Day 17 - Introduction to Node.js & Basics

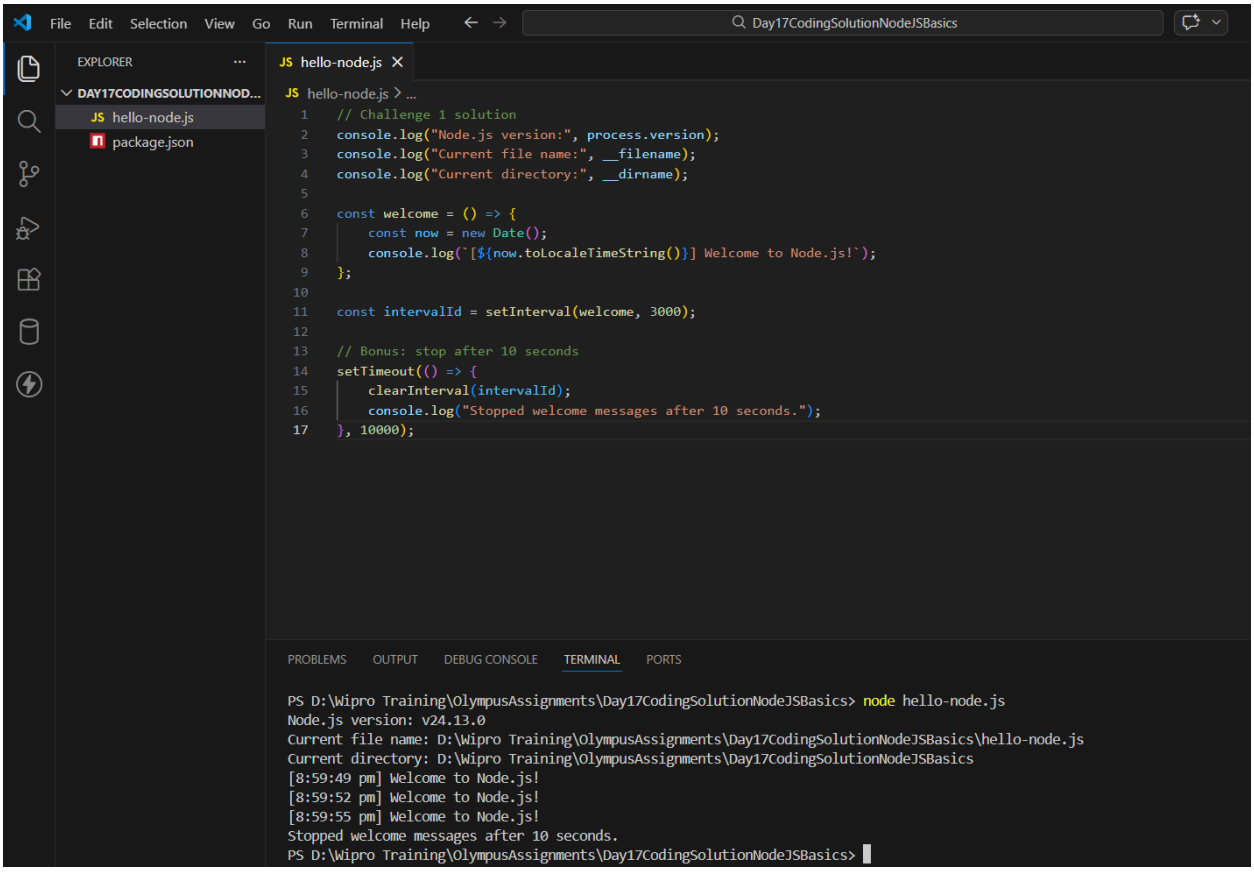
This report summarizes the three coding challenges completed as part of the Day 16 Node.js assignment. Each challenge demonstrates a key Node.js concept such as global objects, timers, CLI arguments, and external npm packages.

Challenge 1: Hello Node

This challenge demonstrates Node.js fundamentals. The program prints the Node version, file name, and directory path. It uses setInterval() to display a welcome message every 3 seconds and clearInterval() to stop the execution after 10 seconds.

Approach:

1. Used built-in global objects (__filename, __dirname).
2. Implemented setInterval() for periodic message display.
3. Used setTimeout() to clear the interval automatically.

