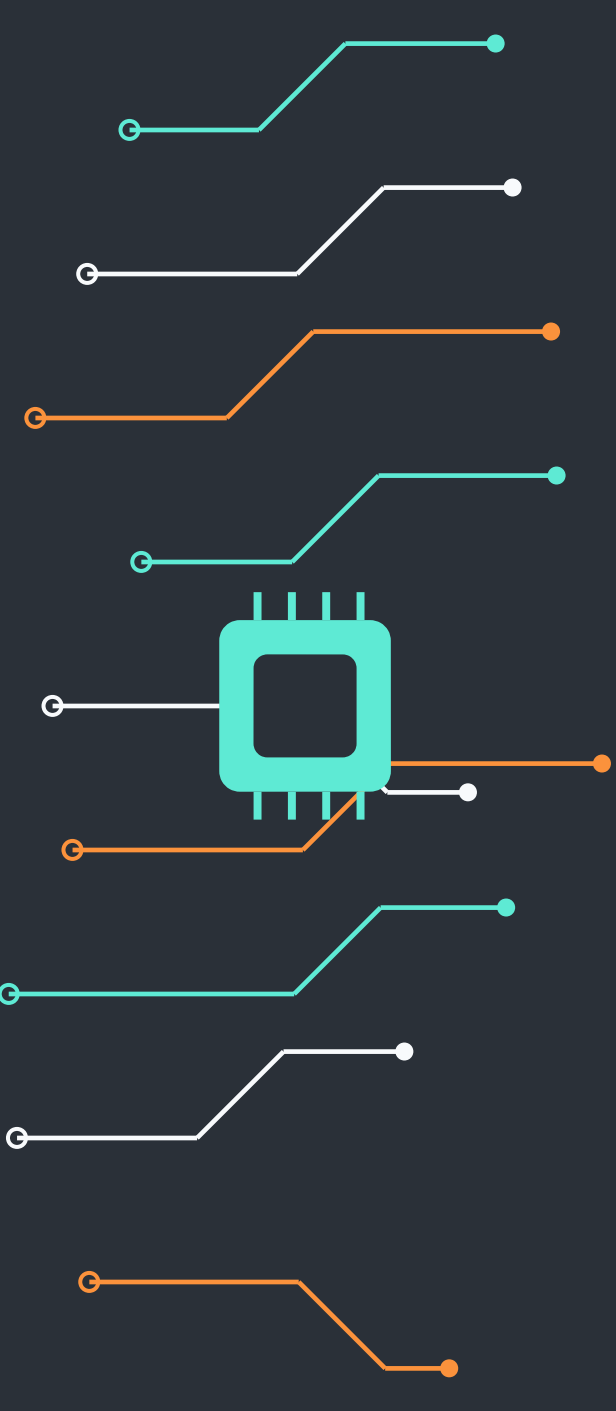




FINAL YEAR PROJECT • B.TECH ELECTRONICS ENGINEERING

Voice-Controlled Home Automation

Switch lights and fans with your voice

PRESENTED BY

Aarav Sharma • Diya Patel

GUIDED BY

Prof. R. K. Mehta

DEPARTMENT

Electronics Engineering, 2025–26

Agenda

01

Introduction

02

Literature & Gap

03

Proposed System

04

Implementation

05

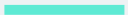
Results

06

Conclusion

01

INTRODUCTION



**Controlling home appliances is
still handled manually in most
places — slow, error-prone and
hard to track.**

Why this project matters

Introduction

- Controlling home appliances matters to families and elderly users every day
- Current methods are manual, slow and hard to scale
- Affordable technology now makes automation practical
- This project builds voice-controlled home automation as a working prototype

CONTEXT

Most families and elderly users we surveyed still rely on paper or spreadsheets for controlling home appliances.

