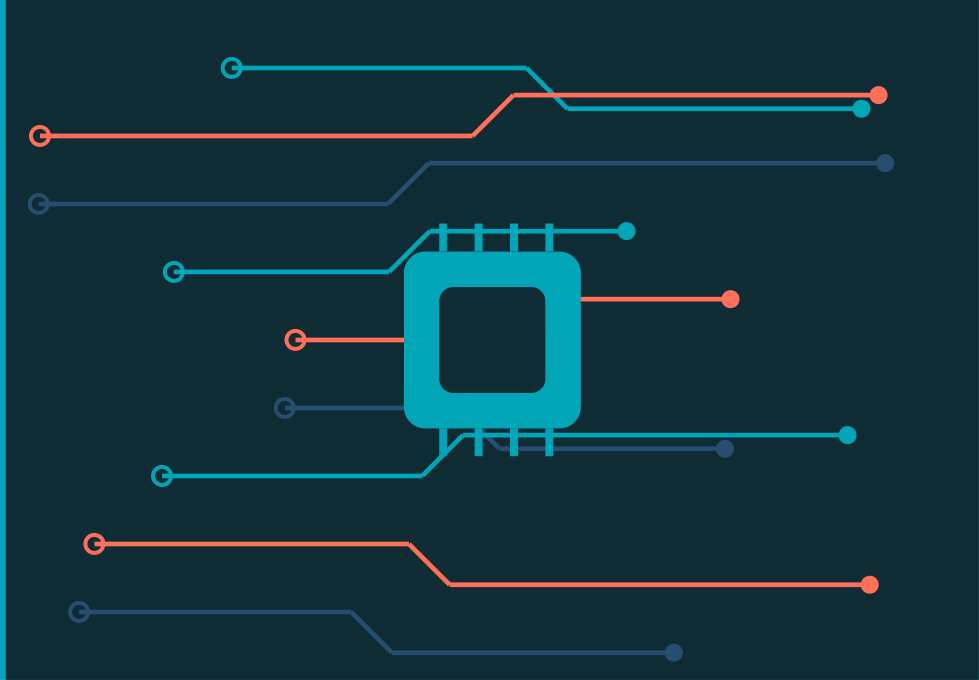


FINAL YEAR PROJECT · B.TECH ELECTRONICS & COMMUNICATION

Smart Parking Management System



Find a free parking slot in seconds

Aarav Sharma · Diya Patel · Prof. R. K. Mehta · Electronics & Communication, 2025–26

Agenda

- 01** Introduction

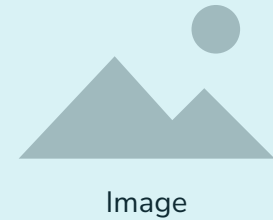
- 02** Literature & Gap

- 03** Proposed System

- 04** Implementation

- 05** Results

- 06** Conclusion



Image

01

INTRODUCTION

KEY IDEA

Parking slot management is still handled manually in most places — slow, error-prone and hard to track.

Why this project matters

Introduction

- Parking slot management matters to drivers and mall operators every day
- Current methods are manual, slow and hard to scale
- Affordable technology now makes automation practical
- This project builds smart parking management system as a working prototype

CONTEXT

Most drivers and mall operators we surveyed still rely on paper or spreadsheets for parking slot management.

Problem statement

1

Manual work

Parking slot management takes hours of repetitive effort.

2

Errors

Mistakes creep in and are hard to trace.

3

No insight

Drivers and mall operators lack data to make decisions.

Objectives

- Automate the core steps of parking slot management
- Give drivers and mall operators a simple, mobile-friendly interface
- Store data securely and generate reports
- Evaluate the system against the existing process



02

LITERATURE & GAP

Literature survey

Study	Approach	Limitation
Study A	Rule-based automation	Not adaptive
Study B	Mobile data collection	No analytics
Commercial tools	Full-featured suites	Costly and complex

Representative summaries — replace with your own citations.

