

Slide 1. Introduction (1 minute)

- Briefly introduce yourself and your project.
 - State the motivation behind the project:
 - "The goal is to innovate traditional elevator systems by enabling remote interaction and enhancing safety, convenience, and reliability."
-

Slide 2. Problem Statement (1 minute)

- Highlight the limitations of traditional elevator systems:
 - Reliance on embedded buttons, which may cause hygiene concerns.
 - Limited accessibility and interaction for disabled people.
 - Safety concerns regarding objects obstructing the door.
-

Slide 3. Objectives (30 seconds)

- Explain what your project aims to achieve:
 - Remote interaction with the elevator system.
 - Improved hygiene by avoiding physical interaction with the elevator (Buttons)
 - Enhanced safety features to prevent accidents.
 - Smooth, automated operation for user convenience.
-

Slide 4. System Architecture

- Present a block diagram of the system (if available) and briefly describe the components:
 - **Hardware:**
 - Stepper motor: Lifting mechanism.
 - Servo motor: Door operation.
 - Photoresistor sensor: Door safety.
 - LED lights: Floor indication.
 - **Software:**
 - Arduino for system control.
 - MQTT for real-time communication.
 - Node-Red for the dashboard interface.
 - Highlight the communication flow between components using the MQTT protocol.
-

Slide 5. Components (Images)

- Present a block diagram of the system (if available) and briefly describe the components:
 - **Hardware:**
 - Stepper motor: Lifting mechanism.
 - Servo motor: Door operation.
 - Photoresistor sensor: Door safety.
 - LED lights: Floor indication.
 - **Software:**
 - Arduino for system control.
 - MQTT for real-time communication.
 - Node-Red for the dashboard interface.
 - Highlight the communication flow between components using the MQTT protocol.
-

6. Key Features and Innovations

- Explain the unique aspects of your project:
 - **Remote Control:** Users can interact with the elevator via a dashboard rather than physical buttons.
 - **Safety Mechanism:** Photoresistor sensor ensures the door doesn't close when an object is detected.
 - **Intuitive Visualization:** Node-Red dashboard provides a user-friendly interface for monitoring and control.
 - **Energy Efficiency:** Optimized use of motors and LEDs.
-

7. Advantages and Applications (1 minute)

- Highlight benefits:
 - Hygienic: No physical buttons.
 - Accessible: Remote control enables easy operation for differently-abled individuals.
 - Scalable: Can be applied to various smart building systems.
 - Possible use cases:
 - Smart homes, malls, hospitals, office buildings.
-

8. Challenges and Future Scope

Discuss challenges faced during development:

- E.g., fine-tuning the motor for smooth operation, integrating real-time communication.
 - Outline future improvements:
 - Adding AI for predictive maintenance.
 - Integrating a mobile app for easier remote control.
 - Expanding to include voice control or gesture-based commands.
-

9. Conclusion

- Recap the project's significance:
 - "This Smart Elevator System is a step toward smarter, safer, and more accessible buildings, aligning with the goals of IoT and automation in modern infrastructure."
 - Invite questions or feedback.
-

Tips for Delivery:

1. Use visuals like diagrams, photos, or short videos to demonstrate key features and components.
2. Practice timing to ensure the presentation flows well within 10 minutes.
3. Speak confidently about the innovation and real-world potential of your project.