

30_days_of_Javascript

Day 1 1: Promises and Async/Await

Tasks/Activities:

Activity 1: Understanding Promises

- **Task 1:** Create a promise that resolves with a message after a 2-second timeout and log the message to the console.
- **Task 2:** Create a promise that rejects with an error message after a 2-second timeout and handle the error using `.catch()`.

Activity 2: Chaining Promises

- **Task 3:** Create a sequence of promises that simulate fetching data from a server. Chain the promises to log messages in a specific order.

Activity 3: Using Async/Await

- **Task 4:** Write an async function that waits for a promise to resolve and then logs the resolved value.
- **Task 5:** Write an async function that handles a rejected promise using try-catch and logs the error message.

Activity 4: Fetching Data from an API

- **Task 6 :** Use the fetch API to get data from a public API and log the response data to the console using promises.
- **Task 7 :** Use the fetch API to get data from a public API and log the response data to the console using async/await.

Activity 5: Concurrent Promises

- **Task 8 :** Use `Promise.all` to wait for multiple promises to resolve and then log all their values.
- **Task 9 :** Use `Promise.race` to log the value of the first promise that resolves among multiple promises.

Feature Request:

1. **Promise Creation Script:** Write a script that demonstrates creating and handling promises, including both resolved and rejected states.
2. **Promise Chaining Script:** Create a script that chains multiple promises and logs messages in a specific sequence.
3. **Async/Await Script:** Write a script that uses async/await to handle promises and includes error handling with try-catch.
4. **API Fetch Script:** Create a script that fetches data from a public API using both promises and async/await, and logs the response data.
5. **Concurrent Promises Script:** Write a script that uses `Promise.all` and `Promise.race` to handle multiple promises concurrently and logs the results.

Achievement:

By the end of these activities, students will:

- Understand and create promises, including handling resolved and rejected states.
- Chain multiple promises to perform sequential asynchronous operations.
- Use async/await to handle asynchronous code more readably.
- Fetch data from public APIs using both promises and async/await.
- Manage multiple concurrent promises using `Promise.all` and `Promise.race`.