

Pir Mehr Ali Shah **Arid Agriculture University Rawalpindi**

University Institute of Information Technology



FYP I – Comprehensive Survey Report

Project Title:		Constituer	ncy Connect
Sı	pervisor:	Ms. Farkhanda Qamar	Project No:
	Sr. No.	Registration No.	Student Name
	1	21-arid-737	Muhammad Ahsan
	2	21-arid-719	Huzaifa Bin Shahzad
	3	21-arid-715	Haseeb Ur Rehman

Project Complexity:

1. Multiple Roles:

The platform offers different roles like

- Constituents
- Representatives
- Assistant

2. Role-based authorization:

Role-based authorization using JWT tokens for multiple user roles each with distinctive features and permissions.

3. Complex Data Handling:

Many interconnected data pieces, such as users, complaints, surveys, and events, must be managed accurately.

4. Authentication and Security:

Standard security measures, including secure logins and data protection via encryption and hashing, to protect user information.

5. Real-Time Features:

Real-time updates when complaint status changes and event notifications.

6. Performance Tracking:

Representatives' performance will be tracked and displayed using visually appealing charts and graphs, requiring advanced data processing and visualization.

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7. User Experience and Interface Design:

- An intuitive and accessible user interface that caters to diverse user groups.
- Ensures responsive design and seamless user interactions across devices.

8. Customizable Reports:

Customizable reports on various metrics, such as complaint resolutions and constituent engagement, involve complex data aggregation and presentation.

9. Multi-language Support:

The system intends to cater to a diverse user base by providing multi-language support.

Technological Aspects:

Frontend:

- 1. HTML5 (Structure)
- 2. CSS3 (Styling)
- 3. Tailwind CSS (Styling)
- 4. Bootstrap (Styling)
- 5. JavaScript (Logic)
- 6. React JS (Single Page Application)
- 7. Redux Toolkit (State Management)
- 8. Material UI (Components)
- 9. React Hook Form (Forms Management)
- 10. React Router (Routes Management)

Backend:

- 1. Node JS (JS runtime)
- 2. Express JS

Database:

- 1. MongoDB (Database)
- 2. Mongoose (Schema)

Authentication and Authorization:

1. Clerk (User Management)

Potential Impact on Society:

Constituency Connect aims to create a society where people are more connected to their representatives, government actions are more transparent, and the citizens are empowered to make their voices heard. This project has the potential to lead to better governance and a higher quality of life for everyone involved.

• **Improved Communication:** The Project will establish a direct communication route between constituents and their representatives. This will make it easier for people to express their issues and get them addressed. This improved communication will help foster trust and make people feel heard by those in power.

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- **Increased Accountability:** Representatives will be more accountable to their constituents, as the system allows constituents to track the performance of their representatives.
- Enhanced Civic Engagement: The platform motivates citizens to take part in surveys, join virtual meetings, and give feedback on resolved complaints.
- **Efficient Problem Resolution:** The system's ability to route complaints to the right department and prioritize urgent issues ensures quicker and more effective problem-solving.
- **Data-Driven Decision-Making:** Representatives can use the feedback and data collected through the system to make informed decisions that better serve their communities.
- **Empowered Citizens:** Constituents can stay informed about their representatives' activities and hold them accountable, leading to a more empowered and engaged citizenry.
- Transparency in Governance: By providing clear statistics and updates, the system fosters transparency in governance, helping to build trust between representatives and their constituents. Citizens can see how their representatives are performing and stay informed about the actions being taken in their community.

Benchmarking:

Problem:

In many democratic societies, a significant communication barrier exists between elected officials and their constituents. Direct interaction with representatives is often limited to individuals with special connections or high social status, while the average citizen's interaction is typically limited to brief encounters during election seasons or at local events. These irregular interactions rarely address the ongoing needs and concerns of the community.

This lack of meaningful engagement has led to a sense of disconnection among citizens, who feel their voices are unheard in the democratic process. As a result, community issues frequently go unaddressed, and public trust in government institutions continues to diminish.

Existing Platforms:

Although no such system exists in our local landscape that matches the scope of our project, some existing systems are similar to our initiative.

FixMyStreet:

FixMyStreet is a platform designed to help citizens report local issues, such as potholes, broken streetlights, and other community problems, directly to their local government. This user-friendly tool allows residents to track the progress of their reports, ensuring that public concerns are addressed efficiently and effectively.

SeeClickFix:

SeeClickFix is a community-driven platform that enables residents to report non-emergency issues in their neighborhood, such as damaged infrastructure, public safety concerns, and other local problems. This interactive approach encourages active community engagement and helps to build a stronger, more connected neighborhood.

Neighbourland:

Neighbourland is a civic engagement platform that empowers residents to collaborate with their local government and community organizations on neighborhood improvement projects. It focuses on gathering ideas, feedback, and support from the community to shape public spaces and policies. By facilitating open dialogue and collective action, it helps to create more vibrant, inclusive, and responsive communities.

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Comparison Table:

Features	Constituency Connect	FixMyStreet	SeeClickFix	Neighbourland
Origin	Pakistan	United Kingdom	United States	United States
Profile Management	Yes, detailed profiles with editable information	Limited to basic profile management	Yes, basic profile management	Yes, basic profile management
Complaint Reporting	Yes, including anonymous reporting and detailed tracking	Yes, report local problems to the council	Yes, allows reporting issues to local authorities	No, focuses on community engagement
Complaint Tracking	Yes, with full history and status updates	Limited tracking, focus on reporting	Yes, with status updates	No, Does not focus on tracking
Complaint Prioritization	Yes	No	No	No
Automated Complaint Routing	Yes	Yes	Yes	No
Virtual Meetups	Yes	No	No	Yes
Surveys and Polls	Yes, Representatives can create and analyze survey	No	No	Yes
Event Calendar	Yes, Representatives can post upcoming events and public meetings	No	No	No
Security	Standard	Standard	Standard	Standard
Feedback	Yes, Feedback about problem resolution	Yes	Yes	Yes
Performance Metrics	Yes, tracks and displays the performance metrics of representatives	No	No	No

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Project Features List:
Complaint Reporting, Complaint Forwarding to the respective department, Complaint Prioritization,
Surveys and Polls, Real-time Analytics, Complaint Tracking Dashboard, Submission and
Resolution, Statistics, Detailed Complaint View, Virtual Meetups, Video Conferencing, Anonymous
Reporting, Confidential Submissions, Service Feedback, Event Calendar

FYP Project Report Evaluation: (For Official use only)

Criteria	Good	Normal	Inferior
Project Complexity			
Technological Aspect			
Potential Impact on			
Society			
Benchmarking			
Project Features			

uggestions/Remarks:				
Name of Examiner	Date	Signature		

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Definition of Terms:

- i. **Project Complexity:** Project complexity is referred to as the degree of significant contribution that a group of students will make in the design and development of the project, spanning over two academic semesters. Secondly, determine if the domain of the project marks the standard of complexity required from a bachelor's student degree, as this project will determine the skills they learned throughout the degree.
- ii. **Technological Aspects:** Technological aspects of the project mean tools/technologies and language(s) used to develop it.
- iii. **Potential Impact on Society:** Determine how much impact the product could have in its stated strategy for a society or community/focused group.
- iv. **Benchmarking:** The proposed project should be compared with existing similar types of work. A *comparison table* is more helpful for a comparative view, listing features of existing works and proposed projects.
- v. **Project Features:** Verify that the features mentioned are complete and significant enough for an FYP project.

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