

System Design:

The user interface allows the user to choose how many hands they want to play, the big blind size, bot types, and the game footage speed. These feature choices are necessary because they configure how the game should work and who should play it.

Once the user closes the screen, Player.py (control script) launches the PokerBots engine and initializes a process for each bot. Each bot must be run on its own process because the Engine-PokerBot communication protocol functions via sockets, and one Python process cannot sustain simultaneous sockets without an asynchronous socket I/O system (which is not the point of this project).

When the game finishes, the engine subprocess stops sending data. The bot processes write their history data to Pickle objects in the working directory, close their sockets, and terminate. The engine subprocess is terminated.

Finally, the footage graphics are initiated. The init(data) function for game_footage.py reads history data and game settings from pickle files in the working directory. The game footage simulates a "poker table" with each player's type, stack size, and hole cards displayed. Whenever an event occurs, the player's box flashes with the name of the event and the quantity (with the color of the flash depending on the outcome: red; bad, green; good).