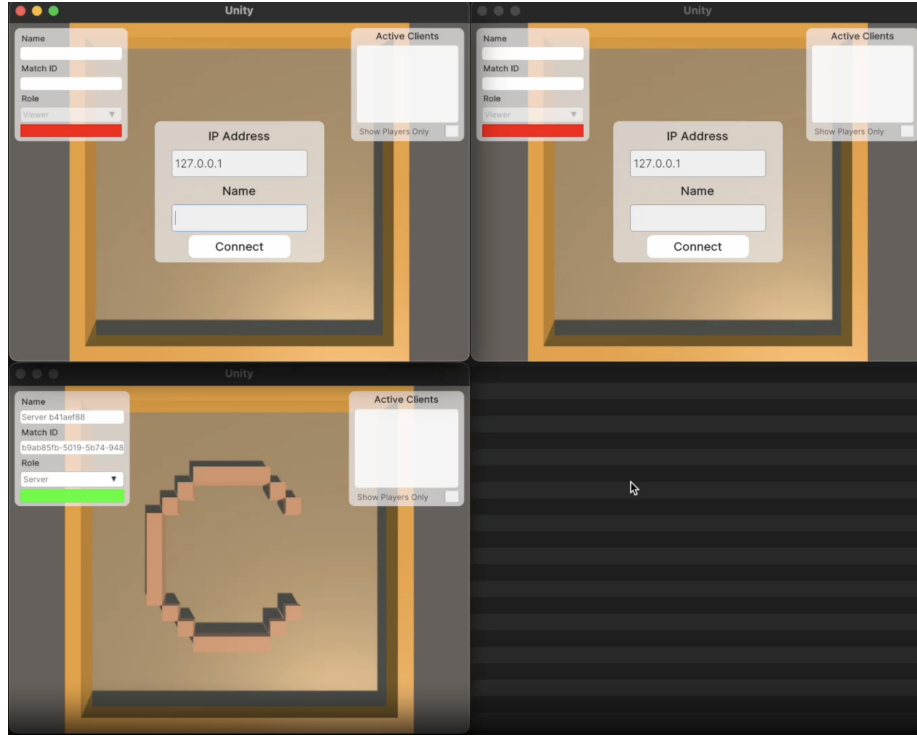# CREW Human-AI Teaming testbed

PDF version

Figure 1: CREW environment

CREW is a platform designed to facilitate Human-AI teaming research, engage collaborations from multiple scientific disciplines, with a strong emphasis on human involvement. It includes pre-built tasks for cognitive studies and Human-AI teaming with expandable potentials from our modular design. Following conventional cognitive neuroscience research, CREW also supports multimodal human physiological signal recording for behavior analysis. (source).

This platform supports Windows, macOS, and Linux. However, macOS prebuilt game environments does not work and will need to be rebuilt.

Installation

Compreshensive installation guide can be found https://generalroboticslab.github.io/crew-docs/getting_started/install.html, make sure to follow them closely. Please reach out to Aakash if you face any issues.

Once everything is installed, we can run the game with following steps:

1. Lauch docker desktop
2. Navigate to `crew-dojo/Nakama/` and run `bash run.sh`. This should run the nakama server and it is viewable at http://127.0.0.1:7351 The default username is `admin`. Default password is `password`.
3. Activate the conda environment with `conda activate crew`. If you face any issues make sure to add the path to the conda environment to your `~/.bash_profile` with `echo export PATH="/Users/nimrobotics/.local/bin:$PATH" >> ~/.bash_profile` and then run `source ~/.bash_profile`
4. Navigate to `crew-dojo/Builds` and a game of your choice, double click to run OR `open Unity.app` from the terminal.
5. To change game parameters, you can run `open Unity.app --args -DisableFirstCamera -DisableAccumuCamera` or `open Unity.app --args -DojoRecording -DojoRecordingFile YOURFILEPATH`. See here for a list of all possible parameters.
6. Change the map: Use unity UI or change `CREW/crew-dojo/Unity/Assets/Examples/HideAndSeek/Scrip` to change the map. You will need to rebuild the game after changing the map.