Technician Service System

for a Service Management Platform

Submitted by

Esadul Islam Sagor(46)
Sabbir Mobin Setu(53)
MD Shofiul Azam(54)
Azmain Khan Jesun(57)

Supervised y

Awaleen Nawar Suha
Lecturer
Dept. of CSE, BAUET
Tanvir Anjom Siddique
Lecturer
Dept. of CSE, BAUET

Introduction

- Centralized platform for connecting users with skilled technicians
- Supports multiple categories (electrician, plumber, mechanic, etc.)
- Automates booking, payment, and review processes
- Provides dashboards for technicians and customers
- Enhances accessibility, reliability, and efficiency in service management

Objectives

- To enable users to find and book qualified technicians easily
- To allow technicians to manage profiles, bookings, and reviews
- To provide real-time notifications and service tracking
- To ensure secure payment and data handling
- To support role-based access and responsive web design

Methodology

- Analyze existing manual technician service workflow
- Design ER-based cloud database structure
- Implement using HTML, CSS, JavaScript, Node.js/Django, MongoDB
- Integrate real-time features using Firebase or API services
- Test system performance and optimize based on user feedback

Advantages

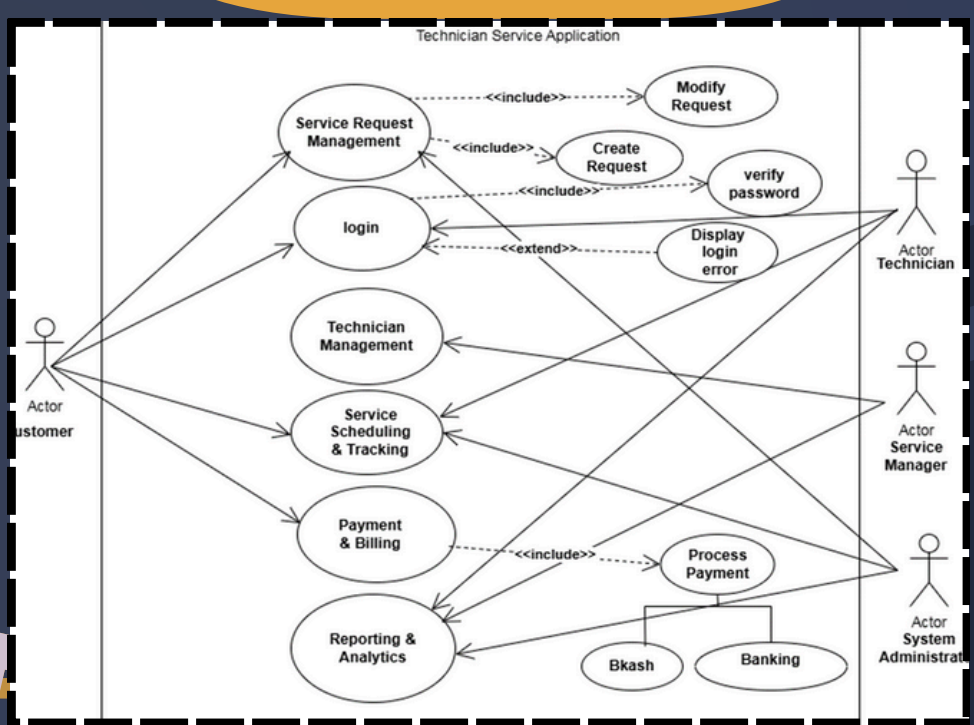
- Automated technician assignment and service tracking
- Real-time communication and status updates
- Secure online payment and cloud-based data storage
- Reduces time, errors, and paperwork
- Increases customer satisfaction and technician efficiency

Analysis

- The system improves accessibility, coordination, and transparency between users and technicians.
- It reduces manual errors, increases productivity, and enhances service satisfaction.

The project is cost-effective, scalable, and recovers investment through efficient automation within two years.

Use Use Case Diagram



Feasibility

- Technically feasible:
- Economically feasible:
- Operationally feasible
- Scalable:

Limitations

- Requires stable internet connection
- Initial setup and server costs are moderate
- Advanced features depend on continuous cloud connectivity