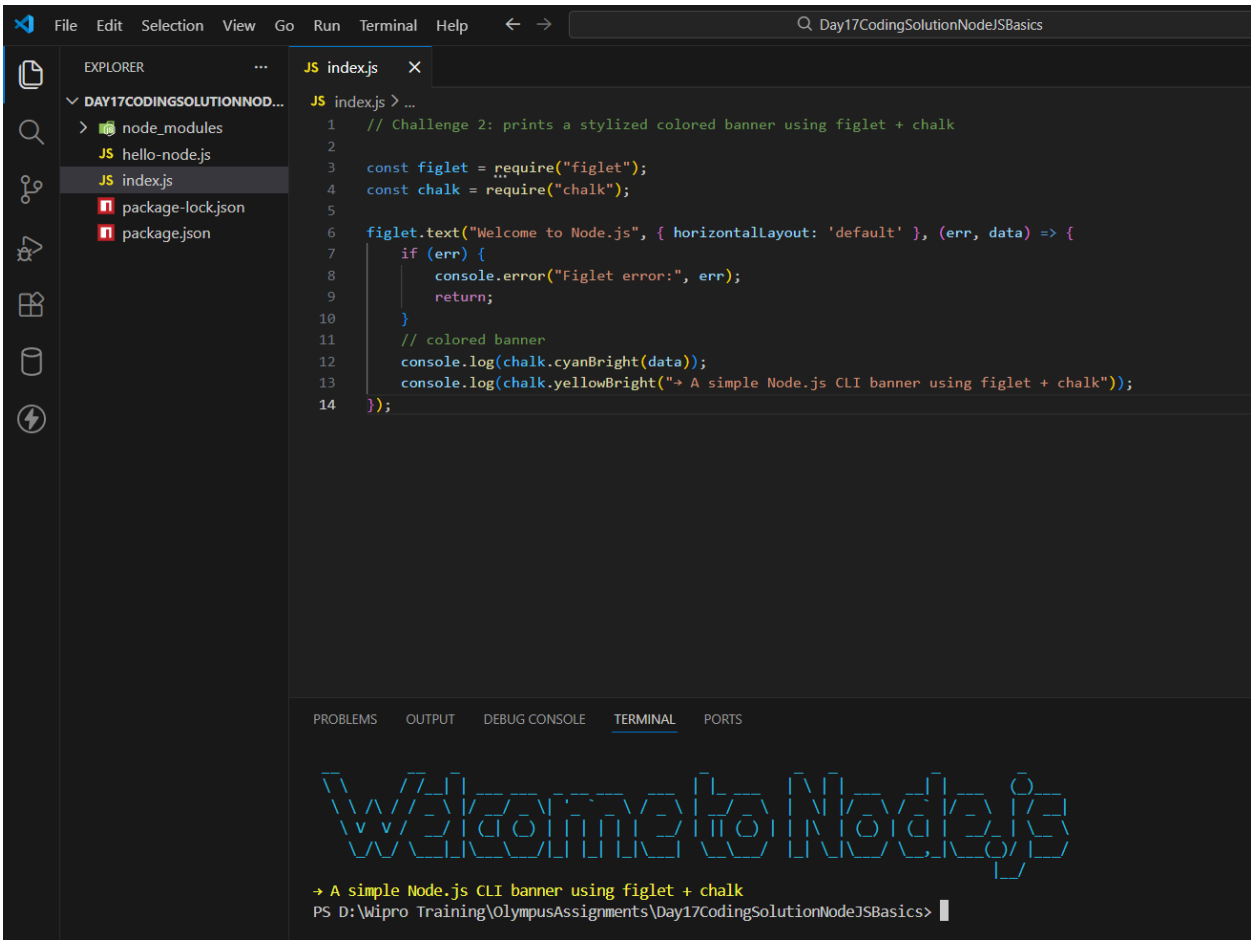


Challenge 2: Colorful Banner App

This challenge prints a colorful banner on the terminal using the figlet and chalk libraries. It demonstrates how to install and use external npm packages and how to create a custom npm start script.

Approach:

1. Imported figlet to generate stylized ASCII text.
2. Used chalk to apply colors to terminal output.
3. Configured an npm start script in package.json to execute index.js.

