

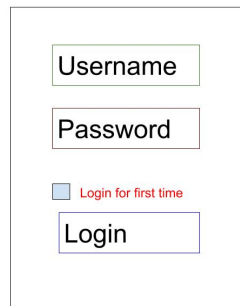
# COP290: Complaint App

Bipul (2014cs50282)  
Deepak (2014cs50435)  
Shivank (2014cs10565)

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We are developing a complaint management system which can be actively used in Institutes like IIT. Using this application, the end users can directly submit their complaint/grievance to the concerned authorities.

## 1 User Interface



A login screen interface with a light gray background. It contains four input fields: 'Username' (green border), 'Password' (red border), a checkbox labeled 'Login for first time' (blue border), and a 'Login' button (blue border). The fields are arranged vertically.

Figure 1: Login Screen

- If user is logging in for the first time his password will be saved in database



	All Complain	
	Complain 7	
	Complain 6	
	Complain 5	
	Complain 4	
	Complain 3	
	Complain 2	
	Complain 1	

Figure 2: Main Page

- It shows all the complaints related to him/his hostel/institute in list view.
- Private complaints has been marked by red circle, while hostel by green and Institute related complaints by Blue.
- Clicking on the top left corner brings navigation drawer through which he can directly access main links.
- FAB has been given in almost every page so that user can report a complain immediately.




User
Location
All Complain
Bookmarked
 Individual
 Hostel
 Institute
Help & Feedback
About Us

Figure 3: Navigation Drawer

- Navigation Drawer holds a bunch of quick links to Bookmarked Complaints, His complaints, hostel and Institute related complaints.

The image shows a mobile application form for creating a new complaint. The form is titled "New Complaint" in green text at the top. Below the title is a dropdown menu labeled "Select Category". Underneath the dropdown is a large text area labeled "Description". Below the description area is a text field labeled "Comment". At the bottom of the form is a green button labeled "Submit".

Figure 4: New Complaint

- Clicking on FAB brings out this page which holds a drop down menu for selecting category of complain.
- User fills up problem description and any comment like favourable time for rectification.
- Technician can use comment to tell any information related to the complaint.
- This page shows all the personal complaints filed by the User, in list view with Fragment view to separate Unresolved and Resolved complaints.
- Clicking on any of the Problem in the list expands the list horizontally and show the complaint description including ticket ID, report Date, comments and option to mark Resolved or Unresolved.
- This page shows all the public complaints filed by the residents of hostel, in list view with Fragment view to separate Unresolved and Resolved complaints.








Individual	
Unresolved	Resolved
 Complain 7	
 Complain 6	
 Complain 5	
 Complain 4	
 Complain 3	
 Complain 2	
 Complain 1	

Figure 5: Complaint Filed by User











All Complain	
 Complain 7	
 Complain 6	
Date Description Ticket ID Comment	
 Resolved	 Unresolved
 Complain 5	
 Complain 4	
 Complain 3	
 Complain 2	
 Complain 1	

Figure 6: Sample Private Complaint Description

- This page shows all the public complaints filed by the residents of institute, in list view with Fragment view to separate Unresolved and Resolved complaints.
- Clicking on any of the Problem in the list expands the list horizontally and show the complaint description including ticket ID, report Date, comments and option to Upvote and Downvote the Problem using Thumbs up and Thumbs down.
- Apart from Options for Normal User, Navigation Drawer holds option to Add new Users.

Hostel	
Unresolved	Resolved
	Complain 7
	Complain 6
	Complain 5
	Complain 4
	Complain 3
	Complain 2
	Complain 1 

Figure 7: Complaint Filed by Hostel

Institute	
Unresolved	Resolved
	Complain 7
	Complain 6
	Complain 5
	Complain 4
	Complain 3
	Complain 2
	Complain 1 

Figure 8: Complaint Filed by Institute

- Form field with Name, Email, Hostel, Room No., Mobile No. required.













