Deployment Manual
for **Quiz Maker**

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1.Introduction

1.1. Purpose

The purpose of this deployment plan is to lay out the steps of the live deployment of Quiz Maker. This document is also intended to keep track of the dependencies and constraints that could possibly hinder the deployment of Quiz Maker.

1.2 Summary

To officially deploy Quiz Maker on live servers, a script would have to be downloaded and run. Since Quiz Maker will run on SUNY Oswego's pi server, the source of Quiz Maker is stored in specific directories. This script provides a quick and convenient way to sift through those directories and launch all of the components of Quiz Maker.

1.3 Intended Audience

This Deployment Manual is intended to be used by users who intend to install and use Quiz Maker.

1.4 References

1) https://github.com/join?ref_cta=Sign+up&ref_loc=header+logged+out&ref_page=%2F&source=header-home
2) https://github.com/CSC480-20F/quiz-maker
3) https://docs.mongodb.com/manual/administration/install-community/

2. Preparation

Quiz Maker must be downloaded from it's github repository. However, a github account is required to access the repository.

If you don't have a github account, you can create one [here](#).

2.1. Software Requirements

Additionally, for database management, MongoDB must be installed before trying to install Quiz Maker. Both the Community Edition and Enterprise Edition for MongoDB are compatible with Quiz Maker.

To start installing MongoDB Community Edition for either Windows, Mac, or Linux, click [here](#). To start installing MongoDB Enterprise Edition for Windows, Mac, or Linux, click [here](#).

3. Installation

The installation of Quiz Maker starts from its GitHub repository, which is located [here](#). Installing Quiz Maker requires cloning the code from the Github repository.

1. From your browser, copy the cloning link
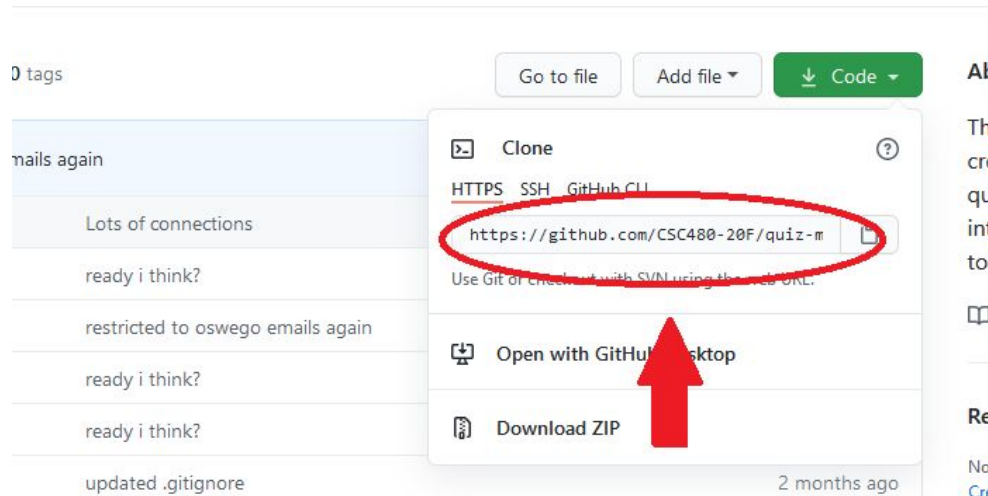
2. From your terminal, go to the directory you want Quiz Maker to be installed in.
3. After, enter the following command:
   a. git clone 'paste the link that you copied here'.
4. Enter your user credentials if you are prompted to. If you weren't prompted to enter user credentials, skip to step 5.
5. Press Enter.

If Quiz Maker was installed successfully, your screen should look like this.

```
Last login: Thu Nov 19 17:47:17 2020 from 129.3.136.156
pi:~> cd csc480
pi:~/csc480> git clone https://github.com/CSC480-20F/quiz-maker.git
Cloning into 'quiz-maker'...
Username for 'https://github.com': dgarcia4
Password for 'https://dgarcia4@github.com':
remote: Enumerating objects: 728, done.
remote: Counting objects: 100% (728/728), done.
remote: Compressing objects: 100% (460/460), done.
remote: Total 4246 (delta 373), reused 541 (delta 222), pack-reused 3518
Receiving objects: 100% (4246/4246), 60.50 MiB | 4.57 MiB/s, done.
Resolving deltas: 100% (2011/2011), done.
Checking out files: 100% (141/141), done.
pi:~/csc480>
```

4. Configuration

4.1. Script File Configuration

Once Quiz Maker is downloaded, the script file responsible for launching the web application will have to be modified. The script file travels to the different directories where Quiz Maker is located and launches each microservice from that location.

The script file will have to be modified such that the script will find which directories Quiz Maker is installed in.

The line that will have to be modified is the line below:
cd /home/mljuljic/Csc480/quiz-maker/Frontend/ (Original).

Change "home/mljuljic/Csc480" into your parent directory that you installed Quiz Maker in

cd "Your parent directory that quiz maker is installed in"/quiz-maker/Frontend/ (Updated)

Now the script can properly find the directories that Quiz Maker is located in. Quiz Maker is now ready to launch.

4.2. Renewing Google SSL Certificate

Google's SSL certificates are only live for about a year, after which, the certificates will expire. . When Google's SSL certificate expires, Quiz Maker will no longer be able to establish a secure connection. Attempting to run Quiz Maker with an expired certificate will result in an SSL handshake error. To mitigate this, whenever Google uploads a new SSL certificate, the keystore certificates will have to be manually updated.

To update the Google Certificate, the new Google SSl Certificate will have to be downloaded. After downloading the Certificate, navigate to the top folder in each microservice and run the following command:

$ keytool -list -keystore path/to/defaultServer/resources/security/key.12 -storepass keyspass

This command will have to be run for each microservice.