Lecture #4: Plan Space Planning

What is the difference between state-space planning and plan-space planning?

How is least-commitment strategy applied in plan-space planning?

What is the major difference between search spaces for state-space planning and plan-space planning?

How does the initial search node in plan-space planning look like?

How are world states modeled in plan-space planning?

What is the difference between causal relation and precedence relation?

What are the two types of flaws in partial plans?

Where from can we take the action to resolve an open goal?

Define a threat.

There is an example partial plan at the slide on Threats. Identify all threats there.

How can variable binding resolve the threat?

What does define branching in plan-space planning?

What type of search algorithm is appropriate for plan-space planning? Can we use DFS?

Reformulate classical variable and value ordering heuristics from CSP to plan-space planning.

Prove that a plan without flaws and with consistent ordering and binding constraints is a solution plan. How can we get a sequential plan from it?

What is the difference between general PSP and PoP?

In the running example, show that open goal At(Home) cannot be satisfied by action Start.