	All Complain	
	Complain 7	
	Complain 6	
	Author Date Description Ticket ID Comment	
	Complain 5	
	Complain 4	
	Complain 3	
	Complain 2	
	Complain 1	

Figure 9: Sample Public Complaint Description




User Location
All Complaints
Bookmarked
 Individual
 Hostel
 Institute
Add New User
Help & Feedback
About Us

Figure 10: Navigation Drawer for Special User



	Add User	
<input type="text" value="Name"/>		
<input type="text" value="Email"/>		
<input type="text" value="Hostel"/>		
<input type="text" value="Room No."/>		
<input type="text" value="Mobile No."/>		
<input type="button" value="Submit"/>		

Figure 11: Navigation Drawer for Special User

## 2 Work Flow of Application

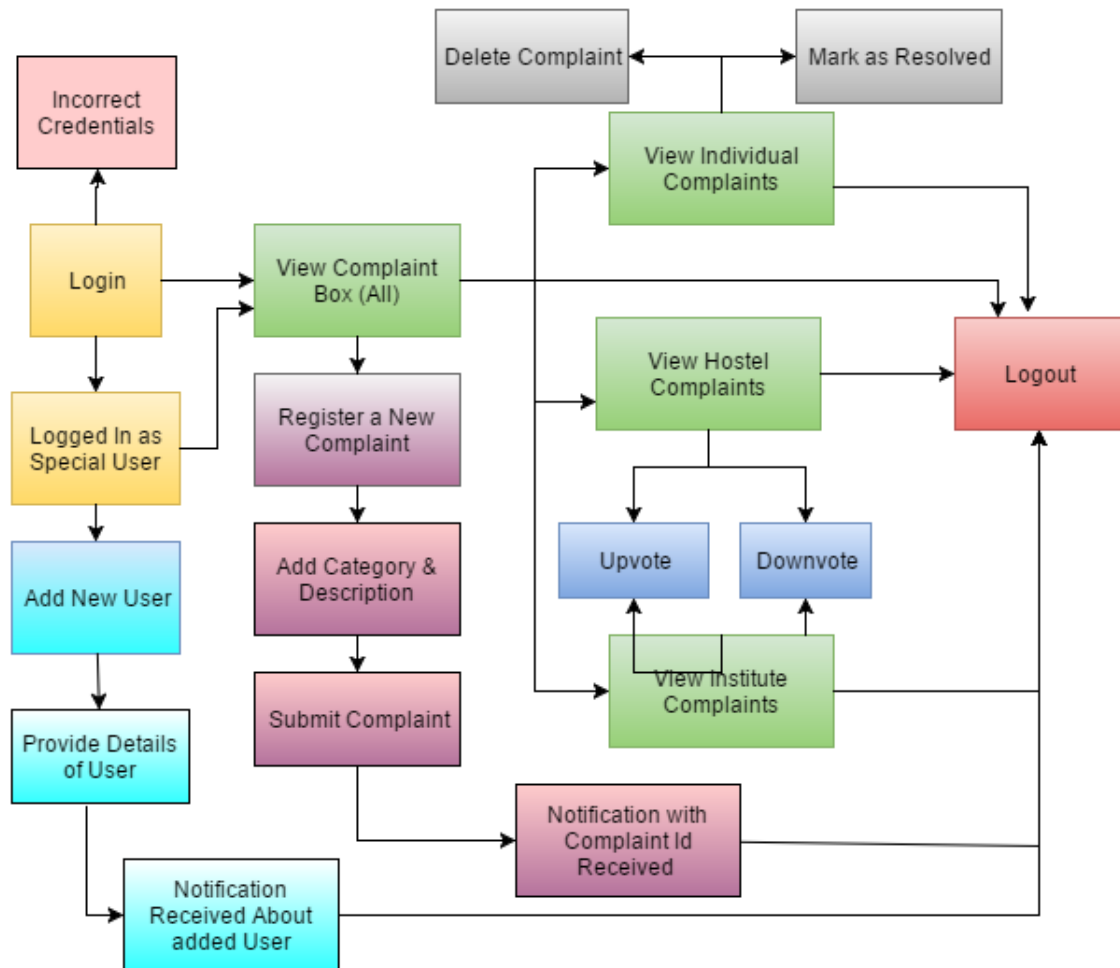


Figure 12: Workflow of Application

### 3 Entity Relationship Diagram

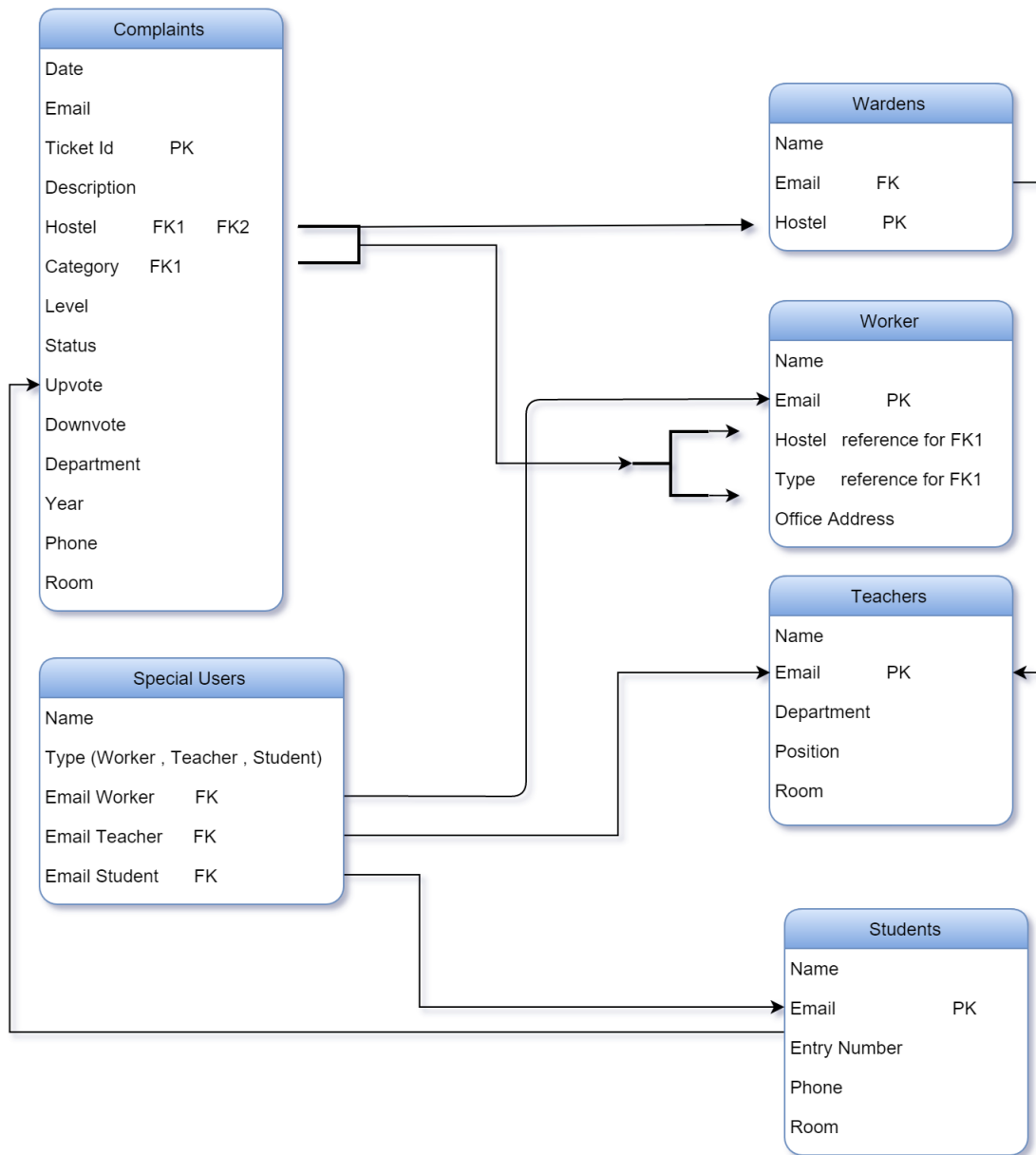


