

Hezuo: Collaborative Coding

Presented by: Daniel Bowden, Hunter Nauman, Derek Taylor, Jacob Fung, Markus Sadowski, Michael Tran

Project Goal:

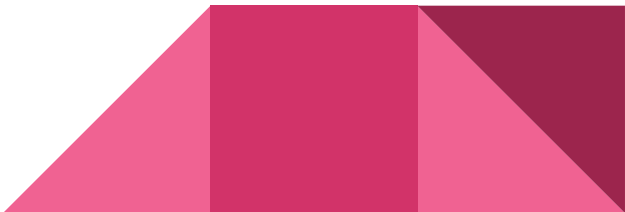
The goal of our project was to make an application that provides a good all-around solution to collaborative programming. It utilizes a peer-to-peer structure where whoever starts the session will act as the server. We based our application in Python, and connecting the peers to each other through websockets.



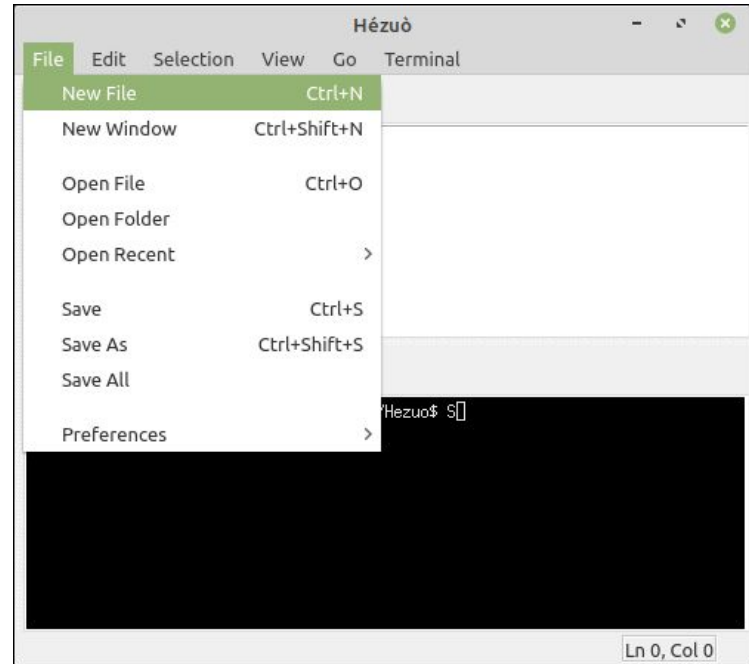
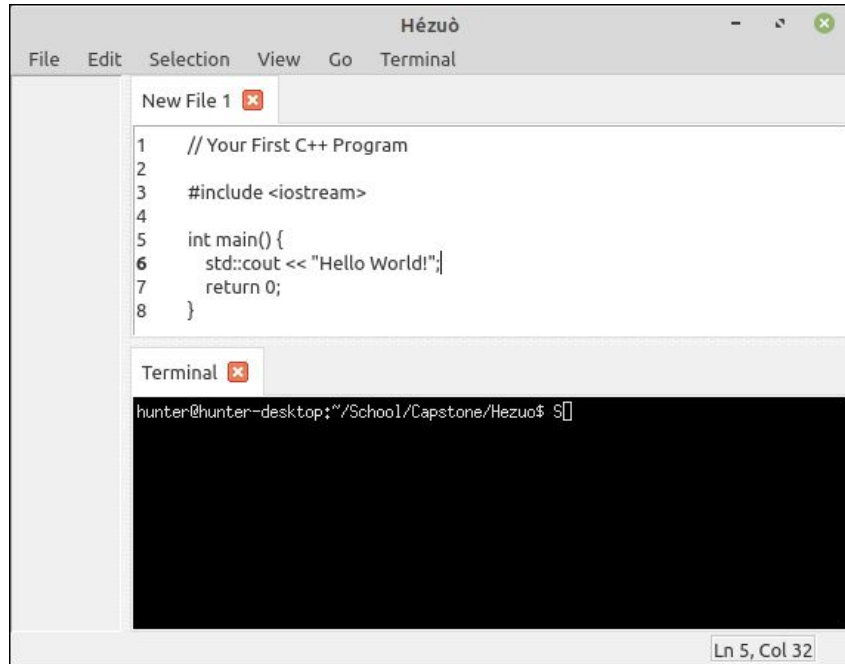
Front End Team

