

Review Questions

Chapter 1: Foundations of Agentic AI

- Q01. Describe how the traditional software systems are stifling growth and competitiveness of businesses.
- Q02. Describe the growing gap between industry needs and status-quo of software systems. How would agentic AI systems fill this gap?
- Q03. Describe three principles of agency.
- Q04. What is an agent?
- Q05. What types of principles guide an agent? Name them.
- Q06. With a neat picture, describe an agentic AI ecosystem.
- Q07. Describe how operating framework of agentic AI systems which consists of Sense-Plan-Act phases.
- Q08. Describe fundamental types of agents.
- Q09. With an example, describe a simple reflex agent.
- Q10. With an example, describe a model based reflex agent.
- Q11. With an example, describe a goal-based agent.
- Q12. With an example, describe utility-based agent.
- Q13. With an example, describe a learning agent.
- Q14. With an example, describe a collaborative agent.
- Q15. Name and briefly describe key features of autonomous agent systems.
- Q16. With appropriate examples, compare single-agent and multi-agent systems.
- Q17. With an example, describe human-in-the-loop agent systems. What benefits do they offer?
- Q18. What is an agentic AI framework? Name a few popular agentic AI frameworks.
- Q19. Name the essential components of an agentic AI framework?
- Q20. Name and briefly describe key ethical challenges faced by agentic AI systems.
- Q21. Name a few ways of weaving ethics into agentic AI frameworks.



Review Questions

Chapter 1: Foundations of Agentic AI

- Q22. Name a few applications of agentic AI systems.
- Q23. Distinguish between AI agent and agentic AI.
- Q24. Distinguish between traditional AI, generative AI, and agentic AI with appropriate examples.