Figure 13: Entity Relationship Diagram



## 4 Event Flow

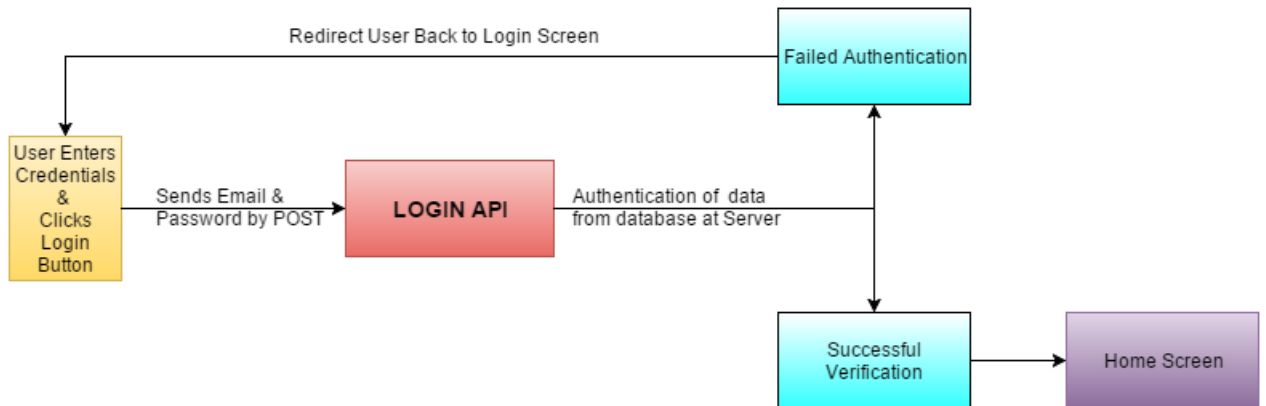


Figure 14: Login API

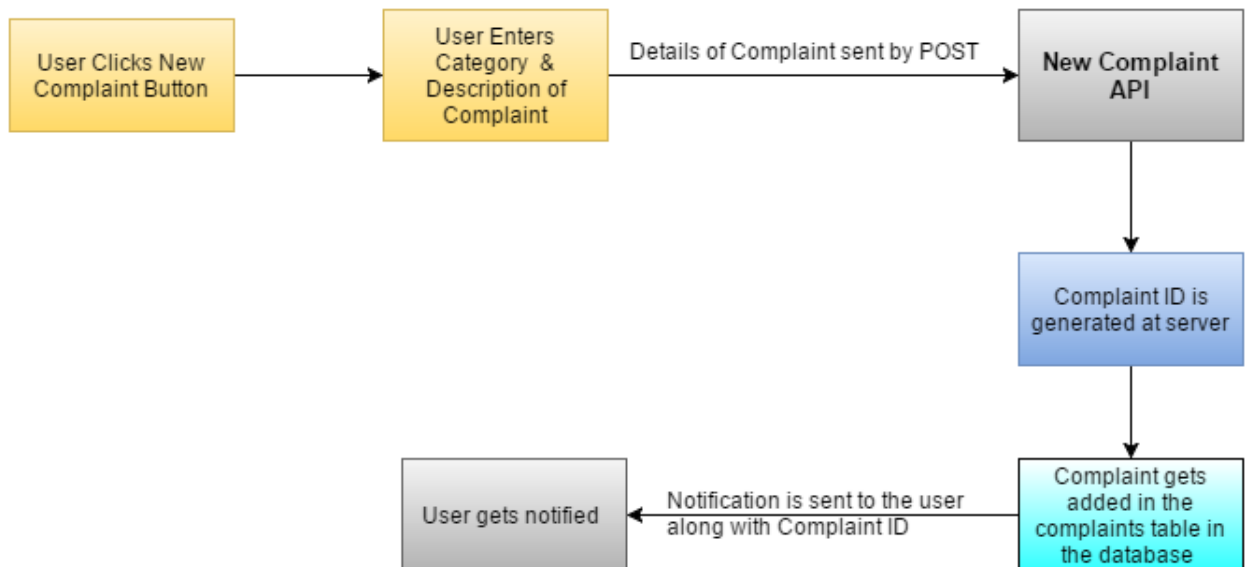


Figure 15: Report Complaint API



Figure 16: API to Upvote a public Question

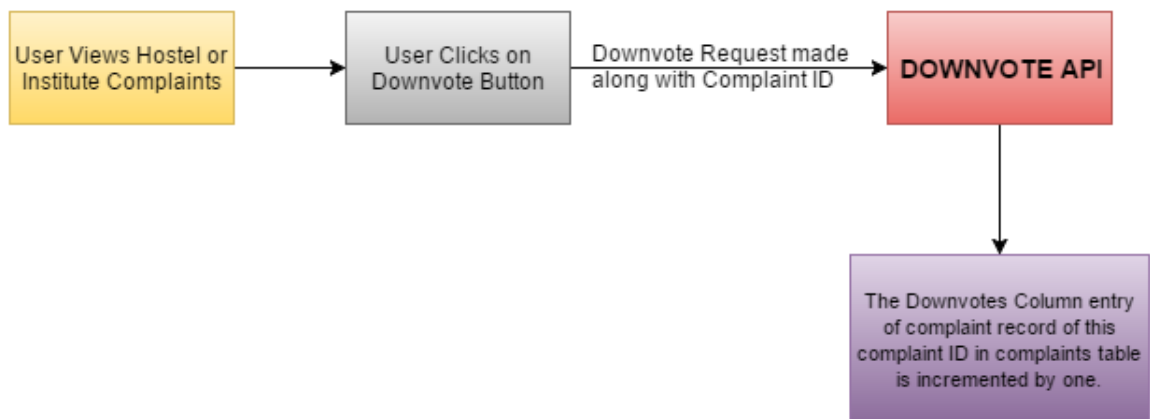


Figure 17: API to Downvote a public Question

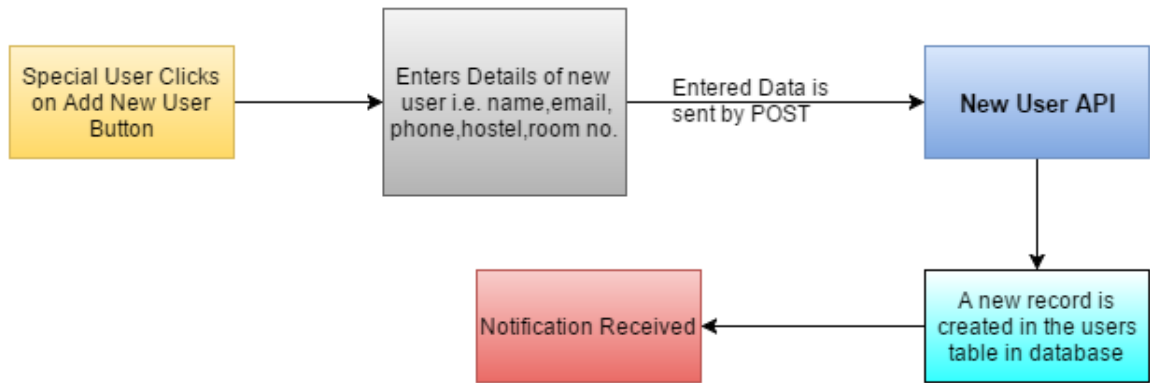


Figure 18: API to add a new User

