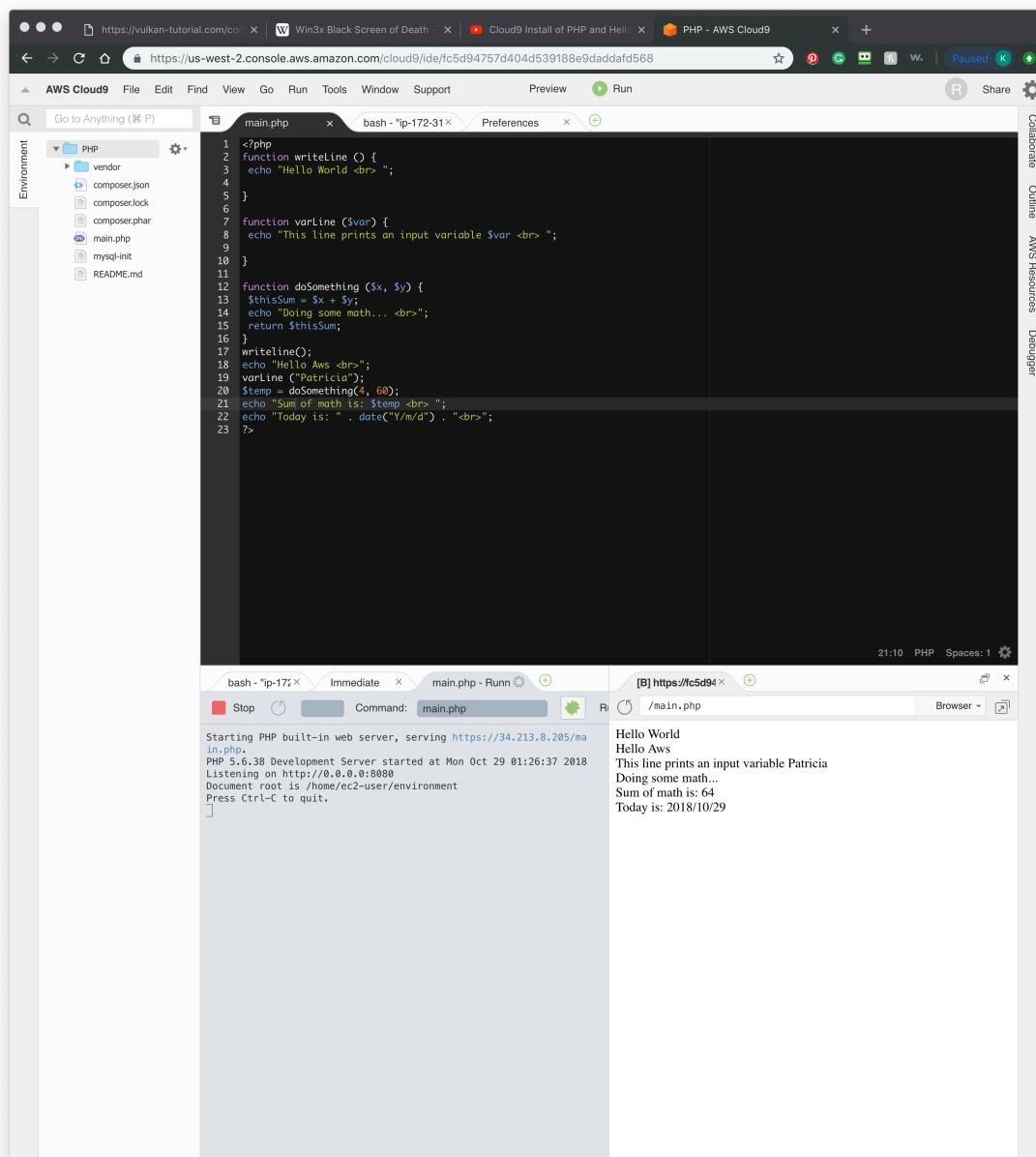


Project 1

1. In Cloud9, I had the most difficulty running my PHP script. Executing the C++ file was as easy as selecting the right compiler from the dropdown menu. The PHP script took a little bit of digging into in order to get used the build environment in Cloud9. Ultimately, I ran my PHP script with the built-in-server selection and then just hit the preview button on the top. Too easy! I had some trial-and-error trying to click on the urls in the command console. However, I soon found the run/preview to be effective. I did have to specify in the browser console my 'main.php' file to run.

