Submission Worksheet

Submission Data

Course: IT490-451-M2025
Assignment: IT490 MQ Test Individual
Student: Matan Z. (mnz6)
Status: Submitted | **Worksheet Progress:** 100%
Potential Grade: 10.00/10.00 (100.00%)
Received Grade: 0.00/10.00 (0.00%)
Started: 6/7/2025 4:49:16 PM
Updated: 6/7/2025 9:37:32 PM
Grading Link: https://learn.ethereallab.app/assignment/v3/IT490-451-M2025/it490-mq-test-individual/grading/mnz6
View Link: https://learn.ethereallab.app/assignment/v3/IT490-451-M2025/it490-mq-test-individual/view/mnz6

Instructions

- Walkthrough: https://youtu.be/tgT0ZAxccbQ

1. Read all instructions and requirements first
2. Use any VM creation tool that gives you root access and persistent storage
    - VirtualBox, Multipass, cloud (Amazon, Google, Azure, etc) (Docker won't be an option here)
    - Create a hostname relevant to the assignment (i.e., test-individual)
    - Create a user of your ucid with a password, ensure relevant permissions
    - Hardward: 1GB Memory, 10GB Hard Drive
    - Install a server version of linux (i.e., Ubuntu Server 24.04)
    - Hint: You may want to get a base install working and use that as a cloning point for quicker destroy/create cycles
3. Use the example code from the master branch of https://github.com/MattToegel/IT490
4. Connect to the VM with two separate ssh connections
    - Run the RabbitMQServerSample.php file successfully in one instance
    - Run the RabbitMQClientSample.php file successfully in another instance
    - Proper data should be sent/received
5. Create a `setup.sh` script that automates the installation/setup logic
6. Fill in the below requirements
7. Submit and Export once done
8. Upload the PDF to your personal GitHub repo for the class
9. Upload the PDF to Canvas

Section #1: (7 pts.) Example Solution

Progress: 100%

☰ Task #1 (3.50 pts.) - Working Example

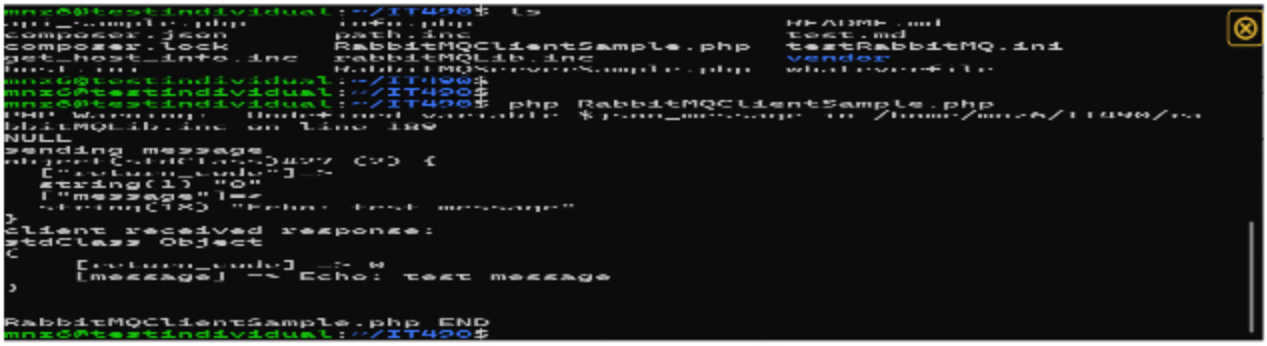
Progress: 100%

🖼 Part 1:

