# SOFT 8023 Distributed Systems Programming

## Project 2

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Client run:

A screenshot of a computer

Description automatically generated

Server run:

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Server code:  
This code defines the handle client function, which is used to manage client connections, wait for commands, and process them.

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This section handles the logic behind the menu where the query is decided.

It also includes a section which publishes the logs to the Rabbit MQ queue

A screen shot of a computer program

Description automatically generated

This section handles file actions, used to store and read logs

A computer screen with text

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This section manages the Rabbit MQ queue, as well as socket configuration.

A computer screen shot of a program code

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This section manages the socket’s ability to create threads, which are used to allow for multiple clients to connect to the server at the same time.

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Client code

This section manages the Client side socket connection configuration. It also allows the user to select the mode of operation, Employee information vs logs

A computer screen shot of a program code

Description automatically generated

This section manages the menu which is used to build the query that will be sent to the server via the socket.   
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This section completes the menu, sends the query, waits for response and prints the result.

A screen shot of a computer program

Description automatically generated

This section allows the user to decide if they want to continue checking employee information, or exit the loop.A computer screen shot of a program code

Description automatically generated

Docker:

While I was able to get the Server running within a docker container, sadly I was unable to complete the connection to the Socket. I tried to troubleshoot this, by opening the port through windows firewall, using docker special host names, localhost, loopback IP addresses, and direct IP configurations, but sadly I was unable to make the connection. I was able to get RabbitMQ to connect in time however.

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A screenshot of a computer program

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