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

System architecture

01 Input

Data captured from users or sensors

02 Process

Core logic validates and analyses

03 Store

Secure database and backups

04 Output

Dashboard, alerts and reports

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

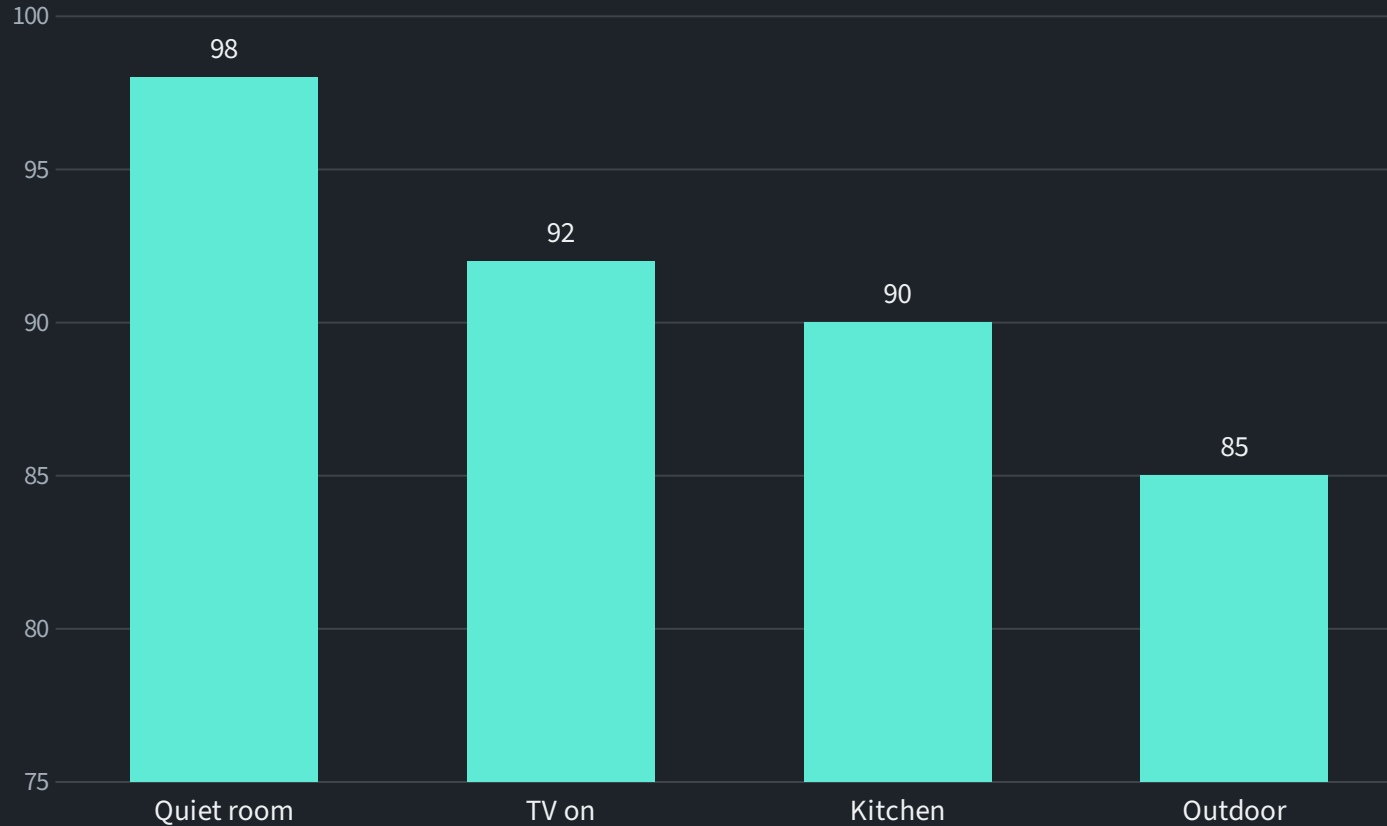
Testing

Integration and field
testing

03

RESULTS

Results



Sample data for illustration — replace with your own figures.

95%

commands recognised

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

Key outcomes

95%

commands recognised

100%

records digitised

< 1 s

average response

Figures from our test setup (sample data).

04

CONCLUSION

Conclusion

- Voice-Controlled Home Automation meets its main objectives
- Automation saves time and reduces errors for families and elderly users
- The design is simple to extend and maintain

Future scope

01

Mobile app

Native apps for Android and iOS

02

AI insights

Predictions from historical data

03

Scale-up

Deploy across more sites

Thank you

Questions and suggestions are welcome.

Aarav Sharma · Diya Patel
Dept. of Electronics Engineering

