



Team D

Service (Ticketing) Management System

Team Members

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Introduction and Project Motivation

Many project topics were considered, but this system-to-be best fit our self-perceived strengths

We cleanly divided our Team into two subteams, one focused on project front-end and one on project back-end

Everyone has had a hand in each portion of this project, so as to maximize educational value

This system-to-be was chosen as it provided the best educational opportunity

Team D felt as though they could improve upon existing ticketing systems by designing a system that streamlined workflow and was web-hosted



Customer Problem Statement and Requirements

I.T. departments the world over utilize service management, or “ticketing” systems to document and keep track of issues, bugs, and tasks for their business

Service management systems today are overly complex and intimidating to non-tech-savvy workers and customers. As a result, they are underutilize - hurting the business bottom line

The system *must* satisfy these requirements:

- Enhance Communication
- Centralize Management
- Enable Data-Driven Management

The system must satisfy these requirements in a manner that is sleek, intuitive, fast, consistent, and as friction-free as possible so as to retain usage within the business

“The best service management system is the one that gets used”



Summarized System Specifications

- Functional Specifications -

The system processes the creation and storage of user accounts and tickets, along with associated metadata. System validates user credentials. System notifies users or customers of ticket updates. System processes updates to ticket information. System provides reports.

- Non-functional Specifications -

The system has a clean and intuitive design to reduce user friction. System works as expected on all major up-to-date browsers. System protects user information through password hashing and salting. System operates and responds quickly.

- User Interface Specifications -

UI provides ease-of-action at all steps. UI provides a dashboard interface for ticket information. UI will offer filter controls for selecting relevant ticket data for viewing.



Implementation

The team elected to develop the system-to-be using the MERN stack (MongoDB, Express.js, React, Node.js)

This collection of technologies was chosen for its modernity, scalability, and the team members' familiarity with the stack

Consideration was also given to the MERN stack's single-language nature and Node.js's asynchronous nature

Choosing the MERN stack enabled rapid application development and efficient design



Thank you!