

Installation Documentation

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Thank you for downloading our software!

Dependencies

To use our project, one must have:

Python3 Version 3.6.5 and higher
Internet connection on a common local network

Disclaimer: We designed this application to run on the 2013 MacBook Pro running macOS version 10.13.4. However, we have tested the program successfully on the iMacs in Deschutes 100. Although non-Mac systems have been able to run our applications, we recommend the use of macOS to the point that it should be considered a requirement. Standard Python3 contains tkinter and pickle libraries.

File Descriptions

In this directory we have two main source files:

teacher_view.py
student_view.py

There are also two directories:

quizes/
answers/

About "teacher_view.py":

- This file is the interpretable source code for running the teacher's client application and also contains software for initializing a server.
- This program must be running in order for a student's client to have a server to connect to.
- To run: `python3 teacher_view.py`

About "student_view.py":

- This file is the interpretable source code for running the student's client.
- To run: `python3 student_view.py`

About "quizes/":

- This directory is used to store quiz files.
- The presence of this directory is required for running "teacher_view.py".
- DO NOT MANUALLY MODIFY THIS DIRECTORY

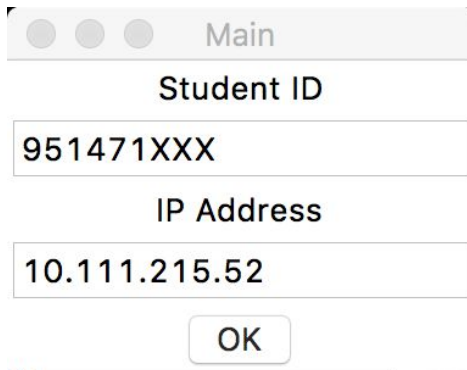
About "answers/":

- This directory is used for writing session reports. Session reports are a summary of student responses to quizzes. If no responses were received, this is stated in the file. Files are named with date and time that session is ended. File is type .txt.
- The presence of this directory is required for running "teacher_view.py"
- You may view, modify, and delete these files as you please.

Using This Software

You may test both of these programs on your computer. The process for utilizing this software is as follows.

1. Run teacher_view.py
 - a. If you have a firewall or other network security features, disable them and grant/allow permissions to the python app.
2. Run student_view.py
 - a. If you have a firewall or other network security features, disable them and grant/allow permissions to the python app.

A screenshot of a graphical user interface window titled "Main". The window has a light gray title bar with three standard macOS window control buttons (red, yellow, green) on the left. Below the title bar, the text "Student ID" is centered. Underneath, there is a text input field containing the string "951471XXX". Below this field, the text "IP Address" is centered. Underneath, there is another text input field containing the string "10.111.215.52". At the bottom center of the window is a button labeled "OK".

Main

Student ID

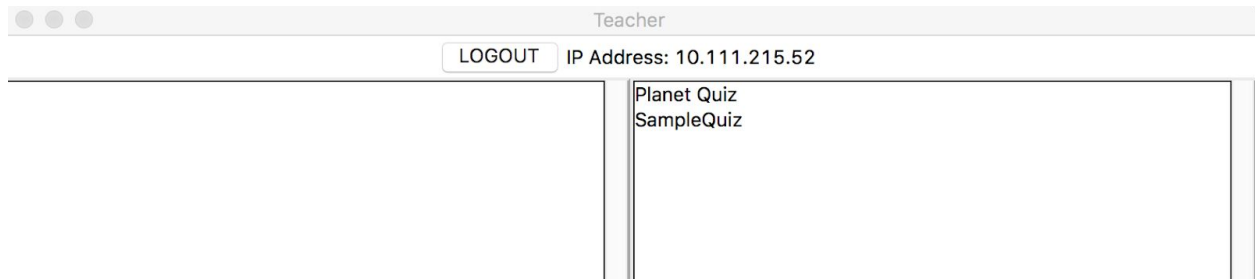
951471XXX

IP Address

10.111.215.52

OK

3. In the student_view menu, enter a Student ID or whatever identifying string you wish to use, shorter than 3000 bytes. Note: Long (20+ char) string length impacts GUI aesthetics and usability.



4. In the student_view menu, enter the IP address that is displayed at the top of the teacher's application. We recommend that with multiple student clients that the teacher display their IP address via whiteboard, projector, or sign. A note on this is at the end of this document.
5. You're connected! More information on operation in User Manual.

IP Address

You might be wondering... "Why do I need to type the IP address?". We originally wanted to have our application not be peer-to-peer(P2P), however this would require a dedicated server supporting our system at all times. The program would allow the teacher to sign into an account and begin a new session, while thousands of teachers could be doing the same simultaneously. We did not acquire capital prior to embarking on system development and thus this plan of owning a server was nixed. However, we developed our application in a fashion that would allow for the current server running software to be easily removed and repurposed into a dedicated server. The price to pay for not paying for a server is that we must hand-input the IP address.

Port Issue

An issue that persists with our current implementation is the negotiation of port usage with the operating system. Our system uses port 44000 by default. Under certain conditions, the operating system will linger in freeing this port. If this occurs, an error message will be printed stating this issue. We recommend waiting a moment(30 seconds) and trying again. If the issue persists, one may edit the source of both files to change the port to another valid port number(eg.33000, 44001) as long as teacher_view.py and student_view.py both have the same port number set. The port number is easily accessible on line 15 of both files.