

Use Case Diagram

It showcases different **actors** (users) interacting with the system and their respective **use cases** (functionalities).

1. Actors in the System

- **Frontline Workers** assist others in completing forms efficiently. They frequently handle multiple users' data, validate and review form inputs, and use multilingual support to aid users from diverse backgrounds. Additionally, they receive form submission notifications to track progress and ensure accuracy. (hospital staff, bank employees, government officials, students, etc.)
- **End Users** use the system for personal or official form-filling. Their interaction with the system is focused on self-service, where they can input data using voice commands, receive real-time feedback, save and resume entries, and navigate forms with voice assistance. Unlike Frontline Workers, End Users generally do not have permissions to access or review multiple user forms. (doctors, bank customers, government officials, students, etc.)
- **System Administrators** manage users, roles, security, and system configuration
- **QA (Quality Assurance Team)** test system functionality
- **Manager** monitors system operations, receives reports

2. Key Functional Use Cases & Relationships

A. Core Functionalities (For Frontline Workers & End Users)

1. **Voice-Driven Form Filling** (Main use case)
 - Users provide voice input to fill forms.
 - Uses **Speech-to-Text Conversion** (extends relationship).
2. **Multilingual Support - Translate Input**
 - Converts user input into different languages if needed.
 - Extends **Voice-Driven Form Filling**.
3. **Automated Repetitive Form-Filling**-The system fills common fields automatically (e.g., name, address, etc.).
4. **Validate Input**-Ensures that entered data is valid and correctly formatted.
5. **Save and Resume Form**-Users can save partially filled forms and continue later.
6. **Real-Time Feedback on Inputs**-System provides feedback (corrects mistakes, asks for missing details, etc.).
7. **Multi-User Access Control**-Enables multiple users (e.g., managers, assistants) to collaborate on forms.
8. **Form Submission Notification**-Notifies users once a form is successfully submitted.

9. **Voice Assistance for Navigation**-Users can navigate the form using voice commands like "Next Field", "Submit", etc.
10. **Voice Training & Personalization**-System adapts to user speech patterns over time.
11. **Dynamic Form Creation**-Forms are generated dynamically based on user needs.
12. **Form Confirmation**-Users confirm the details before final submission.
13. **Form Submit**-Final step where users officially submit the form.
14. **Data Storage & Encryption**-Ensures secure storage and protection of sensitive information.

B. Admin & Management Features (For System Admins & Managers)

15. **Admin Management & System Monitoring**-System administrators oversee user roles, security, and logs.
16. **Testing & Deployment (QA Role)**-QA team ensures that new features are working correctly before deployment.
17. **Data Storage & Encryption**-Ensures secure storage and protection of sensitive information.

3. Special Relationships in the Diagram

- **«extend» Relationship**
 - ✓ **Speech-to-Text Conversion** extends **User Provides Voice Input**, meaning it is required whenever voice input is used.
 - ✓ **Multilingual Support** extends **Voice-Driven Form Filling**, meaning it is an optional enhancement.

System