PHP Script



C++ Script

The screenshot displays the AWS Cloud9 IDE interface. The top browser window shows the URL `https://us-west-2.console.aws.amazon.com/cloud9/ide/d4fbf7abb33f4a9295c9b67e73d3ace9`. The IDE's menu bar includes `AWS Cloud9`, `File`, `Edit`, `Find`, `View`, `Go`, `Run`, `Tools`, `Window`, and `Support`. The toolbar features `Preview`, `Run`, `Share`, and a settings icon. The left sidebar shows the `Environment` pane with a file tree containing `hello.php`, `HelloWorld.class`, `HelloWorld.hpp.o`, `HelloWorld.java`, `helloworld.php`, `main.cpp` (selected), `main.cpp.o`, and `README.md`. The main editor displays the `main.cpp` file, which contains a C++ implementation of a linked list. The code includes a `Node` struct, a `LinkedList` class with `addValue` and `popValue` methods, and a `main` function that creates a list, adds values, and prints them. The bottom pane shows the terminal output of running the program, which prints "Hello World!" and then a segmentation fault error: `bash: line 12: 12633 Segmentation fault $file.o`. The process exited with code 139. The status bar at the bottom indicates the runner is C++ in CWD mode.

```
21     Node *deleteMe = next;
22     next = next->next;
23     delete deleteMe;
24 } //end while
25 } //end ~LinkedList
26
27 void addValue (int val) {
28     Node *n = new Node();
29     n->x = val;
30     n->next = head;
31     head = n;
32 }
33
34 int popValue () {
35     Node *n = head;
36     int ret = n->x;
37     head = head-> next;
38     delete n;
39     return ret;
40 }
41
42 private:
43     Node *head;
44 }; //end class: LinkedList
45
46 int main()
47 {
48     cout << "Hello World!" << endl;
49
50     LinkedList list;
51
52     list.addValue(10);
53     list.addValue(3);
54     list.addValue(2);
55     list.addValue(4);
56     list.addValue(22);
57
58     cout<<list.popValue() <<endl;
59     cout<<list.popValue() <<endl;
60     cout<<list.popValue() <<endl;
61     cout<<list.popValue() <<endl;
62     cout<<list.popValue() <<endl;
63     cout<<list.popValue() <<endl;
64     cout<<list.popValue() <<endl;
65 }
66 }
```

```
Running /home/ec2-user/environment/main.cpp
Hello World!
22
4
2
3
10
bash: line 12: 12633 Segmentation fault $file.o

Process exited with code: 139
```

Java Script

```
1 import java.text.SimpleDateFormat;
2 import java.util.Date;
3 import java.io.*;
4 import java.net.*;
5
6
7
8
9 public class HelloWorld {
10     public static void main (String[] args) {
11         System.out.println("Hello, World");
12         printFunction("My name is Dolly");
13         addFunction(4, 5);
14         printTime();
15
16         //try to open a socket
17         Socket smtpSocket = null;
18         DataOutputStream os = null;
19         DataInputStream is = null;
20         try {
21             System.out.println("Opening socket...");
22             smtpSocket = new Socket("myHost", 25);
23             os = new DataOutputStream (smtpSocket.getOutputStream());
24             is = new DataInputStream (smtpSocket.getInputStream());
25             System.out.println("Socket opened on port 25");
26         }
27         catch (UnknownHostException e) {
28             System.err.println("Error: Unknown Host");
29         }
30         catch (IOException e) {
31             System.err.println("No I/O Connection");
32         }
33     }
34     private static void printFunction (String var) {
35         System.out.println (var);
36     }
37     private static void addFunction (int x, int y) {
38         int thisVar = x+y;
39         System.out.println("The sum is: " + thisVar);
40     }
41     private static void printTime () {
42         java.util.Date date = new java.util.Date();
43         System.out.println(date);
44     }
45 } //end class: HelloWorld
46
47
48
```

bash - "ip-172-31" x hello.php - Runn x helloworld.php - x HelloWorld.java - x

Run Command: HelloWorld.java Runner: Java CWD ENV

Building HelloWorld.java and running HelloWorld
Hello, World
My name is Dolly
The sum is: 9
Mon Oct 29 01:55:20 UTC 2018
Opening socket...
Error: Unknown Host

Process exited with code: 0

