

Requirements

1 Must Have

- Represent a logical model of the environment.
- Model a population in the environment with basic behaviour.
- 3D representation of ship.
- Accurate timescale for simulation.

2 Should Have

- Accurate behavioural model.
- Random population generation.
- Provide user ability to specify environmental variables.
- User ability to modify perspective.
- Ability to load in multiple environment models.
- Dynamic environment modelling (automatic grid/graph generation).
- Ability to represent hazards/block paths in simulator.
- Statistical feedback in display.
- Factor in guest reaction time and effect of alarm.

3 Could Have

- Accurate fire model.
- GUI for user interaction.
- Pause/Stop/Restart functions.
- Possibly allow statistical to be exported to a standard file format for analysis.
- Provide user control over fire source (area and cause).

4 Would Like To Have

- Variable run-speed of simulation.
- Accurately model staff and staff/guest interaction.
- Include wheelchair using guests and interaction required to carry them out.