

W7- Group Assignment: Agents Development Using OpenAI

Objective: Your group will automate specific workflows using OpenAI Agents to improve efficiency and reduce manual effort.

Instructions: Develop and deploy an AI agent using OpenAI Agent Builder tools that integrates with selected APIs and services to perform defined tasks in W7- Group Task: TO DO IN CLASS.

Project Goals:

- Identify workflows suitable for automation.
- Build and deploy an OpenAI agent using Agent Builder.
- Integrate external data sources and APIs.
- Ensure collaborative development using version control.
- Document and present the setup and implementation.

Deliverables

- Functional OpenAI Agent with defined capabilities.
- Documented workflows and integration points.
- GitHub repository with code, README, and contributor details (**Optional**)
- Screenshots of OpenAI Agent Builder setup (local/cloud).
- Final report with project details in PDF.

Examples of workflows to Automate

- Automating student query responses using a knowledge base.
- Scheduling meetings using calendar API.
- Summarizing emails or documents.

Some Rubric (2)	
Criteria	
Functional OpenAI Agent with Defined Capabilities	<p>20 pts Full Marks</p> <p>Agent is fully functional and successfully performs all defined automation tasks. Demonstrates intelligent decision-making with proper prompt engineering and context handling. Includes appropriate tools and integrations. Handles edge cases and errors gracefully. Clear documentation of agent capabilities, limitations, and use cases provided. Evidence of thorough testing.</p>
Documented Workflows and Integration Points	<p>20 pts Full Marks</p> <p>Comprehensive workflow documentation with clear step-by-step automation processes. Detailed diagrams showing triggers, actions, data flow, and decision points. Thorough documentation of all integration points including APIs, data sources, authentication methods, and data exchange formats. Includes error handling strategies and workflow optimization notes.</p>
GitHub Repository with Code, README, and Contributor Details	<p>20 pts Full Marks</p> <p>Well-organized GitHub repository with clear structure, meaningful commits, and proper project files. Comprehensive README including project overview, setup instructions, usage examples, API documentation, team member details with specific roles, and contribution guidelines. Professional markdown formatting. Includes .gitignore and appropriate licensing. (Optional but strongly recommended)</p>
Screenshots of OpenAI Agent Builder Setup	<p>20 pts Full Marks</p> <p>Comprehensive screenshots showing complete Agent Builder setup including agent configuration, tools/functions, prompt instructions, memory settings, and testing/execution. Clear evidence of local or cloud deployment. Screenshots demonstrate proper agent architecture and optimization. All team members have verified access to development environment.</p>
Final Report with Project Details in PDF	<p>20 pts Full Marks</p> <p>Comprehensive, professionally formatted PDF report including: project overview and objectives, workflow identification and justification, implementation details with technical specifications, team roles and responsibilities, challenges faced and solutions, results and testing outcomes, and future improvements. All required screenshots properly embedded and labeled. Clear, well-organized writing with proper formatting.</p>