

JavaScript Functions and Array Methods

1. Write a function called `isEven` that takes in a number as a parameter and returns `true` if the number is even, and `false` otherwise.

2. Convert the following function into an arrow function:

```
function capitalizeWords(sentence) {  
  return sentence.split(" ").map(function(word) {  
    return word.charAt(0).toUpperCase() + word.slice(1);  
  }).join(" ");  
}
```

3. Write an arrow function called **getMax** that takes in an array of numbers as a parameter and returns the maximum number in the array.

4. Write a function called **printSquares** that takes an array of numbers as input and uses the **forEach** method to print the square of each number.

5. Write a function called **getDoubledValues** that takes an array of numbers as input and uses the **map** method to return a new array with each number doubled.

6. Write a function called **getEvenNumbers** that takes an array of numbers as input and uses the **filter** method to return a new array with only the even numbers.

Country Guide App

Country Guide app: Build an Express server that fetches country data from a country API based on user input (such as country name). Display the country information to the user. Apply basics of routing.

Requirements:

1. **User Input Handling**: The application should accept user input to fetch relevant information.
2. **Express Server Setup**: Implement an Express server to handle HTTP requests and responses.
3. **API Integration**: Connect to a country API to fetch detailed information based on the user-provided country name.
4. **Data Display**: Display the retrieved country information, including details such as population, capital, currency, and more.
5. **Routing Implementation**: Apply basic routing concepts to navigate between different parts of the application seamlessly.

Recipe Finder

Description: In this project, you will create a recipe finder application that allows users to search for recipes based on the ingredients they have. The application will fetch recipe data from a recipe API and display the matching recipes dynamically on the user interface.

Requirements:

User Interface:

Design a visually appealing and user-friendly interface using HTML and CSS.

Include an input field where users can enter the ingredients they have.

Display the search results with the matching recipes, including recipe names, images, and a summary.

Backend API:

Choose a recipe API service provider (such as Spoonacular, Edamam, or Food2Fork).

Use JavaScript (AJAX or Fetch API) to make HTTP requests to the recipe API and retrieve recipe data.

Pass the user-entered ingredients as parameters in the API request.

Handle the API response and extract the relevant recipe information.

Data Presentation:

Use JavaScript (DOM manipulation) to dynamically update the user interface with the fetched recipe data.

Display the recipe names, images, and summaries in a visually appealing manner.

OPTIONAL-Implement a way to view the full recipe details, either by expanding the card or navigating to a separate page.

Error Handling:

Implement error handling mechanisms for cases such as invalid user inputs or API request failures.

Display appropriate error messages to the user when necessary.

This project will allow you to practice HTML, CSS, and JavaScript skills, as well as API integration and dynamic data manipulation. It provides an opportunity to create a useful application for users who want to find recipes based on the ingredients they have on hand.