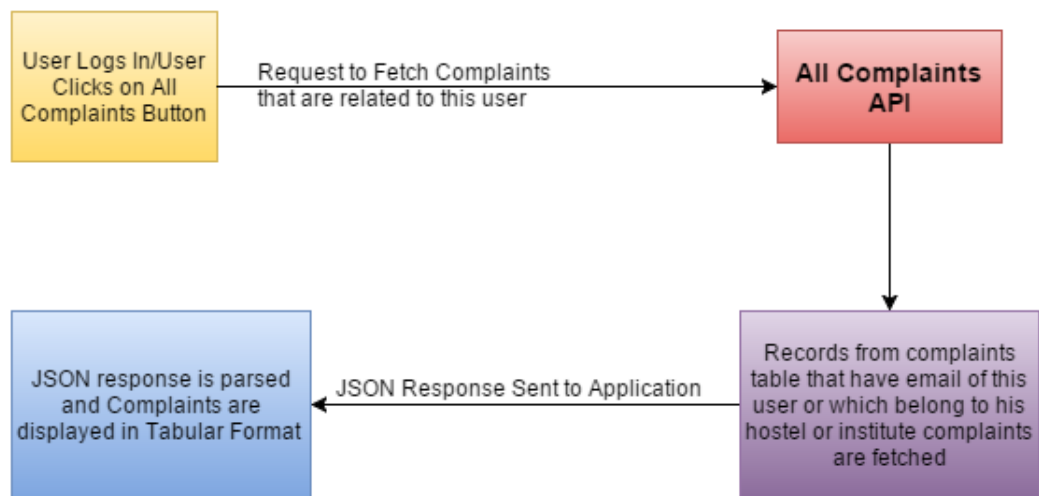


Figure 19: API to fetch all complaints

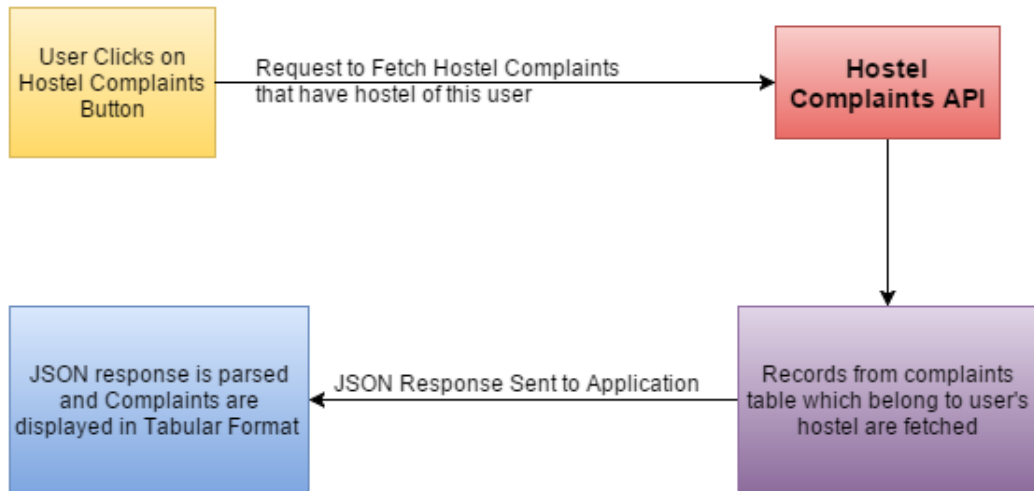


Figure 20: API to fetch hostel complaints

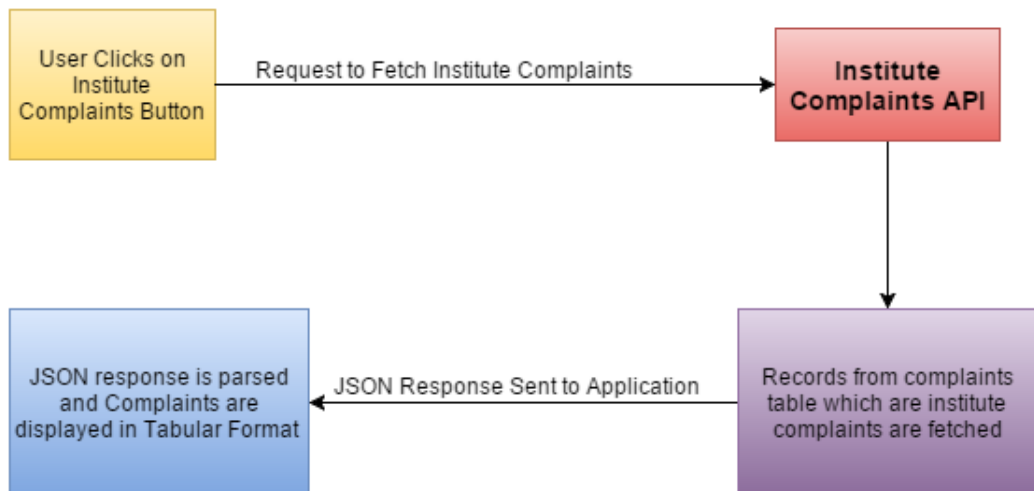


Figure 21: API to fetch Institute complaints

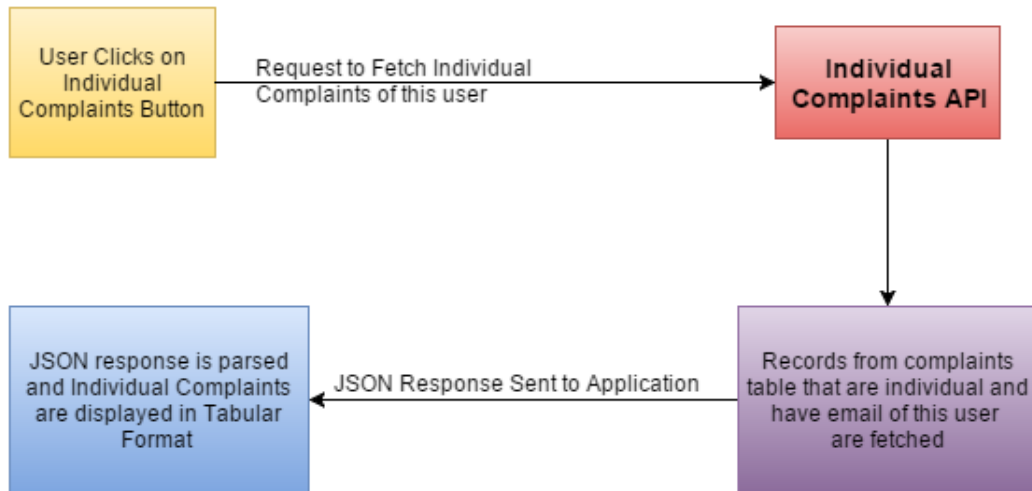


Figure 22: API to fetch private complaints

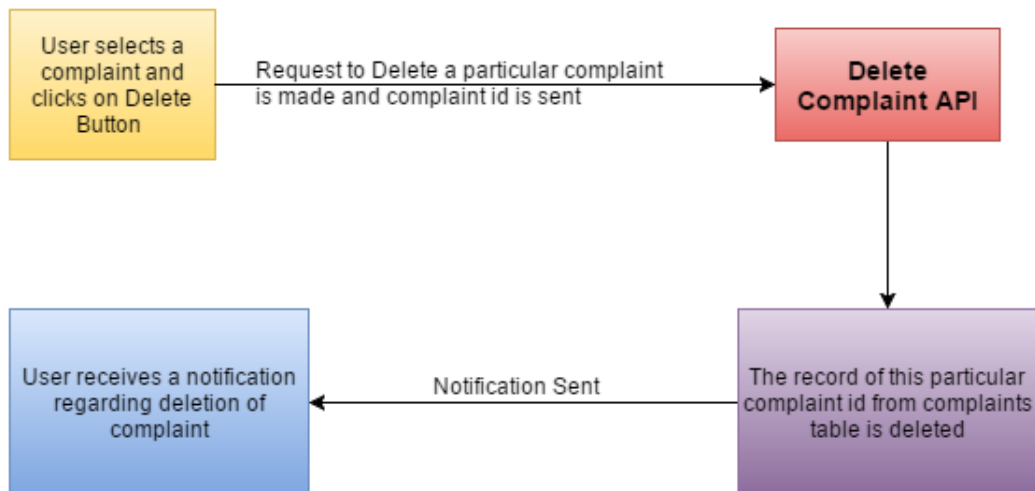


Figure 23: API to Delete a complaint

## 5 Features

- PHP is being used for backend server.
- User information has been organised in different database tables.
- Unique Complaint ticket ID is generated and assigned at server side when user submits a complaint.
- Comment section is added where Problem submitter and technician can discuss about several issues related to the problem.
- Problems by default has been sorted according to submission date within their categories.
- Problem submitter can upload picture of the complaint for better insight for technician.
- When a new Complaint is filed, related technician or authority gets notification on his/her mobile.
- API has been developed in such a way that these can be used for Developing web application as well as Windows/ Iphone app.

## 6 References

- <http://stackoverflow.com>
- <http://youtube.com>
- <http://code.tutsplus.com>