Existing vs proposed system

Existing system

- ✓ Manual records
- ✓ Slow turnaround
- ✓ No reports

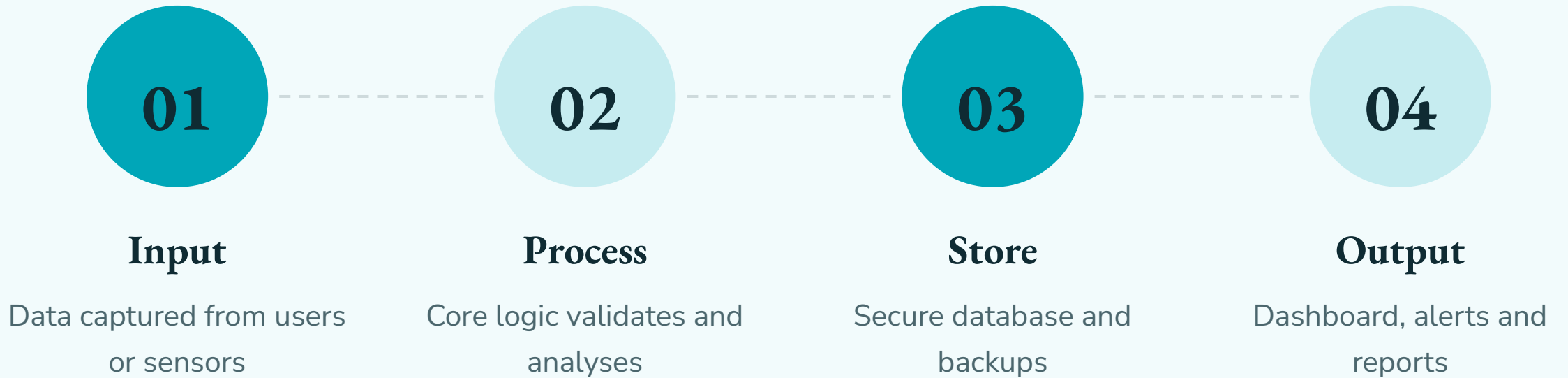
Proposed system

- Automated workflow
- Real-time dashboard
- One-click reports

03

PROPOSED SYSTEM

System architecture



Block diagram

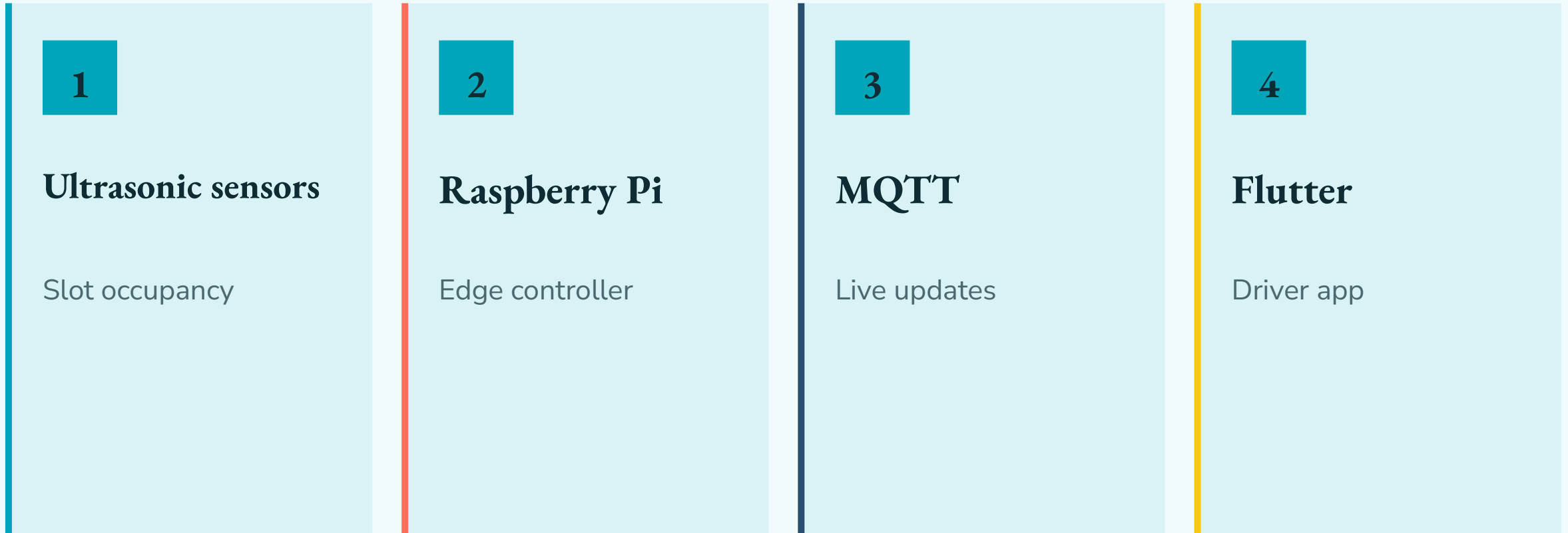
Every module talks through one simple, testable interface.

The system is built in layers: an input layer, a processing service, a database and a dashboard. Each layer can be tested independently, which keeps smart parking management system simple to maintain and extend.



