



INFORMATICS
INSTITUTE OF
TECHNOLOGY

UNIVERSITY OF
WESTMINSTER 

Informatics Institute of Technology

Department of Computing

Coursework

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Degree Program

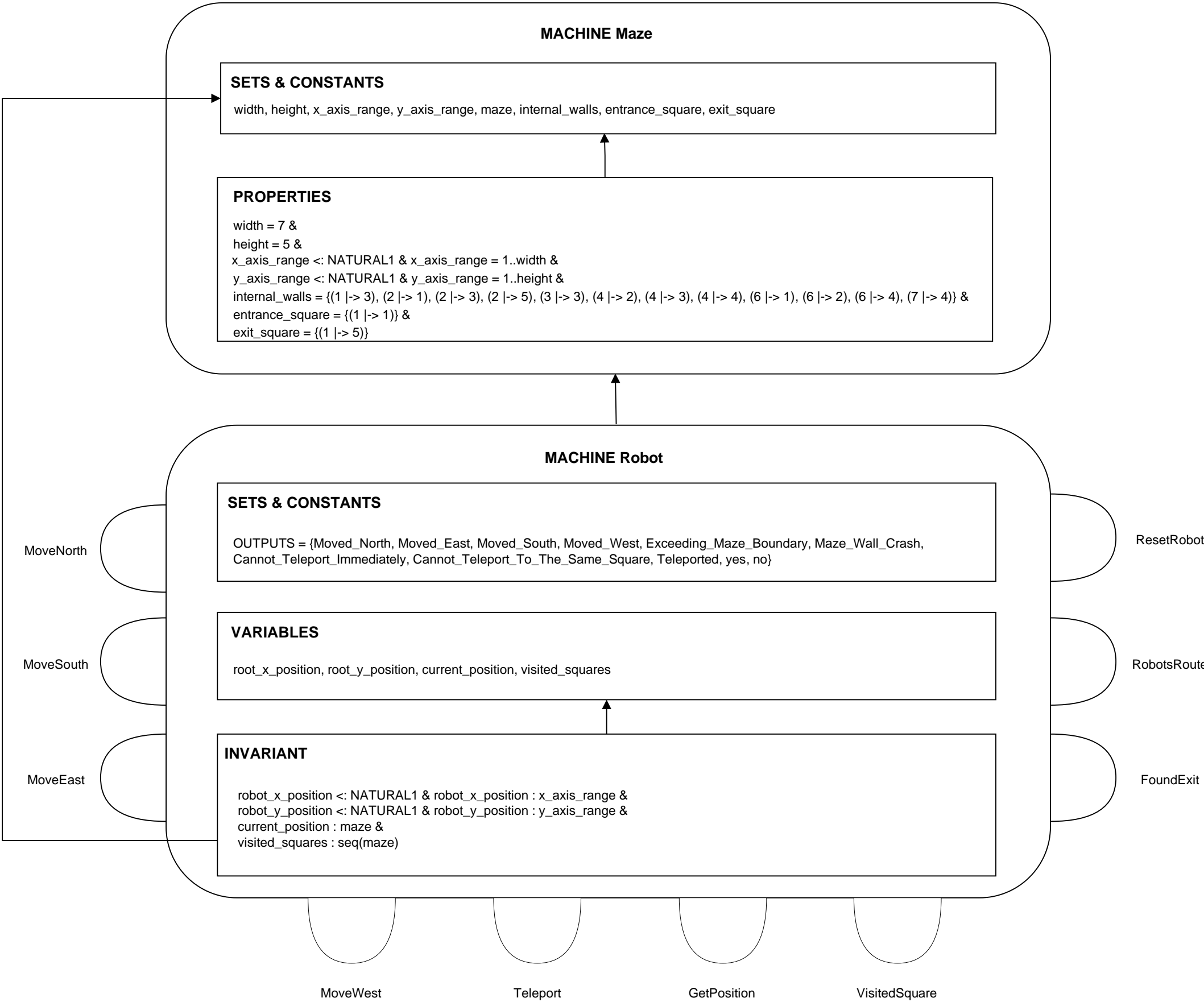
BEng (Hons) Software Engineering

Module

6SENG005C Formal Methods

Date

07/01/2023



Invariant Explanation

Name	Description
robot_x_position <: NATURAL1 & robot_x_position : x_axis_range	The value of ‘robot_x_position’ variable is a natural number, and it is one of ‘x_axis_range’s values.
robot_x_position <: NATURAL1 & robot_x_position : x_axis_range	The value of ‘robot_y_position’ variable is a natural number, and it is one of ‘y_axis_range’s values.
current_position	‘current_position’ defines the current position of the robot, and that value is in the maze
Visited_squares	‘visited_squares’ is sequence of maze which is used to store the previous steps of the robot