
Lecture 26

CPSC 110

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Lecture 26

Generative recursion: Is a Maze solvable?

- We model all the possible moves from each node/cell using a tree.
- We did not have a fixed template for an arbitrary arity tree because we are using generative recursion.
 - genrec is NOT data driven, so we won't always start with the data definitions that we need.
- Template tags (*see colour coded image on edX*)
 - arb-tree: we are generating an arbitrary arity tree
 - genrec: we need to create **new** data for each possibility
 - backtracking: to backtrack and traverse through every possibility in the possibility tree
 - encapsulated: due to local
- We created several helper functions that did not already exist.
 - First: wish list entries for helpers
 - * Outside solvable? because our helper functions may be quite complicated, so we want to be able to test them.

My questions

- Side-note: If we wanted to model moves in all four directions, could we use a Deterministic State Machine?
- Should we create helper functions for maze? So that if we change the implementation of maze, it will not break our tests and functions.