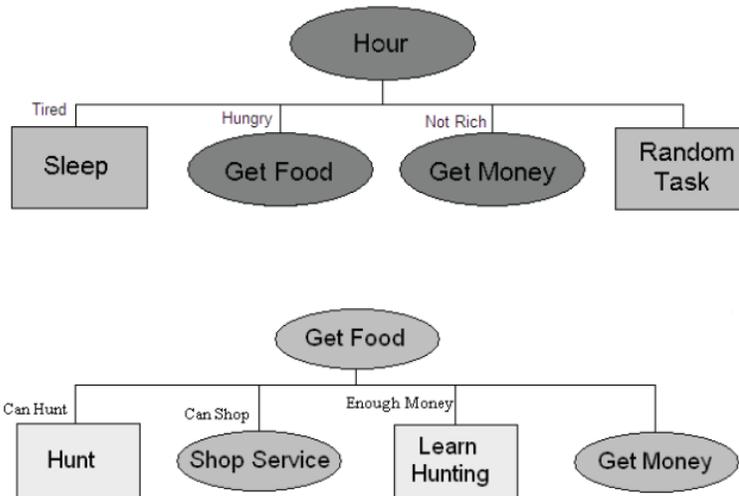# CAP 6671: Planning

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Please submit this homework via email directly to the TA (apetkova@cs.ucf.edu) by *midnight Feb 9th*. Include **CAP 6671** in the subject header. The writeup should be completed without assistance and not be longer than 2 pages. Please correctly cite any sources that you use when preparing your answers.

1.[3 pts] Describe how memoization can be used to speed classical planning.

Your answer should cover the following points:

1. how does memoization work?

2. give an example of how memoization would work in a specific planning problem such as one of the ones discussed in lecture.

2. [3 pts] This picture shows an example of an HTN plan library for a game bot.

1. Describe the general operation of an HTN planner.

2. Assume that the following NPC state conditions are currently true and everything else is not true. The bot is hungry, can shop and has enough money. Describe the plan that the Kelly et al. HTN planner would generate in this specific case.