

Exercise: Handling Promise States - Borrowing a Book

Objective: Create TypeScript code to simulate borrowing a book from a library and demonstrate handling different Promise states.

Outline:

1. Define TypeScript Code:

- Create `library.ts` in a code editor and write the TS code for the **`borrowBook(bookId:number)`** function and the two usages one to fulfill the Promise and one to reject the Promise

2. Code the `borrowBook` Function:

- Define the **`borrowBook`** function to simulate borrowing a book from a library.
- The **`borrowBook(bookId:number)`** function returns a Promise that simulates borrowing a book from a library. It resolves if the book is available and rejects if the book is not available.
- Assume that you have array of `availableBooks = [1,2,3]`.
- Based on the `bookId` passed, if the `bookId` exists in the array resolve with a message ``Book ${bookId} is successfully borrowed.`` otherwise reject with ``Book ${bookId} is not available in the library.``

3. Handle a Fulfilled Promise Usage 1:

- Create usage 1 to demonstrate handling a fulfilled Promise using **`.then()`**.
- Borrow a book that is available (e.g., **`bookIdToBorrow = 2`**) and log the success message in the **`.then()`** handler.

4. Handle a Rejected Promise Usage 2:

- Create Usage 2 code to demonstrate handling a rejected Promise using **`.catch()`**.
- Borrow a book that is not available (e.g., **`bookIdToBorrowInvalid = 4`**) and log the error message in the **`.catch()`** handler.