



130 CHALLENGE



Setup

Directions:

Here is everything you need to get ready for the 130 Challenge. EVERY member of your team must do this so that all laptops are ready to go for challenge day.

- Make sure you have Python 3.11 (e.g. 3.11.1, 3.11.2, 3.11.3, etc.). Python 3.10 or Python 3.12 will **NOT** work. Python is very specific about compiling with one version and running with another. As long as you have Python 3.11.X (i.e. the version starts with "3.11") it will work. Also, make sure to grab the 64-bit version.
- If you don't have Python 3.11, go download it.
- Now open up Git Bash, Powershell, or other command line program and type the following commands (if you don't know how to do this, see next section below), hitting enter after each line and letting it install fully before going to the next line:
 - For Windows:

```
python -m pip install pygame
python -m pip install requests
python -m pip install numpy
```
 - For Mac or Linux (use 'python3' instead of 'python'):

```
python3 -m pip install pygame
python3 -m pip install requests
python3 -m pip install numpy
```
- You will use the command line for running your Python challenge.
- Now make sure you are in the directory with the setup files and run the following command in the terminal. Note the "c" at the end. This is different from normal assignments:

```
python Setup.pyc
```
- If you see the message "Python Setup Finished", you are good to go for the Python challenge set(s).

Using Command Line:

- If you haven't used command line before to run your Python programs, here is what you do.
- Go to the folder that contains your Python code (e.g. the Setup.pyc file).
 - This could be your Downloads folder, Documents folder, or wherever place you put these files.
- Make sure no files are selected (i.e. make sure nothing is highlighted)
- Hold the shift button down on your keyboard
- Right click
- Select "Open Powershell window here" in the menu that pops up
- Release shift key
- Then type your command and hit the enter key, such as:
 - python Setup.pyc

- or any of the commands in the section above
- You will use this method to run the challenge
- Make absolutely sure that you are in the right folder when you try to run python on a particular file.
- For example, if you are in your Downloads folder and your Python files are in your Documents folder, the command line is **NOT** going to search your entire hard drive to find these files. It will search the current folder you are in, and that is it!
- Command line is just like opening a folder in Windows Explorer (i.e. with the file and folder icons). The only difference is that we don't have pretty icons and a GUI, instead we have a black background and text. But the same rules apply. You can go into and out of folders and when you run a program, only the files in the folder you are currently in can be seen.

Team Setup:

- One Person Does this:
 - Setup a Discord channel for you and your team. You will need to share files and communicate during the challenge and Discord will serve both of these purposes.
 - This Discord should not be shared with any other team, but do make sure all members of your team join the Discord before the day of the challenge.
 - Create a file called **team.txt**
 - Copy and paste your team name from the attendance sheet on Moodle into this file
 - The file should ONLY contain your team name, with nothing else. The team name should be put on the first line of the file and the file should only contain that line (i.e. a text editor should show there is only one line in the file)
 - Share this file with your team on your Discord channel
- For the rest of the team:
 - Join the Discord challenge for your team.
 - Grab the team.txt file
 - Hold on to this file for the challenge

Things to keep in mind:

- To check your code, run the game on the command line. You cannot run the game in an editor.
- You may look up anything online, however I recommend checking your lecture notes first. Chances are something was covered explicitly in the notes that will help you. If not, feel free to Google.
- Follow all directions completely. This means reading (and sometimes re-reading) everything. Failure to follow directions will result in a failed challenge. These challenges are automatically checked by software on my server, so any deviation from the directions will fail the check.
- Make sure you have a working internet connection as it is required for all challenges.
- Make sure you have Python 3.11
- Make sure you have "pygame", "requests" and "numpy" installed for Python (if you followed the directions above, these should be installed).
- You should have a Discord setup for your team to communicate and share files. This obviously should not be shared with any other team.

- USE YOUR TEAM WISELY!!! **You are in teams for a reason.** Some of your team should be solving a challenge while other are solving a different challenge. OR you can all try to solve the same challenge by combining ideas.
- Let me be clear about this, if there is no talking among your team during the challenge day and no one tries to coordinate your efforts, you will not do well! Speak to your team, think out loud and tell them your ideas. Talk. Talk. Talk. Otherwise you will be stalled on the challenges and will not make much progress.
- Speak up and solve challenges **together!**
- And finally, ... HAVE SOME FUN! This is mostly bonus. If you do the bare minimum, you will make a perfect score on this. If you do more, you will earn bonus. This should only serve to help your grade. So, have fun and enjoy solving challenges!