Team: Daniel, Jacob, Michael, Markus

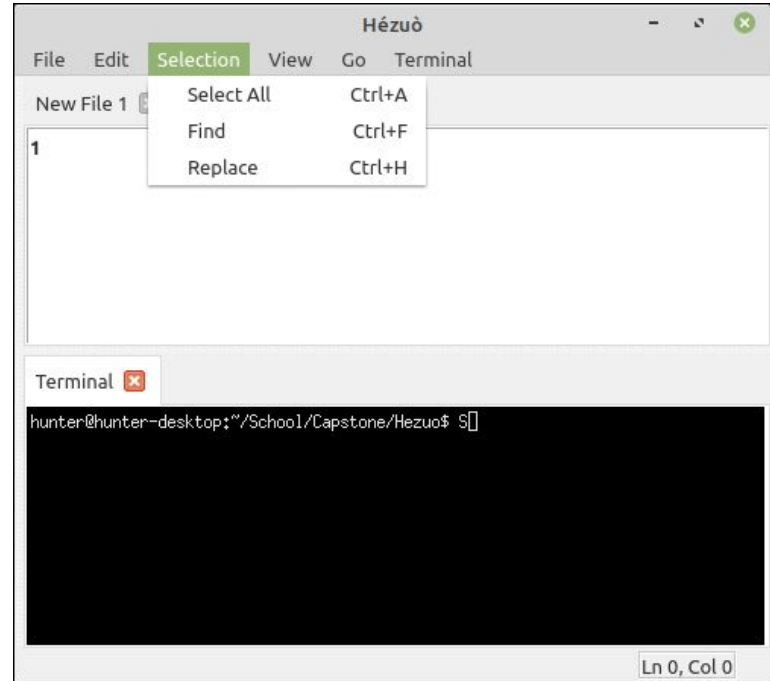
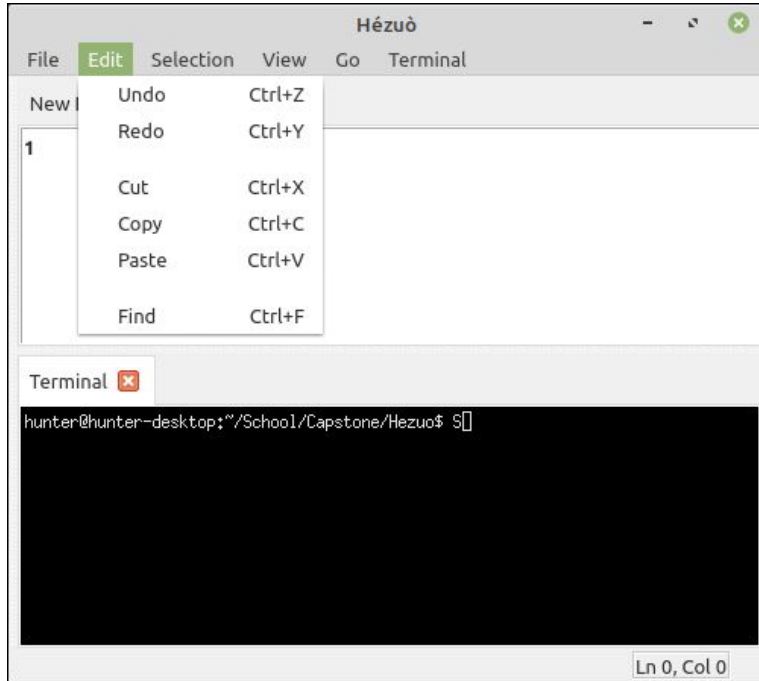
Objectives

