

User Document

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Course: CSCI 301 – Section 1

Project: Simulation of a Waiting Line

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Compilation

```
g++ main.cpp WaitLine.cpp Customer.cpp -o waitline
```

Execution

```
./waitline
```

Description

The program runs a time-driven simulation of a waiting line.

Edit main.cpp to set:

```
wl.simulate(duration, arrivalProbability, maxTransactionTime);
```

Example:

```
wl.simulate(10, 0.65, 5);
```

Example Output

Time 0: Customer 1 enters line with a 5-minute transaction.

Customer 1 begins service after waiting 0 minutes.

Simulation ends. The final statistics:

Total customers served: 4

Average waiting time: 2.75 minutes

Customers left in line: 1