**Project Title:** Conversational IVR Modernization Framework

**Project Statement:**

This project aims to modernize existing IVR (Interactive Voice Response) systems built on VoiceXML (VXML) by integrating them with modern Conversational AI platforms such as ACS and BAP Service. By reusing and extending legacy assets, the solution will enable these systems to support conversational interfaces while minimizing rework. The approach focuses on enhancing usability, improving user experience, and reducing the technical burden of transitioning legacy IVRs to AI-driven workflows.

**Expected Outcomes:**

• Integration of VXML-based IVR systems with Conversational AI platforms (ACS/BAP)  
• Enabling of conversational interactions within traditional IVR frameworks  
• Minimized redevelopment effort during transition from legacy systems  
• Enhanced end-user experience through voice-driven conversational workflows

**Modules to be Implemented:**

**Module 1: Legacy System Analysis and Requirements Gathering**

**Objective:** Assess current VXML-based systems and define technical and functional integration requirements  
**Tasks:**  
• Review the architecture and capabilities of existing IVR implementations  
• Document integration needs for alignment with ACS and BAP platforms  
• Identify technical challenges, constraints, and compatibility gaps

**Module 2: Integration Layer Development**

**Objective:** Build a middleware/API layer to connect legacy IVRs to the Conversational AI stack  
**Tasks:**  
• Design and implement connectors or APIs to enable communication between VXML and ACS/BAP  
• Ensure real-time data handling and system compatibility  
• Validate integration layer with sample transaction and flow testing

**Module 3: Conversational AI Interface Development**

**Objective:** Introduce natural language capabilities to the IVR system via conversational flows  
**Tasks:**  
• Develop conversational dialogue flows that map to existing IVR logic  
• Integrate conversational flows into the legacy system architecture  
• Enable real-time voice input/output handling via Conversational AI

**Module 4: Testing and Deployment**

**Objective:** Final validation and production rollout of the modernized IVR system  
**Tasks:**  
• Conduct full-cycle testing for performance, accuracy, and user flow coverage  
• Deploy the integrated system in production environments  
• Monitor post-deployment system behaviour and resolve performance issues

**Milestones:**

**Milestone 1: Weeks 1–2**  
- Completion of system analysis and detailed documentation of integration strategy

**Milestone 2: Weeks 3–4**  
- Delivery of functional integration layer between VXML systems and ACS/BAP

**Milestone 3: Weeks 5–6**  
- Development and successful integration of conversational AI flows

**Milestone 4: Weeks 7–8**  
- Final deployment with performance validation in live environment