



INFORMATICS
INSTITUTE OF
TECHNOLOGY

UNIVERSITY OF
WESTMINSTER

6SENG001W

Reasoning About Programs

Informatics Institute of Technology
Department of Computing

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Structure Diagram of the Maze & Robot System

Coursework

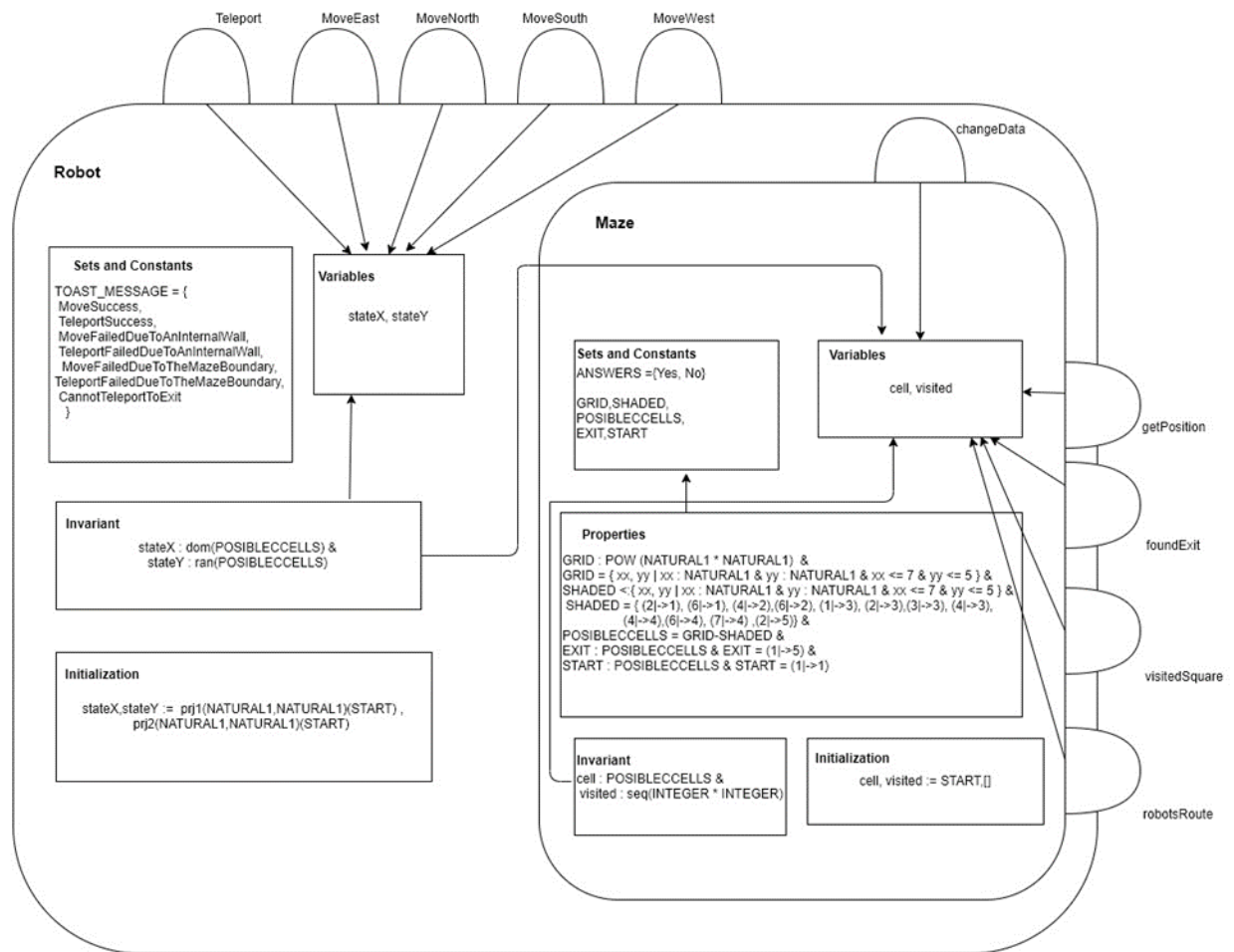
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The Structure Diagram of the Maze & Robot System



Explanation of the "state invariants" of the system

Invariant	Explanation
stateX: dom(POSSIBLECELLS) & stateY: ran(POSSIBLECELLS)	Stores the current position (Coordinates) of the robot.
cell: POSSIBLECELLS &	Store the current cell of robot on the maze
visited: seq(INTEGER*INTEGER)	Store the robot's path on the maze. (Store visited squares of the robot when robot has moved off it.)