TDT4136 - Exercise 6

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Fall 2014

1 The planning graph

We chose to ignore the negated literals. See figure 1.

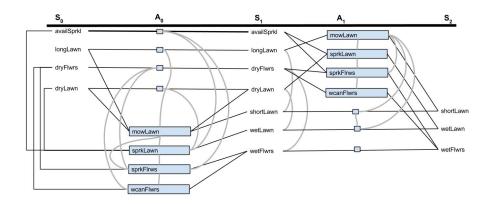


Figure 1: Planning graph

2 Our plan

2.1 Highlighted planning graph

See figure 2.

2.2 Action steps of plan

- 1) availSprkl, longLawn, dryF lwrs, dryLawn
- 2) mowLawn(), wcanFlwrs()
- 3) dryLawn, shortLawn, wetFlwrs, availSprkl

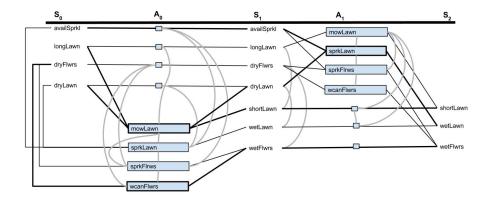


Figure 2: Highlighted planning graph.

- 4) sprkLawn()
- 5) shortLawn, wetLawn, wetFlwrs

2.3 Explanation of how we obtained the plan

It's quite logical really. Since the sprinkler only can be used one time, we chose to use it for the lawn since we have the possibility of using a watering can for the flowers. Since it's not possible to mow a lawn that is wet, we have to mow it first. At the same "actionlevel", we can use the water can for the flowers. This gives the actions indicated on the planning graph and in the written steps.

Alternatively we could have chosen to use the sprinkler for the flowers, but then we would not be able to water the lawn. As it says in the assignment: "we think of the sprinkler as being assigned a single task for the duration of the gardening exercise."