TED UNIVERSITY

CMPE 313/SENG 214

Software Engineering

Citizen Portal and

Service Request System

Project Proposal

SECTION 03 - TEAM 02

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1 Introduction

The purpose of this document is to present the plan for creating a Citizen Portal that will encourage citizen participation in our municipality's governance. The portal will enable citizens to participate proactively in decision-making processes by giving them the means to vote on proposals, suggest new discussion topics, offer feedback, and update their personal information. The app must be able to verify users' identities and confirm that they are city residents while ensuring they are anonymous to one another. This creates a safe environment for the process by allowing citizens to freely contribute and share their ideas while remaining anonymous.

2 Project Description

1. Overview

The Citizen Portal will serve as a digital platform for citizens to participate in the governance of our municipality. It will enable citizens to:

- Vote on proposals discussed in the city council.
- Propose new topics for discussion.
- Provide feedback on proposals submitted by other citizens.
- Maintain their profiles for accurate representation.

2. Objectives

Objective	Brief Description of the Objective
Develop a user-friendly Citizen Port & Service Request System	Develop a user-friendly Citizen Portal and Service Request System to streamline communication and facilitate efficient interaction between residents and municipal services.
Provide Transparency	Increase transparency in governance by allowing citizens to propose and vote on topics of interest.
Enhance Application Performance	Reduce the application loading time by 30% compared to the original benchmark, so 95% of users can view pages in an average of 2 seconds.

High-level definition of some functional requirements and important non-functional requirements to achieve. (these will be further be developed and documented in our Software Requirements Specification (SRS) Document)

Functional Requirements:

- **User Authentication:** Enable secure registration and login for residents, verifying their identities.
- **Proposal Voting:** Allow users to view and vote on city council proposals.
- **Topic Submission:** Enable users to submit new discussion topics.
- **Feedback Submission:** Allow users to provide feedback on proposals from other citizens.

- **Profile Management:** Provide users with the ability to update their profiles.

Non-Functional Requirements:

- **Anonymity:** Maintain user anonymity within the portal.
- **Performance**: Reduce loading time by 30%, aiming for 95% of users to view pages in 2 seconds.
- **Usability:** Ensure the portal is intuitive and user-friendly.
- **Accessibility:** Comply with accessibility standards for users with disabilities.

3. Target Customers

The following user categories will be served by the Citizen Portal:

1. **Citizens:** Residents of our municipality who wish to participate in local governance.
2. **City Council:** Elected representatives responsible for making decisions on behalf of the community.
3. **Administrators:** Municipal staff responsible for managing the portal and facilitating citizen engagement.

4. Value Proposition

The Citizen Portal is essential for the following reasons:

1. **Enhanced Civic Engagement:** By giving people a forum to express their thoughts and participate in decision-making, we enable them to actively participate in determining the direction that our municipality will take.
2. **Improved Transparency:** Through increasing accessibility and inclusivity of governance processes, the portal promotes transparency and builds community confidence and transparency.
3. **Strengthened Community Cohesion:** By facilitating open dialogue and collaboration among citizens, the portal strengthens community bonds and fosters a sense of shared responsibility for our municipality's development.

3 Preliminary Plan

5. Planned Deliverables

The development of the Citizen Portal will involve the following deliverables:

1. **Requirements Development and Analysis:** Detailed documentation of functional and non-functional requirements for the portal.
2. **Design and Prototyping:** User interface designs and prototypes showcasing the visual layout and functionality of the portal.
3. **Implementation and Testing:** Fully implemented portal with documented source code and comprehensive testing reports.

6. Working Plan

The project will follow a combination of plan-driven and agile methodologies:

- Plan-driven approach: Initially, the project will follow a sequential development process, starting with requirements analysis, followed by design, implementation, testing, and deployment.
- Agile methodologies: Agile practices such as iterative development, continuous integration, and regular feedback cycles will be incorporated to adapt to changing requirements and deliver incremental improvements.

1. **Requirements Development and Analysis:** Stakeholder requirements are gathered, analyzed, and documented in detail, along with software requirements.
2. **Design and Prototyping:** Designing navigation flows and user interface layouts, subsequently creating prototypes and iterating designs in response to feedback.
3. **Development and Testing:** To ensure functionality and reliability, the portal will be implemented in line with the finalized designs and requirements. Unit, integration, and system testing will also be carried out.

Training:

- The development team will engage in self-learning to become proficient in learning a prototype tool such as Adobe XD or Sketch for designing user interfaces and prototypes.
- Furthermore, team members will receive training on other essential tools utilized in the project, including Asana for task management, Git for version control, and Google Drive for document storage and sharing.

Collaboration:

During the development of the Citizen Portal & Service Request System, we will:

- Utilize Asana for task management and progress tracking.
- Employ Slack for real-time communication.
- Use email for formal communication.
- Manage code with Git.
- Store and share documents using Google Drive.
- Conduct virtual meetings via Zoom.
- Gather feedback from customers through regular sessions.
- Embrace an iterative approach for continuous improvement.
- Implement a structured change control process.
- Conduct regular risk assessments to mitigate potential threats.

Milestones:

1. **Project Kickoff:** Organize a kickoff meeting to bring developers together and establish project goals.
2. **Requirements Gathering:** Gather and analyze requirements from customers to define system specifications from the first document that customers gave.
3. **Prototype Development:** Develop a prototype of the system for customer review and feedback.
4. **Testing and Quality Assurance:** Conduct comprehensive testing to ensure system functionality and quality.
5. **Deployment and User Training:** Deploy the system and provide user training for officers and administrators.
6. **User Acceptance Testing (UAT):** Invite end-users to participate in UAT sessions to validate the system.
7. **Final Deployment:** Deploy the finalized version of the system after addressing UAT feedback.
8. **Project Closure:** Conduct a project closure meeting to review deliverables and lessons learned.

7. Roles and responsibilities

Team Member Name	Role in Project Development
Emir Can Tokalakoğlu	Project Manager
Onat Keser	Business Analyst
Ahmet Tokgöz	UI/UX Designer
Mustafa Pınarcı	Backend Developer
Bartu Özen	Frontend Developer
Ege İzmir	Tester