- To create a functional GUI
 - Create a text editor
 - Add features to the text editor
 - Implement a terminal
 - Collaborate with Back End team to implement synchronization
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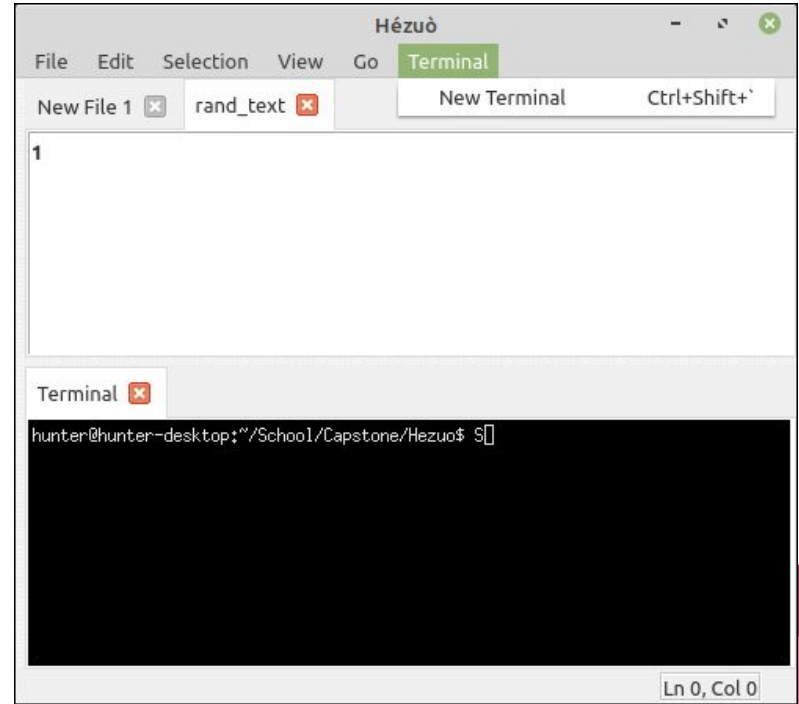
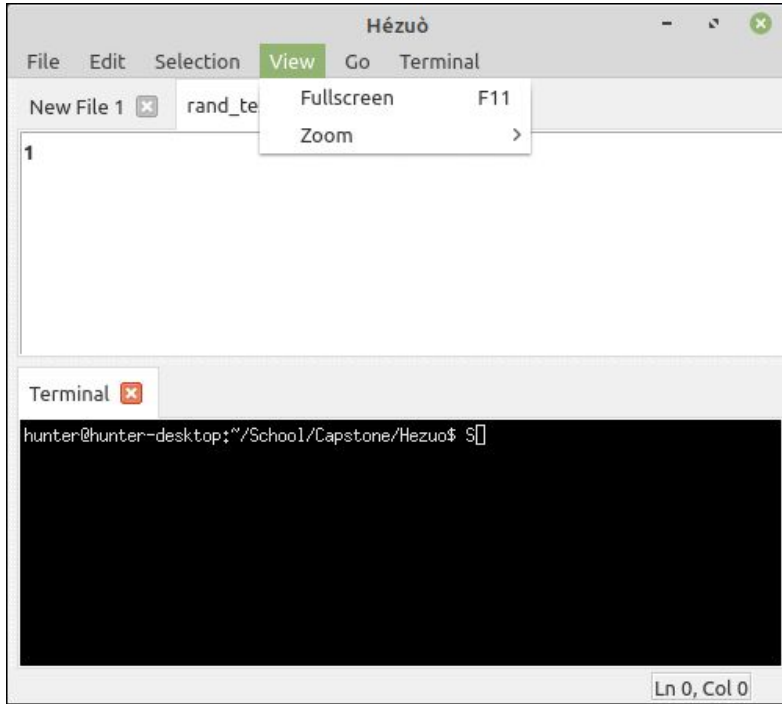
Current GUI



