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|  | Helpful  to achieving the objective | Hamper  achieving the objective |
| Internal origin  (attributes of the system) | Strengths   1. Real-world Python programming for creating agent-based systems that are implemented in GitHub repositories. 2. Working with GitHub to design software concepts, including version management, modular coding, and teamwork. E-Portfolio/intelligent-agents.html https://fahadsaleh19.github.io 3. Problem-solving and coding skills are improved by combining conceptual knowledge (agent architecture, natural language processing, adaptive algorithms) with real-world application implementation. | Weaknesses/Areas for further development   1. This is because complex agent implementations and repository handling will be hard for inexperienced Python or Git users to comprehend. 2. Minimal experience working on software development lifecycles ranging from 0 to 1000s, including CI/CD pipelines and automated tests. 3. The development of some sophisticated Python libraries and GitHub service features may be slowed by the use of self learning. |
| External origin (attributes of the environment) | Opportunities   1. GitHub provides a professional portfolio connection and enhances employment as a project manager and project showcasing tool (https://github.com/YourRepoLink). 2. GitHub's branching and virtual collaboration practices simulate actual software development scenarios and improve teamwork and repository management skills. 3. Working on AI, ML, and automation projects at work will be made possible by having knowledge of Python, GitHub, and agent-based programming. | Threats   1. Because AI system technologies, GitHub workflows, and Python libraries are evolving so quickly, frequent changes may be required. 2. Technical issues with virtual tools or locating the repository can also cause projects to be blocked. 3. Individual learning and performance can also be impacted by a lack of contribution balance in group work on GitHub projects. |