

Lesson 06 Demo 04

Working with Try-Catch

Objective: To demonstrate the implementation of error handling using the try-catch block in JavaScript

Tools Required: Visual Studio Code and Node.js

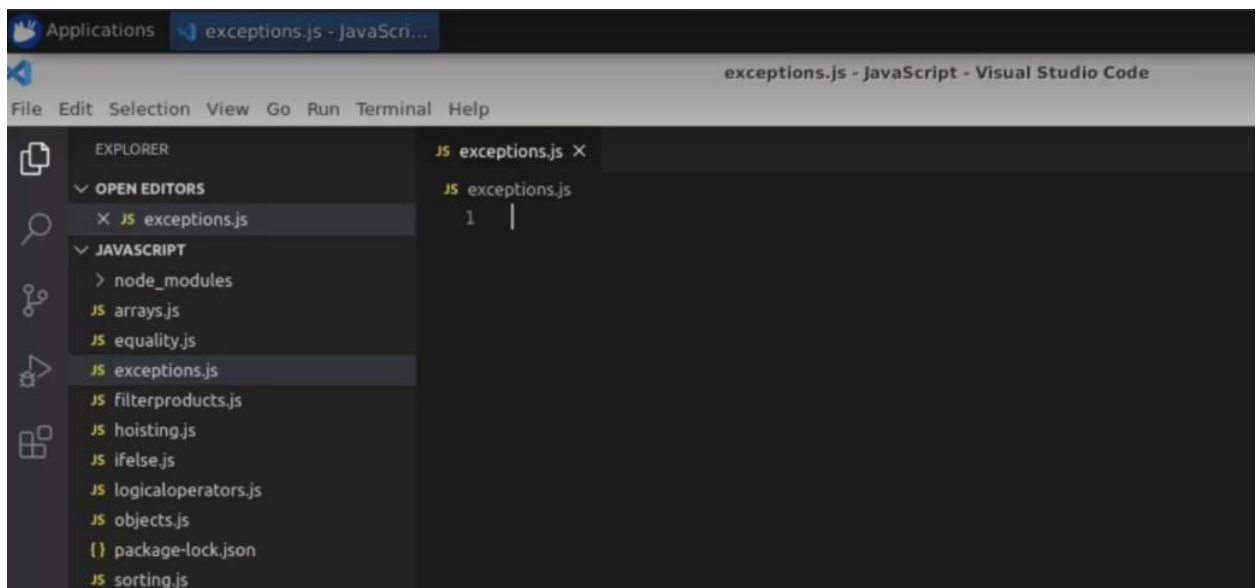
Prerequisites: None

Steps to be followed:

1. Implement error handling using the try-catch block

Step 1: Implement error handling using the try-catch block

- 1.1 Open Visual Studio Code and create a new JavaScript file named **exceptions.js**



- 1.2 Declare the **getCashBack** function, add an array of random cashback, and implement logic to return cashback based on the lucky number

```
JS exceptions.js X
JS exceptions.js > getCashBack
1 function getCashBack(luckyNumber){
2   let cashBacks = [20, 34, 12, 44, 56, 67, 89, 90, 88];
3   return cashBacks[luckyNumber];
4 }
```

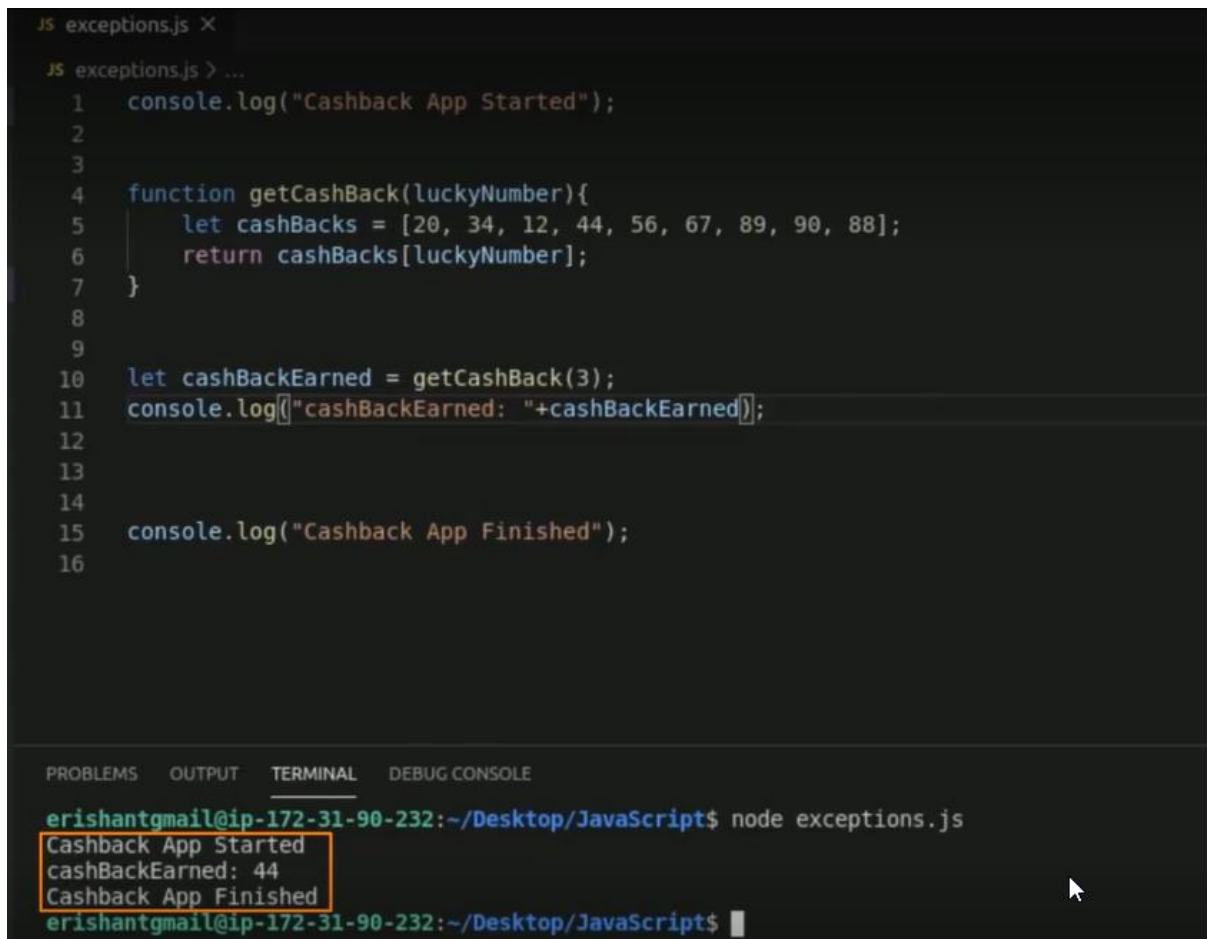
- 1.3 Log **Cashback App Started** at the beginning of the program

```
JS exceptions.js ●
JS exceptions.js > ...
1 console.log("Cashback App Started");
2
3   | |
4 function getCashBack(luckyNumber){
5   let cashBacks = [20, 34, 12, 44, 56, 67, 89, 90, 88];
6   return cashBacks[luckyNumber];
7 }
```

