UNIVERSITY OF WESTMINSTER

INFORMATICS INSTITUTE OF TECHNOLOGY

6SENG001W Reasoning About Programs

Coursework 1 (2021/22)

B.Eng. (Hons) Software Engineering

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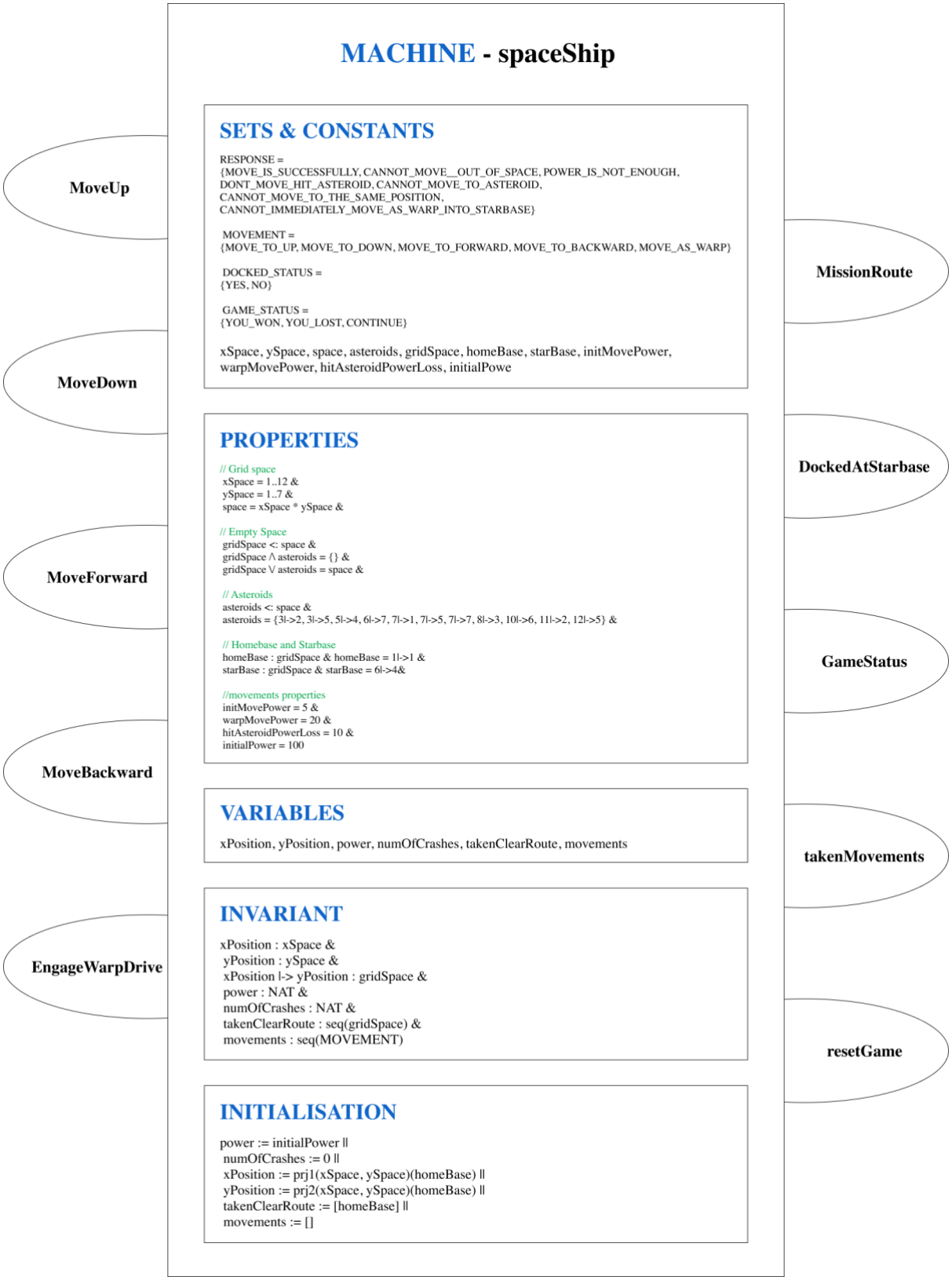
1. Structure Diagram



2. Invariants used in spaceship

1. xPosition – Current x value in grid (space)
2. yPosition – Current y value in grid (space)
3. gridSpace – Space between x and y axes
4. power : NAT – Power that spaceship has or expend
5. numOfCrashes : NAT – Number of conflicts with Asteroid
6. takenClearRoute : seq(gridSpace) – possible part to move in the grid
7. movements : seq(MOVEMENT) – possible ways to move the spaceship