

Date: 11 June 2024

Day: Tuesday

Overview:

Day 5 of the internship was dedicated to deepening my understanding and practical application of the path and util modules in Node.js. These modules play crucial roles in managing file paths, directory structures, and providing utility functions for common development tasks.

Learning Objectives:

- **Path Module:**
 - Explored the path module in Node.js, which provides utilities for working with file and directory paths.
 - Learned how to manipulate paths, resolve path segments, and handle file path operations cross-platform.
 - Implemented techniques for joining paths (`path.join()`), resolving absolute paths (`path.resolve()`).

- **Directory Handling Operations:**
 - Explored and implemented essential directory operations including listing, creation, renaming, and deletion.

- Learned techniques for navigating directory structures and manipulating directories programmatically.

- **Specific Operations Covered:**

- **Directory Listing:** Utilized `fs.readdir()` to retrieve a list of files and subdirectories within a directory, enabling dynamic content management.
- **Directory Creation:** Implemented directory creation using `fs.mkdir()` to facilitate structured data storage and organization.
- **Renaming and Moving Directories:** Practiced renaming directories with `fs.rename()` and moving directories using `fs.rename()` across different paths, ensuring file system integrity and organization.
- **Directory Deletion:** Explored safe deletion of directories using `fs.rmdir()`, handling permissions and ensuring thorough cleanup processes.

JS Path&Util.js > ...

```
1 const path = require('path');
2 const util = require('util');
3 console.log(path.basename(__filename));
4 console.log(path.join(__dirname, './path/file'))
5 console.log(util.log(path.basename(__filename)))
```

Activities and Insights:

- Path Handling in Node.js:
- Practiced constructing and manipulating file paths using `path.join()` to ensure consistency and compatibility across different operating systems.
- Implemented path operations for directory management and file system interactions, considering edge cases such as handling relative and absolute paths effectively.