

CIS 598 Senior Project

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Online Complier

- Edit and compiles C code
- Allows user log in with credentials.
- Type in code in C, and we will run it in the backend

- Client
 - Javascript
 - Browser: Google Chrome
 - Data transfer: AJAX
- Server
 - Digital Ocean
 - gcc version 7.5
 - (Possible Websocket)

Wanna Learn Some C?

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Wanna Le

Hi!

username

Our secret word is

password

Sign Up

Log in

C?

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Log in Page

The screenshot shows a user interface for a compiler. On the left, there is a sidebar with a "File..." menu containing three items: "File...", "File...", and "File...". Below the menu is a list of recent files: "Console" and "Output". At the top right, there are two buttons: "Compile" and "Stop". The main area contains a code editor with the following C code:

```
int main()
{
    printf("Hello world");

    return 0;
}
```

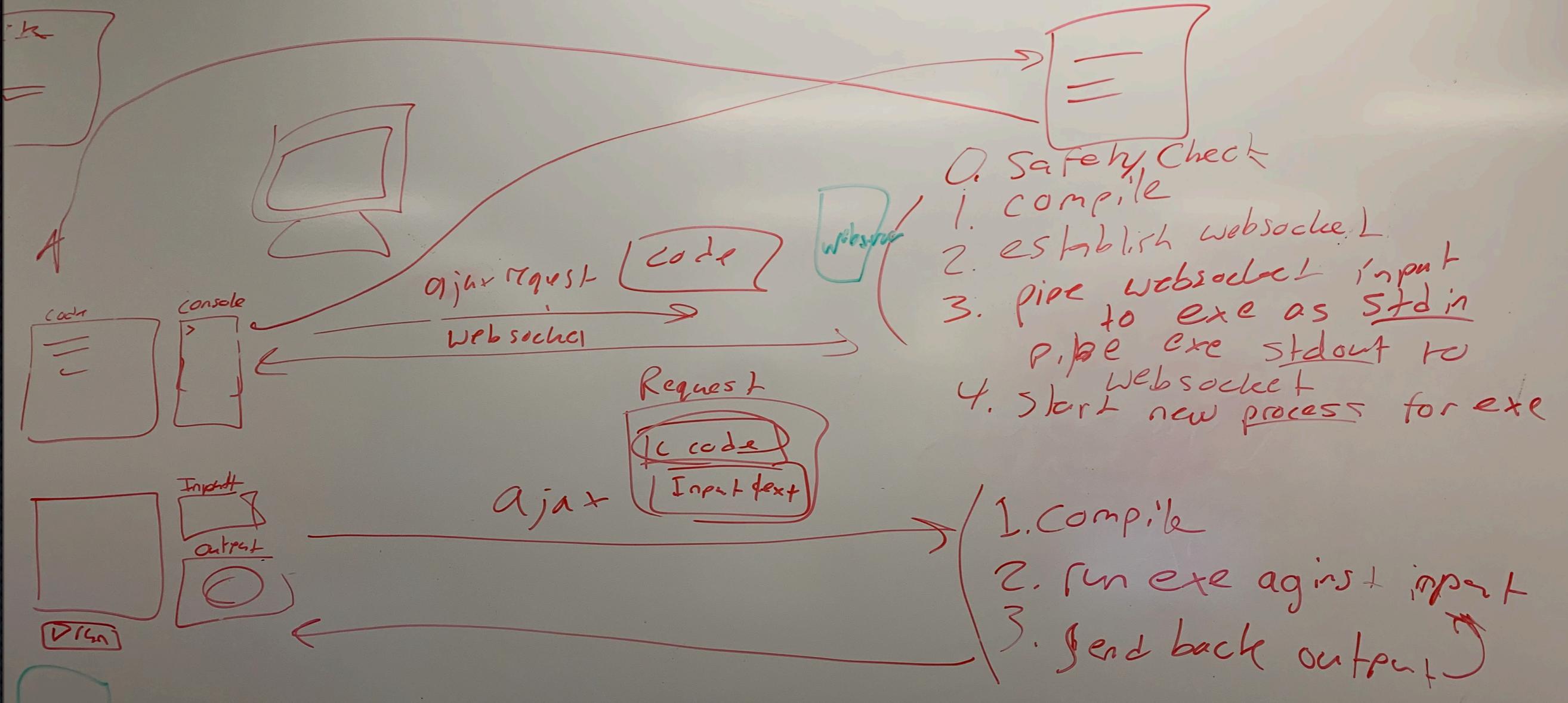
Compiler Page

The front-end needs to do

- Editing
- Logging in
- Compiling
- Signing up
- Displaying output
- Terminating the program
- (Possible) Resume the previous work.

The back-end needs to do

- Safety check
- Compile
- (Possible) Wait for input
- Return the result



Possible Factor to be Careful

- User may try to mess with the compiler.
 - Restrict the library they can use.
- User may unintentionally mess up the compiler with infinite loop.
 - Restrict the process running time. (Either from client for server)

Any Advices or Questions?

Thank you!