- 1.4 Call the **getCashBack** function with a specific lucky number and log the cashback earned.
Log **Cashback App Finished** at the end of the program

```
JS exceptions.js X
JS exceptions.js > ...
1  console.log("Cashback App Started");
2
3
4  function getCashBack(luckyNumber){
5      let cashBacks = [20, 34, 12, 44, 56, 67, 89, 90, 88];
6      return cashBacks[luckyNumber];
7  }
8
9
10 let cashBackEarned = getCashBack(3);
11 console.log("cashBackEarned: "+cashBackEarned);
12
13
14
15 console.log("Cashback App Finished");
```

1.5 Run the program



The screenshot shows a code editor with a file named `exceptions.js`. The code defines a `getCashBack` function that takes a `luckyNumber` and returns a value from an array. It then calls this function with the value 3 and logs the result. The terminal below shows the command `node exceptions.js` being executed, with the output `Cashback App Started`, `cashBackEarned: 44`, and `Cashback App Finished`. The output lines are highlighted with an orange box.

```
JS exceptions.js X
JS exceptions.js > ...
1  console.log("Cashback App Started");
2
3
4  function getCashBack(luckyNumber){
5      let cashBacks = [20, 34, 12, 44, 56, 67, 89, 90, 88];
6      return cashBacks[luckyNumber];
7  }
8
9
10 let cashBackEarned = getCashBack(3);
11 console.log("cashBackEarned: "+cashBackEarned);
12
13
14
15 console.log("Cashback App Finished");
16

PROBLEMS  OUTPUT  TERMINAL  DEBUG CONSOLE
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node exceptions.js
Cashback App Started
cashBackEarned: 44
Cashback App Finished
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$
```

You will see the log messages and the cashback value returned from the `getCashBack` function.

- 1.6 Surround the code that may throw an error with a try-catch block, adding a catch block to manage the error and logging appropriate error messages

```

JS exceptions.js X
JS exceptions.js > ...
1 console.log("Cashback App Started");
2
3
4 function getCashBack(luckyNumber){
5     let cashBacks = [20, 34, 12, 44, 56, 67, 89, 90, 88];
6     if(cashBacks[luckyNumber]){
7         return cashBacks[luckyNumber];
8     }else{
9         //return 0;
10        let error = Error("Inavlid Lucky Number");
11        throw error;
12    }
13 }
14
15 try{
16     let cashBackEarned = getCashBack("thirteen");
17     console.log("cashBackEarned: "+cashBackEarned);
18 }catch(e){
19     console.log("Something went wrong "+e);
20 }
21
22

```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE

```

at Object.Module._extensions..js (internal/modules/cjs/loader.js:1158:10)
at Module.load (internal/modules/cjs/loader.js:986:32)
at Function.Module._load (internal/modules/cjs/loader.js:879:14)
at Function.executeUserEntryPoint [as runMain] (internal/modules/run_main.js:71:12)
at internal/main/run_main_module.js:17:47
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node exceptions.js
Cashback App Started
Something went wrong Error: Inavlid Lucky Number
Cashback App Finished
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

By following the above steps, you have successfully implemented error handling in the Cashback App, allowing it to manage unexpected errors and exceptions without interrupting the program's execution.