else

{

}

header("location:register.php?msg=6"); echo msg;

mysqli\_close($con);

?>

### Login

<?php

include "condb.php";

$Username=mysqli\_real\_escape\_string($con,$\_POST["uname"]);

$Password=mysqli\_real\_escape\_string($con,$\_POST["password"]);

$sql="select \* from tbllogin where Username='$Username' and Password='$Password'";

$result=mysqli\_query($con,$sql);

$row=mysqli\_fetch\_array($result);

$Type=$row['Type']; setcookie("loguser",$Username,time()+3600,"/"); if($Type==1)

{

header("location:adminhp.php");

}

else if($Type==2)

{

header("location:officerhp.php");

}

else if($Type==3)

{

}

else

{

}

header("location:userhp.php");

header("location:login.php?msg=2"); echo msg;

mysqli\_close($con);

?>

### Post Complaint

<?php

include "condb.php";

$targetDir = "uploads/";

$Name=mysqli\_real\_escape\_string($con,$\_POST["cname"]);

$EmailId=mysqli\_real\_escape\_string($con,$\_POST["uname"]);

$ResidentialAddress=mysqli\_real\_escape\_string($con,$\_POST["address"]);

$TypeOfComplaint=mysqli\_real\_escape\_string($con,$\_POST["ctype"]);

$DepartmentName=mysqli\_real\_escape\_string($con,$\_POST["department"]);

$DateOfComplaint=mysqli\_real\_escape\_string($con,$\_POST["cdate"]);

$filename = basename($\_FILES["file"]["name"]);

$ComplaintDescription=mysqli\_real\_escape\_string($con,$\_POST["comdescription"]);

$LocationAddress=mysqli\_real\_escape\_string($con,$\_POST["locaddress"]);

$Status=mysqli\_real\_escape\_string($con,$\_POST["status"]);

$StatusDescription=mysqli\_real\_escape\_string($con,$\_POST["statusdescription"]);

$targetFilePath = $targetDir . $filename;

$fileType = pathinfo($targetFilePath,PATHINFO\_EXTENSION); if(isset($\_POST["postcomplaint"]) && !empty($\_FILES["file"]["name"]))

{

$allowTypes = array('jpg','jpeg','png'); if(in\_array($fileType, $allowTypes))

{

if(move\_uploaded\_file($\_FILES["file"]["tmp\_name"], $targetFilePath))

{

$query="Insert into tblpostcomplaint(`CName`,`EmailId`,`ResidentialAddress`,`ComplaintType`,`DepartmentName`,`Date OfComplaint`,`ProofOfComplaint`,`ComplaintDescription`,`LocationAddress`,`Status`,`StatusDescrip tion`)values('$Name','$EmailId','$ResidentialAddress','$TypeOfComplaint','$DepartmentName','$Date OfComplaint','$filename','$ComplaintDescription','$LocationAddress','$Status','$StatusDescription')";

if(mysqli\_query($con,$query))

{

}

}

else

{

}

else

{

}

header("location:postcomplaints.php?msg=7"); echo msg;

header("location:postcomplaints.php?msg=8"); echo msg;

header("location:postcomplaints.php?msg=9"); echo msg;

}

}

else

{

}

header("location:postcomplaints.php?msg=10"); echo msg;

mysqli\_close($con);

?>

### Add Officer

<!DOCTYPE html>

<html lang="en">

<head>

<title>AddOfficer</title>

<link rel="stylesheet" type="text/css" href="style\_css.css">

</head>

<body>

<?php

include "condb.php";

$Name=mysqli\_real\_escape\_string($con,$\_POST["oname"]);

$Gender=mysqli\_real\_escape\_string($con,$\_POST["gender"]);

$DepartmentName=mysqli\_real\_escape\_string($con,$\_POST["department"]);

$Designation=mysqli\_real\_escape\_string($con,$\_POST["designation"]);

$OfficialAddress=mysqli\_real\_escape\_string($con,$\_POST["offaddress"]);

$Mobile=mysqli\_real\_escape\_string($con,$\_POST["mobile"]);

$Username=mysqli\_real\_escape\_string($con,$\_POST["uname"]);

$Password=mysqli\_real\_escape\_string($con,$\_POST["password"]);

$q="Insert into tblofficerdetails(Name,Gender,DepartmentName,Designation,OfficialAddress,Mobile,Username,Pass word) values ('$Name','$Gender','$DepartmentName','$Designation','$OfficialAddress','$Mobile','$Username','$Pass word')";

$sql=mysqli\_query($con,"Insert into tbllogin (Username,Password,Type) values('$Username','$Password','2')");

if(mysqli\_query($con,$q))

{

header('location:officerdetails.php?msg=1'); echo msg;

}

else

{

header('location:officerdetails.php?msg=0'); echo msg;

}

?>

</body>

</html>

### Admin Update Status

<?php

include "condb.php";

$CId=$\_REQUEST["CId"];

$Name=mysqli\_real\_escape\_string($con,$\_POST["cname"]);

$EmailId=mysqli\_real\_escape\_String($con,$\_POST["uname"]);

$ResidentialAddress=mysqli\_real\_escape\_string($con,$\_POST["resaddress"]);

$TypeOfComplaint=mysqli\_real\_escape\_string($con,$\_POST["ctype"]);

$ComplaintDescription=mysqli\_real\_escape\_string($con,$\_POST["comdescription"]);

$LocationAddress=mysqli\_real\_escape\_string($con,$\_POST["locaddress"]);

$ProofOfComplaint=mysqli\_real\_escape\_string($con,$\_POST["file"]["name"]);

$DateOfComplaint=mysqli\_real\_escape\_string($con,$\_POST["cdate"]);

$DateOfApproval=mysqli\_real\_escape\_string($con,$\_POST["appdate"]);

$Status=mysqli\_real\_escape\_string($con,$\_POST["status"]);

$StatusDescription=mysqli\_real\_escape\_string($con,$\_POST["statusdescription"]);

$sql="Update tblpostcomplaint set DateOfApproval='$DateOfApproval',Status='$Status',StatusDescription='$StatusDescription' where CId='$CId'";

if(mysqli\_query($con,$sql))

{

header("location:adminviewusercomplaints.php?msg=3"); echo msg;

}

else

{

header("location:adminviewusercomplaints.php?msg=4"); echo msg;

}

mysqli\_close($con);

?>