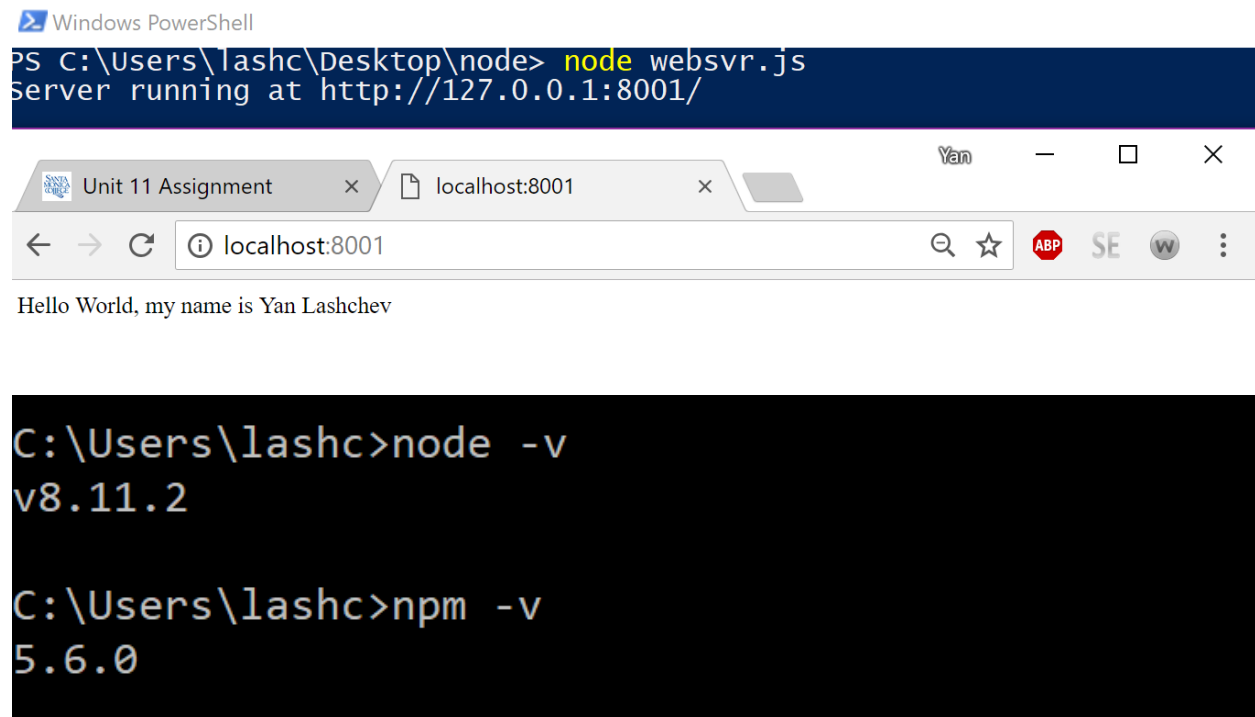


Node.JS is a runtime environment for server-side programming. Rather than utilizing different languages and methods of running client side and server-side scripting node.JS was creating to make programming more asynchronous. Rather than having multi-threaded event loops running constantly taking up memory and handing many processes can be very slow. Node.JS runs a single-thread event to take care of connections. The reason we learned callbacks is because with every new connection the callback is fired. Node.JS is non-blocking IO which means you do not need to wait for every function or operation to finish to start the new one. This allows smooth and easy way to grab, read, transfer, implement and so on with data. Other things like Node.JS are multi-threaded and the fact they are in different syntax makes it a little more difficult to put all together. But the biggest part of Node.JS is that is has nice package libraries that can be easily accessed to get a variety of tasks done.



The image shows a Windows PowerShell terminal window and a web browser. The PowerShell window displays the command `node webserv.js` and the output `Server running at http://127.0.0.1:8001/`. The web browser shows the page `localhost:8001` with the text `Hello World, my name is Yan Lashchev`. Below the browser, a separate terminal window shows the commands `node -v` and `npm -v` with their respective outputs `v8.11.2` and `5.6.0`.

```
Windows PowerShell
PS C:\Users\lashc\Desktop\node> node webserv.js
Server running at http://127.0.0.1:8001/

Unit 11 Assignment x localhost:8001 x
Hello World, my name is Yan Lashchev

C:\Users\lashc>node -v
v8.11.2

C:\Users\lashc>npm -v
5.6.0
```