

# HR ChatBot Key Notes

**Project Name:**

HR AI ChatBot Integration

**User Role:**

Senior ASP.NET Developer (HR Application Domain)

**Purpose:**

Enhance HR application with AI capabilities (chat-driven interface).

**LLM Integration:**

OpenAI GPT-4 via Azure OpenAI Service for intent classification and command extraction.

**Architecture:**

Hybrid approach: MVC-based Chat UI > ChatController API > GPT > Internal HR APIs.

**Action Routing:**

JSON-based 'actions-config.json' file to dynamically route parsed actions.

**Key Commands:**

ShowLeave, ApplyLeave, ApproveLeave, CancelLeave, WithdrawLeave

**ChatCommand Model:**

Standardized model including EmpId, LeaveType, StartDate, EndDate, LeaveId.

**Internal APIs:**

ASP.NET MVC API controllers handle CRUD for leave management.

**Security:**

Access via internal API secured using role-based filters and validated inputs.

**Error Handling:**

Returns 'Unknown' for unsupported or ambiguous user inputs.

**Prompt Patterns:**

Modular JSON prompt templates per intent (stored in CommandClassifier, ApplyLeave, etc).

**Logging:**

Custom file logging for GPT request, response, and internal API calls.

**Date Handling:**

Standardized format 'yyyy-MM-dd' for parsing and routing dates.

**Frontend:**

Razor-based MVC chat view (chat bubble format, async messaging).