Al Planning week 9

Requirements for a planning problem: <u>initial state</u> and <u>goal state</u>; <u>actions</u>, applied to change from one state to another; <u>preconditions</u>, the previous state before an action is applied; <u>effect</u>, the new state after an action is applied.

In a planning problem, you are <u>given</u> the initial and goal state and are asked to <u>find</u> a sequence of actions leading from the initial state to the goal state. You can create a <u>graph</u> of all possible sequences which can be searched <u>breadth first</u>, <u>depth</u> first, or with a heuristic search.

Sometimes, actions are also associated with <u>parameters</u> (objects that actions are performed on).

Al Planning week 10

Heuristic functions evaluate the distance to the goal state and are used to search the shortest path to a goal.