Submission Worksheet

Submission Data

Course: IT490-450-M2025
Assignment: IT490 MQ Test Individual
Student: Hwan S. (hs723)
Status: Submitted | **Worksheet Progress:** 100%
Potential Grade: 10.00/10.00 (100.00%)
Received Grade: 0.00/10.00 (0.00%)
Started: 6/10/2025 12:33:06 AM
Updated: 6/10/2025 9:02:57 PM
Grading Link: https://learn.ethereallab.app/assignment/v3/IT490-450-M2025/it490-mq-test-individual/grading/hs723
View Link: https://learn.ethereallab.app/assignment/v3/IT490-450-M2025/it490-mq-test-individual/view/hs723

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

```
ns723@test-individual:~$ cd IT490-master
ns723@test-individual:~/IT490-master$ php RabbitMQServerSample.php
Rabbit MQ Server Start
processing request
Consuming queue
processing message
Received Request
array(2) {
  ["message"]=>
  string(12) "test message"
  ["type"]=>
  string(4) "echo"
}
<pre></pre>Replying to testQueue.response
```

server consuming and replying

```
ns723@test-individual:~/IT490-master$ php RabbitMQClientSample.php
PHP Warning:  Undefined variable $json message in /home/ns723/IT490 master/rabbitMQLib.inc on line 189
NULL
sending message
object(stdClass)#27 (2) {
  ["return code"]=>
  string(1) "0"
  ["message"]=>
  string(18) "Echo: test message"
}
client received response:
stdClass Object
(
    [return_code] => 0
    [message] => Echo: test message
)

RabbitMQClientSample.php END
```

client sending and receiving

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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:

The initial set up took a while for me to do and I'm not sure if I did it correctly. I had a lot of issues initially trying to ssh into the VM from my local machine. Turns out the fix was to change the network setting of my VM from NAT to bridged. Other than that, I was able to get the master branch of the github link into my VM.

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Task #2 (3.50 pts.) - Setup Script

Progress: 100%

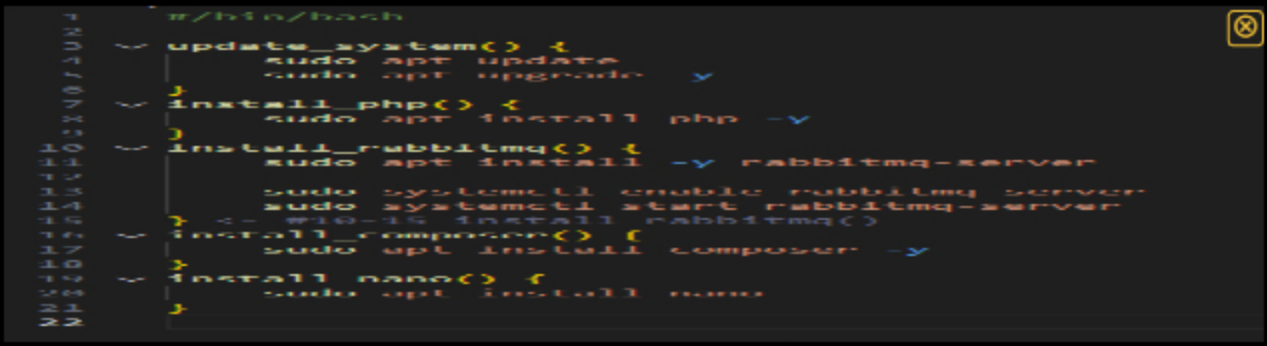
Part 1:

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.



setup script to automate installation

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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/hs723/SU25-IT490-Dev/main/setup.sh

URL
https://github.com/hs723/SU25-I

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Part 3:

Progress: 100%

Details:

- Briefly explain each step of the process in the script

Your Response:

The first step is to update and upgrade all system packages. Next, we install php. This should install PHP and all of its required extenstions. Then, we install RabbitMQ. After the installation, we enable and start the RabbitMQ service. If it is not enabled and started, we won't be able to send or receive messages using the RabbitMQ server. Then, we install composer.

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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:

I think the easiest part of this assignment was getting the inital set up done on the VM. Following the video, I was able to easily install all the packages and dependencies that were needed.

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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:

I think the hardest part was configuring the VM before doing anything. I had a lot of trouble setting up the VM and connecting to it from my local computer. Turns out I had to change the network setting of my VM from NAT to Briged.

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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 think I learned a lot about VM configuration and the initial setup process for all of the packages and dependencies that we will be using. Especially RabbitMQ. Creating a working script is something that I am pretty new to as well. I'm not sure if the one that I created is correct but I still think that I know more about it than I did before.

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