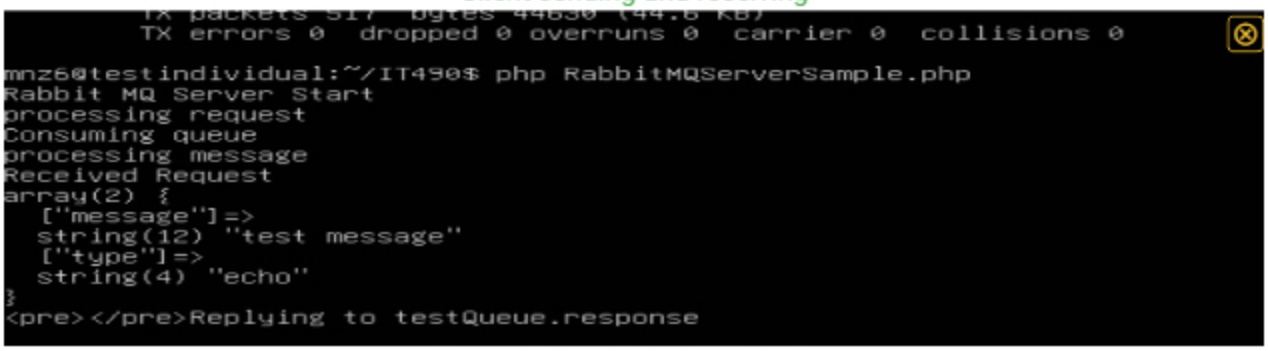
Progress: 100%

Details:

- Demonstrate a successful send/receive of the example message
- Hostname should be test-individual or similar
- Username should be your ucid



Client sending and receiving



server consuming and replying

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Part 2:

Progress: 100%

Details:

- Detail the initial setup experience and note things you had to address in order for the example to work

Your Response:

During the initial setup I needed to figure out how to get the client side to respond to the server side. I cloned the master branch of the project repository to access the necessary files for the messaging system. I installed RabbitMQ-Server, PHP, and Composer to make sure I had all dependencies. Then, using PowerShell with SSH, I executed the client script, which successfully sent a message. The server-side output confirmed receipt of the message, demonstrating successful communication between the client and server

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Task #2 (3.50 pts.) - Setup Script

Progress: 100%

Part 1:

Progress: 100%

Details:

- Show a snippet of the `setup.sh` script you created to automate the installation and configuration steps that lead up to a working example.

Installation and configuration steps for the working example in setup.sh

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Part 2:

Progress: 100%

Details:

- Include the direct link to the file from your personal class repository

URL #1
https://github.com/matanz1/IT490-Summer/blob/main/setup.sh

URL
https://github.com/matanz1/IT49

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Part 3:

Progress: 100%

Details:

- Briefly explain each step of the process in the script

Your Response:

I started by cloning the IT490 repo from GitHub using SSH, then I moved into that folder. After that, I updated and upgraded the system's packages to make sure everything was up to date. I installed PHP and Composer so the project could run and manage its dependencies, then ran Composer install to grab those dependencies. I also installed Nano for a text editor and istaled RabbitMQServer for messaging. I then, ran php rabbitMQServerSample.php which started and tested rabbitMQ setup.

tested rabbitMQ setup.

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Section #2: (3 pts.) Reflection

Progress: 100%

Task #1 (1 pt.) - What was the easiest part of this assignment

Progress: 100%

Details:

- At least a few solid sentences

Your Response:

The easiest part of the assighment for me was installing Ubuntu and virtualbox because I had done this before. As well as getting all of the dependecies. It was easy to get all the dependencies since it was all shown in the video.

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Task #2 (1 pt.) - What was the hardest part of this assignment

Progress: 100%

Details:

- At least a few solid sentences

Your Response:

The hardest part was getting all of the files from the master branch. This is becuase when I tried to clone it did not work. However I saw the mistake that I made and fixed it. Another difficult part was the setup.sh script since I had not known what to put into it at first. I then figured out what I needed to do.

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Task #3 (1 pt.) - What did you learn during this assignment

Progress: 100%

Details:

- At least a few solid sentences

Your Response:

I learned about RabbitMQ. I read a bit about the documentation and what it does. I did not really know what it does and what it is used for. I saw that it is an open-source message broker and it lets applications communicate by sending messages through queues. I also did not know a lot about install and when you run composer install, it installs the exact versions of dependencies listed in the composer.lock file to ensure consistency across environments. If there's no lock file, it installs from composer.json and creates a new lock file based on the installed versions.

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