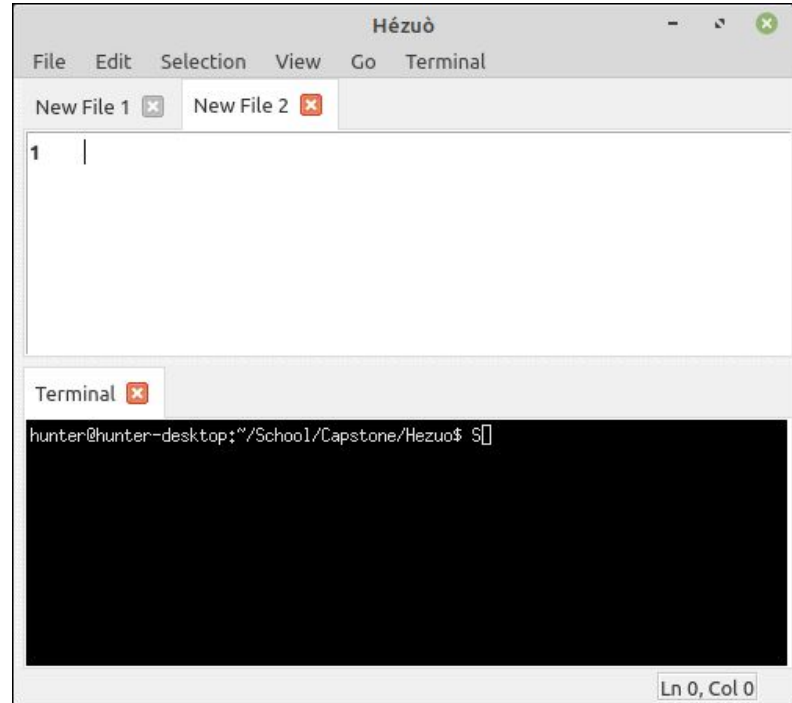
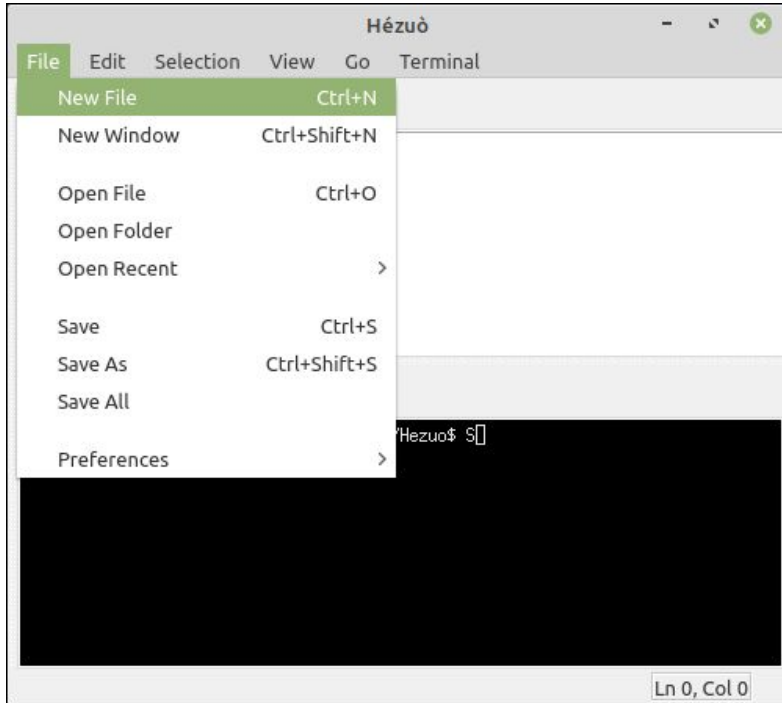
Current GUI (cont.)



