Seminar 3 Summary: Hybrid Agent Architectures

In this session, Dr. Stelios Sotiriadis introduced the concept of **Hybrid Agent Architectures**, which blend reactive and deliberative approaches to build more adaptive and intelligent systems. The discussion highlighted how hybrid agents combine the strengths of both paradigms to function effectively in dynamic environments.

Key points from the seminar:

- **Hybrid Architecture Overview**: These agents integrate both **reactive components** (which respond immediately to changes in the environment) and **deliberative components** (which reason, plan, and use memory to make decisions).
- **Benefits of Hybrid Agents**: This architecture allows agents to quickly respond to immediate stimuli while also planning for long-term objectives, making them well-suited for real-world applications such as robotics, smart assistants, and autonomous vehicles.
- **Course Reading**: Students were directed to Chapter 5 of *"Introduction to Multi-Agent Systems"* by Michael Wooldridge, which explores hybrid models and their use in multi-agent systems.
- **Assignment Support**: Dr. Stelios provided additional guidance and clarification on the upcoming assignment, encouraging students to reach out with questions and to continue reviewing unit materials.

The seminar emphasized the importance of understanding hybrid architectures as a practical design strategy that balances reactivity and planning in intelligent agent systems.