



Technician Service System

for a Service Management Platform



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

Submitted by

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

Supervised by

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

Objectives

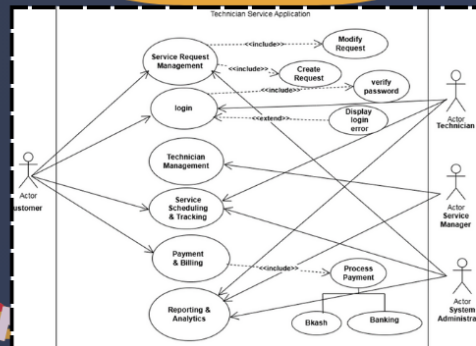
- To enable users to find and book qualified technicians easily
- To allow technicians to manage profiles, bookings, and reviews
- To provide real-time notifications and service tracking
- To ensure secure payment and data handling
- To support role-based access and responsive web design

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



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

Feasibility

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

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

Limitations

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