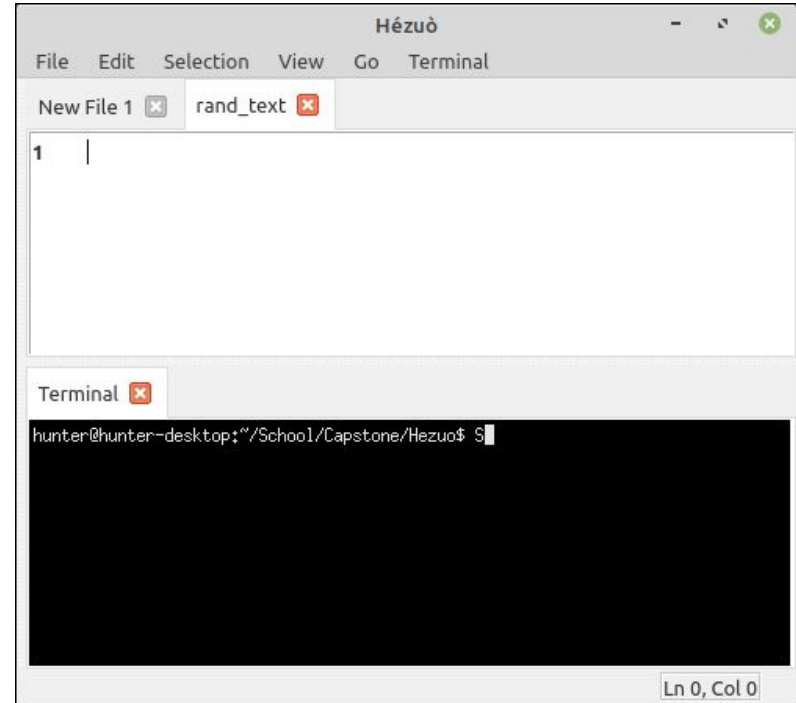
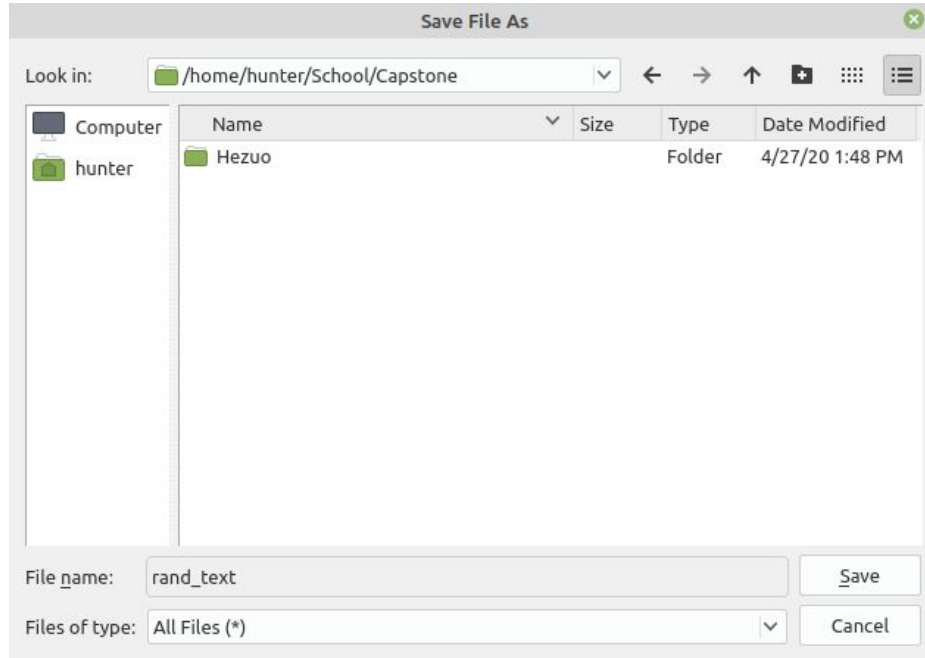
Current GUI (cont.)



