state: the status of the world as far as the agent wants to represent it

a function that represents this map is needed. For state s:

**ACTIONS (s)** gives the actions available in state s.

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**ACTIONS (in (Arad))**
- go (Zerind)
- go (Sibiu)
- go (T)

**RESULT (s, a)** the resulting state when you take action a in state s:

**RESULT (in (Fagras), go (Bucharest)) = go in (Bucharest)**

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**data structure:**
frontier list: open list
contains NODES that will be explored
explored list: closed list
contains NODES that have been explored

links to parent, link to children
state, depth, path cost