**Gather functional integration requirements (voice input → intent mapping)**

The objective of this task is to capture and define the functional requirements needed for integrating the legacy IVR with Conversational AI platforms (ACS/BAP). Specifically, the focus is on enabling voice-based user inputs, mapping them to appropriate intents, and routing them to the correct IVR workflows.

Traditional IVRs operate primarily on DTMF (Dual Tone Multi Frequency) inputs, requiring users to press numbers for specific actions. However, modern users expect natural voice interactions.

Example: Instead of pressing “1” for balance enquiry, a caller should be able to say “Check my balance”.

This requires capturing voice input, converting it into text, identifying the intent behind it, and mapping that intent to an existing IVR function.

**Scope:**

This task covers the functional integration layer between:

Caller voice input → Captured and processed via ACS/BAP.

AI/NLP module → Recognizes the intent.

Legacy IVR workflows → Executes the mapped function (e.g., balance enquiry, fund transfer).

The Conversational AI platform (ACS/BAP) processes the speech and converts it into text (speech-to-text). Then NLP (Natural Language Processing) identifies the intent. That intent must be mapped to the correct legacy IVR flow.

**Methodology:**

Collect User Utterances – e.g., "Check my balance," "Transfer money."

Define Intents – e.g., Check Balance, Transfer Money, Block Card.

Map Intents to IVR Actions – Link each intent to the corresponding legacy module.

Fallback Handling – Provide prompts for unrecognized or ambiguous inputs.

**Example:**

User Voice Input: "I want to check my balance"

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Speech-to-Text: "I want to check my balance"

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NLP Intent Detection: Check Balance

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Mapped to Legacy IVR Action: Route call to Balance Enquiry module

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System Response: "Your account balance is ₹10,000."