Block diagram / flowchart

Technology stack



Project timeline

Jul

Requirement study

Survey of users and existing tools

Sep–Oct

Development

Modules built and unit tested

Dec

Report

Documentation and final review

Aug

Design

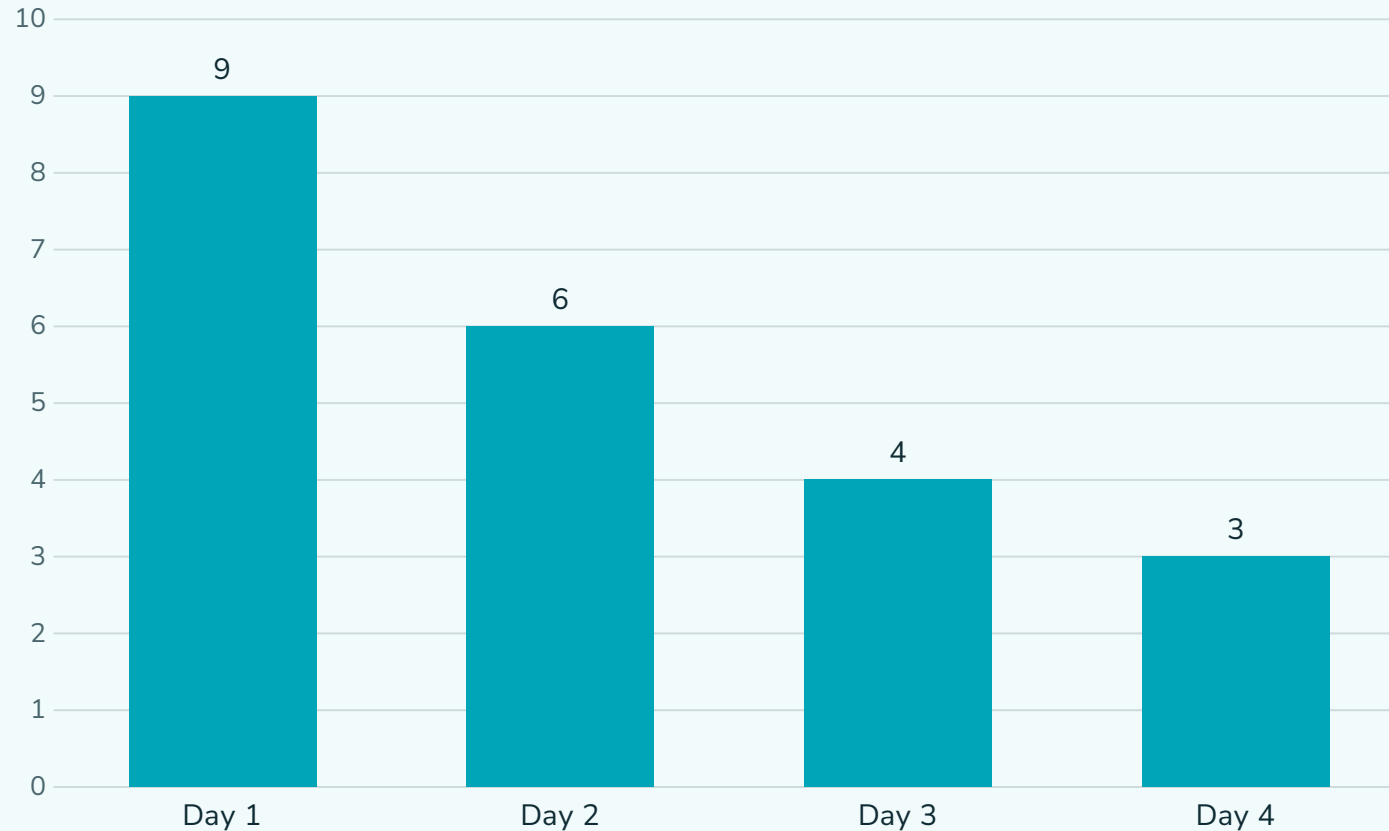
Architecture, database and UI wireframes

Nov

Testing

Integration and field testing

Results



Sample data for illustration — replace with your own figures.

3×

faster slot finding

The prototype improved steadily over the evaluation period (sample data).

Key outcomes

3×

faster slot finding

100%

records digitised

< 1 s

average response

Figures from our test setup (sample data).

04

CONCLUSION

Conclusion

- Smart Parking Management System meets its main objectives
- Automation saves time and reduces errors for drivers and mall operators
- The design is simple to extend and maintain



Image

Future scope

1

Mobile app

Native apps for Android and iOS

2

AI insights

Predictions from historical data

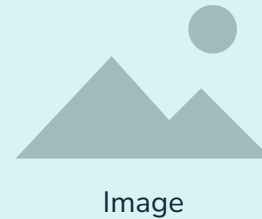
3

Scale-up

Deploy across more sites

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- [2] B. Author and C. Author, Book Title, 2nd ed. Publisher, 2022.
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Thank you

Questions and suggestions are welcome.

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