

Supermarket Simulation

An interactive simulation of a supermarket :)

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Start

Simulate

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CONTENT PAGE



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Link	Description
Content Page	Table of content
Title Page	Team Number, Team Members, (Optional: Team Member Photos), Submission date, Course Name and Number, Team Name, Project Theme, ESD logo, Team logo
Abstract and Motivation	A solution-neutral statement of the problem area and goal / Textual description of project
Project Description	Summary of the goal of our simulation
Mathematical Model	An explanation of the mathematical model used
Project Management	Functional diagram of project steps with input/output documentation; Project schedule; Task assignment; Due date performance
Simulation Design	Influence diagrams, stock and flow diagrams, state machine diagrams, event graphs, data structure diagram, Capella model
Model Documentation and Programming	Powerpoint guided tour of model (similar to lecture examples) using screenshots and annotations - It should include the model equations (e.g. formulas for state changes); decision Rules (FCFS vs MostNeeded)); Programming Code.
User Interface Visualization and Animation	User's manual or Powerpoint tutorial; screenshots; link to YouTube video; How to install the software or replicate the results?
Output Analysis	What questions can you answer using the simulation? What measures of system performance can you estimate using your simulation? What sensitivity analysis? - Tabular summary of runs; statistical significance of differences; Discussion of whether results are surprising or expected; lessons learned; conclusions
Bibliography	Credits

This column includes the links to the different contents that makes this project a success.

PROJECT DESCRIPTION



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Project Description

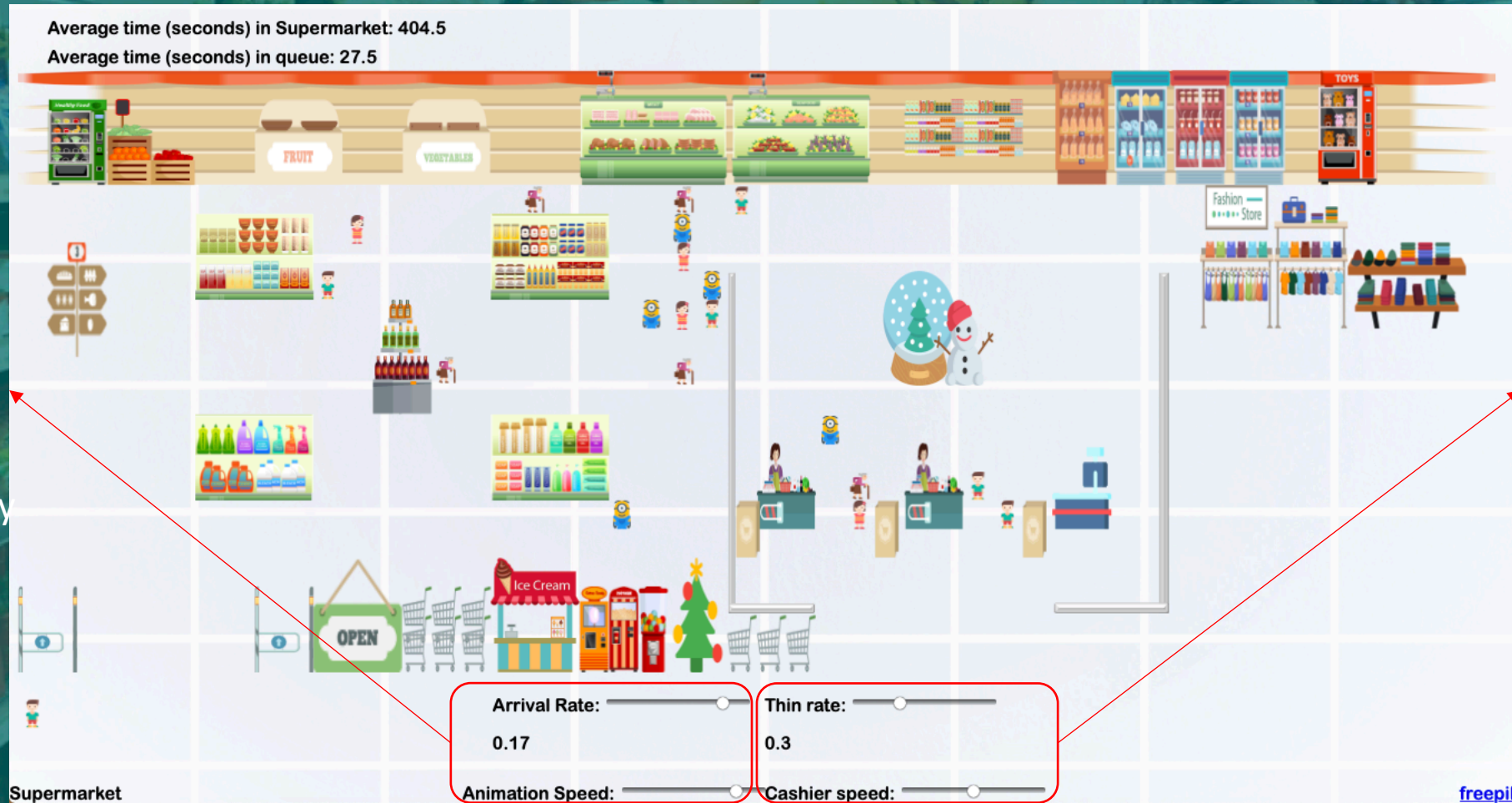
Link to Document: [Project Description](#)



Our simulation project aims to replicate the customer walking flows and purchasing behaviours in a supermarket. We want to understand the relationships between the counter queues and number of counters, along with the flow rate of customers. We can vary parameters to see the individual effects.

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How does it work?



These sidebar allows user to increase or decrease the arrival rate of the customers and the animation speed respectively

These sidebar allows user to increase or decrease the thin rate of the customers arrival rate and the cashier speed respectively