**Checkers Program User Documentation**

**SDEV265, Fall 2024**

**Team 3**

**Introduction**

This document is here to provide instructions for install and basic operation of Team 3’s checkers game program. The game is made for local duo play or bot play with three difficulties, easy, medium, or hard. The game should work on any Integrated Development Environments (IDEs) that can interpret Python.

This User Document will contain:

* How to install the program
* Summary on how to operate program
* Basic troubleshooting links and tips for “import pygame” issues

**Installation**

This program works on the Visual Studio Code IDE so any references may be exclusive to it. Although, it should be compatible with any IDE that can interpret Python.  
  
Below are the steps to install the checkers game program:

1. Download the Python file from the provided Github repository.
2. Open the game program in your IDE.
3. Run the program.

If you run into issues with running the program because of errors with the “import pygame” line of code, refer to the troubleshooting section below

**Game Operation**  
  
This section will describe how to operate the program using natural language.  
  
When running the game the first screen you see has the options for “Local Play”, “Bot Play”, and the option to “Quit”.

Local Play allows for two users to play a game of checkers locally. You can enter your name and select which player will be playing red or black.

Bot play allows you to pick a difficulty level for the bot, Easy, Medium, or Hard, and enter your name and select to play as red or black.

After you finish the game on Local Play or Bot Play, you will be brought to a menu to go back to the main menu. From here you can play another game, or exit the game with the “Quit” option.

**Troubleshooting**  
  
This section is biased as it will be going over the troubleshooting for a Windows 10 PC user, but it should cover most possible issues one could encounter and may need to be tweaked for Win11 or any other OS.

The main issue one may encounter is that pygame is not installed.   
The fix to this is to enter the following in the IDE terminal or in command prompt.  
  
“pip install pygame”  
  
If the following doesn’t work, it could be due to python not being in your system PATH.  
Test this by entering the following in command prompt  
  
“python --version”  
“pip --version”

If both commands are successful, try entering the install command in the command prompt instead of the IDE terminal. If either command fails to give output of version, it's likely due to python and/or pip not being in your system PATH. To check if python is installed, go to the following in your file path. [USERNAME] should be your username on your PC  
  
C:\Users\[USERNAME]\AppData\Local\Programs\Python\Python313\

If the python folder exists, verify that the Scripts folder exists within it and that pip and other utilities are within the Scripts folder.   
If these folders don’t exist, install them from the [official python website.](https://www.python.org/downloads/)

Now it's time to add the Python313 folder and Scripts folder to PATH.

First, open the file explorer and right click “This PC” and select properties.   
On the Settings menu click “advanced system settings”.  
On System Properties, select Environment Variables. It should be located under Advanced.  
On Environment Variables, find Path in the system variables, select Path, and click on edit.  
On Edit Environment Variables, Enter the below by selecting new and copy pasting it or typing it  
  
C:\Users\[USERNAME]\AppData\Local\Programs\Python\Python313\

C:\Users\[USERNAME]\AppData\Local\Programs\Python\Python313\Scripts\

Once those have been entered, press ok to save changes.  
Close and reopen Command Prompt to ensure changes have taken effect.  
  
To verify install enter the following in Command Prompt.

“python --version”  
“pip --version”

If they both work for you, you should be able to enter the below in Command Prompt to install pygame.  
  
“pip install pygame”  
  
Once you enter the above command it should show some information about it downloading. You should be able to run the game once it downloads. If it fails to run, close and reopen the program.

If it still fails to run, I would recommend finding more in depth troubleshooting online or retracing the steps given.