

Node.js Core Modules

Challenge 4: File System (fs) Module

User Story: As a content manager, I want to store user input into a file and read it back for confirmation.

```
Command Prompt
Directory of C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17
14-11-2025 14:59 <DIR> .
14-11-2025 14:54 <DIR> ..
14-11-2025 14:58 <DIR> challenge4-fs
14-11-2025 14:59 <DIR> challenge5-http
14-11-2025 15:00 <DIR> challenge6-events
0 File(s) 0 bytes
5 Dir(s) 869,480,472,576 bytes free

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17>cd challenge4-fs
C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge4-fs>dir
Volume in drive C is Windows-SSD
Volume Serial Number is CAB5-1089

Directory of C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge4-fs
14-11-2025 14:58 <DIR> .
14-11-2025 14:59 <DIR> ..
14-11-2025 15:00 895 writeRead.js
1 File(s) 895 bytes
2 Dir(s) 869,465,509,888 bytes free

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge4-fs>node writeRead.js
Data written successfully.
Reading file...
Node.js is awesome!

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge4-fs>|
```

Challenge 5: HTTP Module

User Story: As a backend developer, I want to serve a basic web page using Node.js without Express.

```
Command Prompt - node ser
Volume in drive C is Windows-SSD
Volume Serial Number is CAB5-1089

Directory of C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17
14-11-2025 14:59 <DIR> .
14-11-2025 14:54 <DIR> ..
14-11-2025 15:02 <DIR> challenge4-fs
14-11-2025 14:59 <DIR> challenge5-http
14-11-2025 15:00 <DIR> challenge6-events
0 File(s) 0 bytes
5 Dir(s) 869,368,279,040 bytes free

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17>cd challenge5-http
C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge5-http>dir
Volume in drive C is Windows-SSD
Volume Serial Number is CAB5-1089

Directory of C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge5-http
14-11-2025 14:59 <DIR> .
14-11-2025 14:59 <DIR> ..
14-11-2025 15:00 803 server.js
1 File(s) 803 bytes
2 Dir(s) 869,353,009,152 bytes free

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge5-http>node server.js
Server running at http://localhost:3000
node:_http_server:354
    throw new ERR_HTTP_HEADERS_SENT('write');
    ^

Error [ERR_HTTP_HEADERS_SENT]: Cannot write headers after they are sent to the client
    at ServerResponse.writeHead (node:_http_server:354:11)
    at Server.<anonymous> (C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge5-http\server.js:23:9)
    at Server.emit (node:events:508:28)
    at parserOnIncoming (node:_http_server:1186:12)
    at HTTPParser.parserOnHeadersComplete (node:_http_common:122:17) {
  code: 'ERR_HTTP_HEADERS_SENT'
}

Node.js v24.11.0
C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge5-http>node server.js
Server running at http://localhost:3000
```

Challenge 6: Events Module

User Story: As a developer, I want to simulate event-driven behavior (like a notification system).

```
Command Prompt
Error [ERR_HTTP_HEADERS_SENT]: Cannot write headers after they are sent to the client
    at ServerResponse.writeHead (node:_http_server:354:11)
    at Server.<anonymous> (C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge5-http\server.js:23:9)
    at Server.emit (node:events:508:28)
    at parserOnIncoming (node:_http_server:1186:12)
    at HTTPParser.parserOnHeadersComplete (node:_http_common:122:17) {
  code: 'ERR_HTTP_HEADERS_SENT'
}

Node.js v24.11.0

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge5-http>cd ..

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17>dir
Volume in drive C is Windows-SSD
Volume Serial Number is CAB5-1D89

Directory of C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17

14-11-2025  14:59    <DIR>          .
14-11-2025  14:54    <DIR>          ..
14-11-2025  15:02    <DIR>          challenge4-fs
14-11-2025  14:59    <DIR>          challenge5-http
14-11-2025  15:00    <DIR>          challenge6-events
                   0 File(s)              0 bytes
                   5 Dir(s)  869,270,536,192 bytes free

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17>cd challenge6-events

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge6-events>dir
Volume in drive C is Windows-SSD
Volume Serial Number is CAB5-1D89

Directory of C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge6-events

14-11-2025  15:00    <DIR>          .
14-11-2025  14:59    <DIR>          ..
14-11-2025  15:00             864 eventsDemo.js
                   1 File(s)              864 bytes
                   2 Dir(s)  869,252,751,360 bytes free

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge6-events>node eventsDemo.js
User John logged in.
User John logged out.
Session expired for John.

C:\Users\mindf\OneDrive\Desktop\Wipro-training-27\Challenges_17\challenge6-events>
```