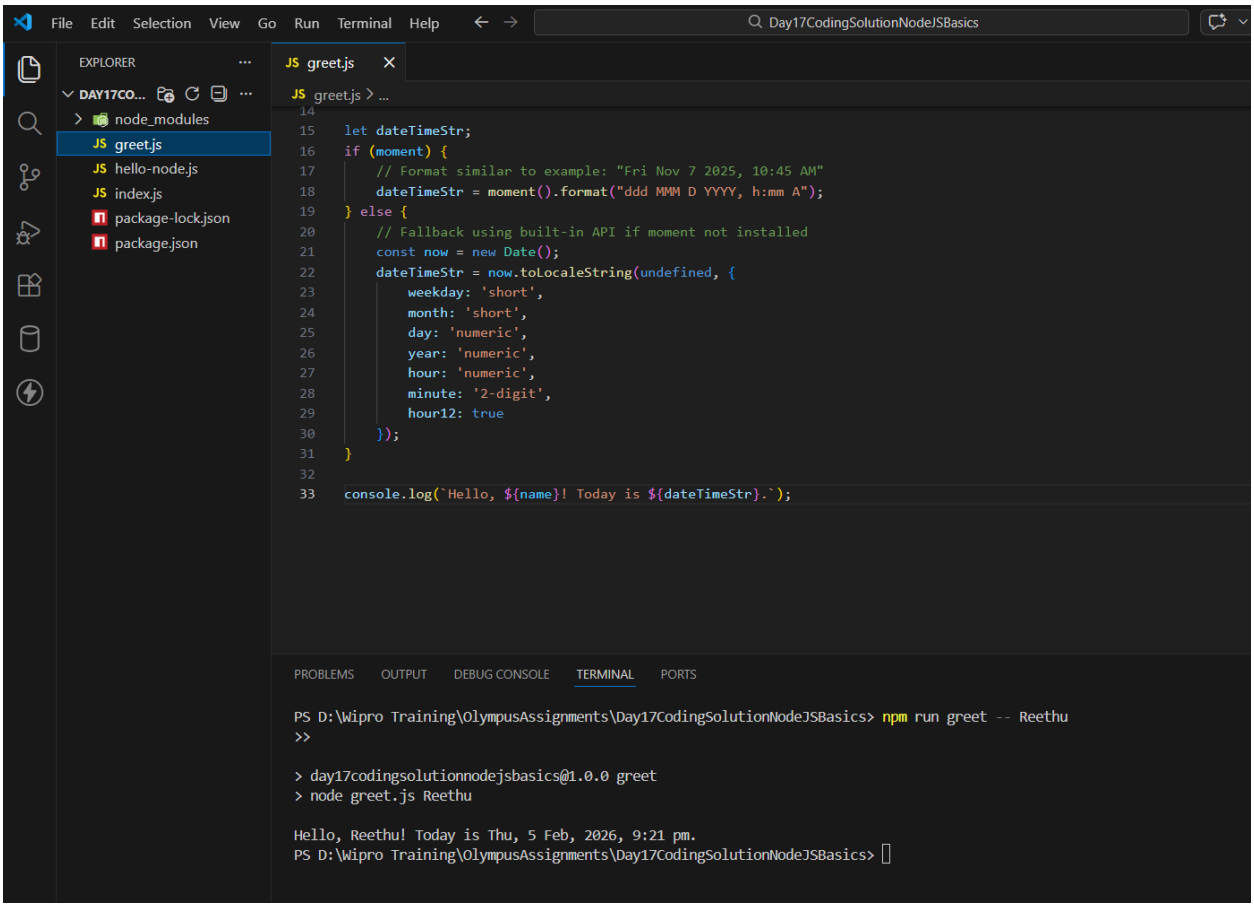


Challenge 3: CLI Greeting App

This challenge takes a user's name as a command-line argument and greets the user along with the current date and time. It uses the process.argv array to capture input and the moment library to format timestamps.

Approach:

1. Retrieved user input using process.argv.
2. Formatted date and time using moment().
3. Provided a fallback using JavaScript's built-in Date object if moment was not available.



Conclusion

All three challenges successfully demonstrate the fundamentals of Node.js, including working with global objects, timers, npm packages, and command-line interaction. This assignment provided practical experience in executing and managing Node.js scripts.