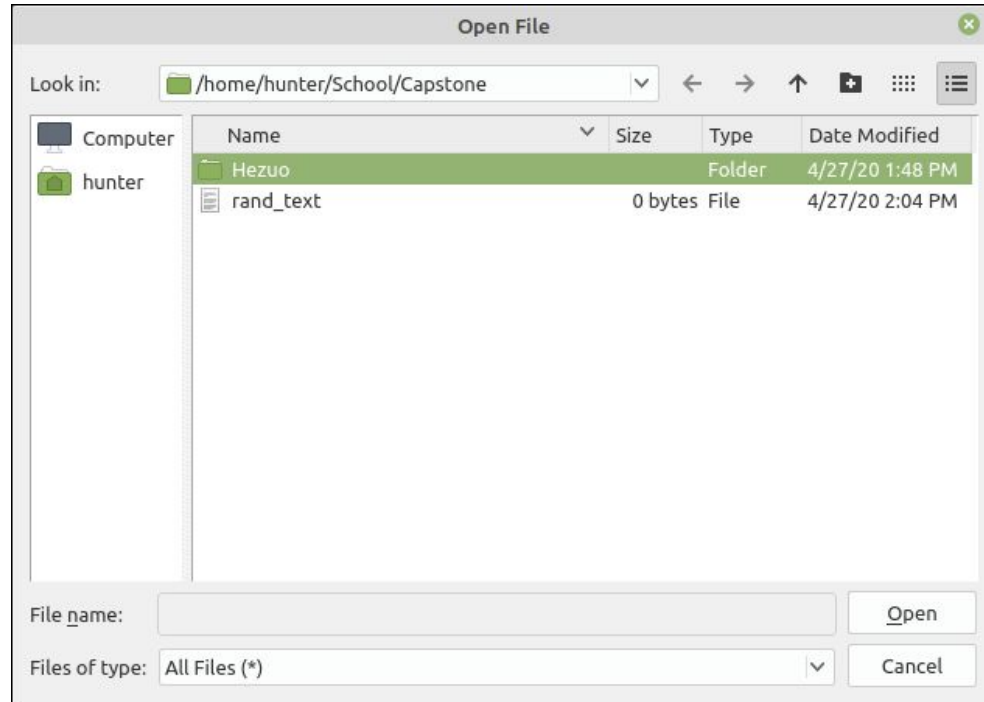
Current GUI (cont.)



Current GUI (cont.)



Current GUI (cont.)



Back End Team

Team: Hunter, Derek

Objectives

- Define protocol
- Research synchronization methods
- Begin implementation of simple synchronization
 - Websockets vs sockets
- Integrate synchronization into the GUI



Synchronization

```
Command Prompt - py_sync_server.py
D:\School\Capstone_2\Hezuo\sync>py sync_server.py
: This is an example of message passing using websockets
:
: _
```

```
Command Prompt - py_sync_client.py
D:\School\Capstone_2\Hezuo\sync>py sync_client.py
Connection established. Client correctly connected
Received message from server: This is an example of message passing using websockets
```

Protocol: write, update, delete, etc.



GUI Future Work

The goals that we set for this project were somewhat ambitious. While we have a functioning text editor that can create a terminal and have server-client interaction, they have yet to be compiled into a fully functional software. As a result, we haven't yet achieved "collaborative coding" or Hezuo as a fully collaborative software, but we plan on compiling the all aspects of the software into a fully functional software in the future. This would include porting our current synchronization scripts into the GUI and adding more functionality to the GUI.

