# Simma- Design and Implementation

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### Introduction

- Collect pegs and unload them at the "home-spot"
- Avoid ghosts (randomly moving "hostile" objects)

## Operating modes

#### 2 operating modes

- collect peg
  - ullet Increase weight of robot by peg mass  $\Longrightarrow$  speed loss
  - Remove collision and heat from peg ⇒ robot ignores it
  - Collision with peg when already loaded results in a time penalty
- Avoid ghost
  - Collision with ghost results in a time penalty for the robot
  - Collision with ghost destroys (all) peg(s) carried by the robot
  - Robot has the ability to drop the peg(s) in order to increase its speed

#### **Fitness**

Despite being under construction, the current fitness is as follows:

#### Fitness:

- Number of pegs unloaded at "home-spot"
- Number of collisions with the ghosts

## Video

Video, May 12, 2014