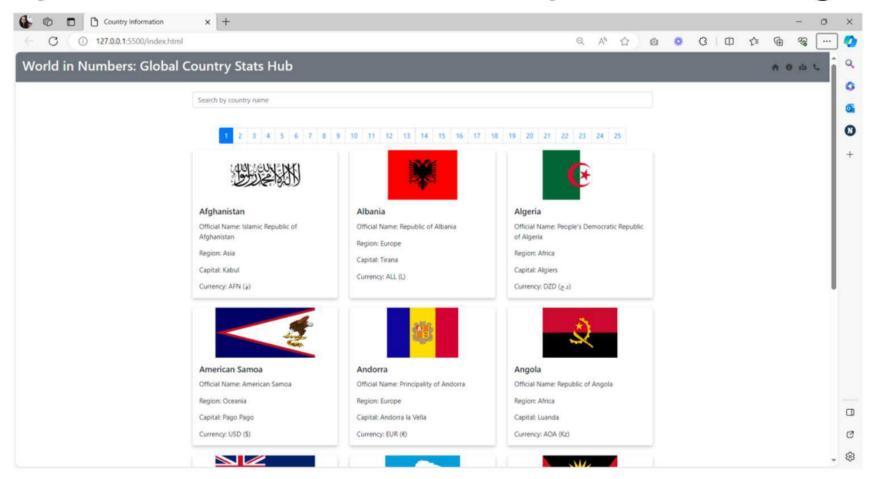
## **Snapshot of an Interactive and Responsive Web Page**



- For the web page viewed, how much time will you take to design
  - Interactive and Responsive Content
    - With country information fetched by making call to 3<sup>rd</sup> Party API?
    - With a responsive grid layout to display the details?
    - That displays the details of each country in Card layout?
    - Enabled with pagination to scroll through countries?
    - With search functionality to quickly retrieve a country's details?









# Let's Estimate Time Required

| Feature  | Time Required | Remarks |
|--|---------------|---------|
| Interactive web page to fetch country details by making request to 3 <sup>rd</sup> party API |               |         |
| Responsive grid layout to display country info   |               |         |
| Display details of each country in a card layout   |               |         |
| Pagination for scrolling through countries information                                       |               |         |
| Search functionality for quick retrieval of specific country's details                       |               |         |

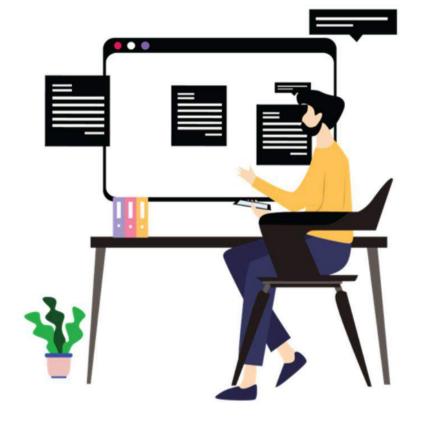




# Is there a way so that the time taken be reduced to half or less than half?



# **Develop Interactive** and Responsive Web Page using **ChatGPT**

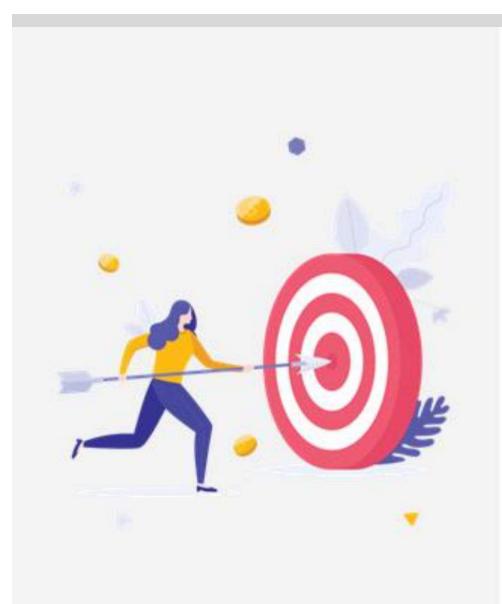












## **Learning Objectives**

- **Revisit ChatGPT**
- Understand problem statement for developing responsive and interactive web page
- Write prompts to accomplish the given task
- Create code documentation
- Summarize benefits and limitations of working with **ChatGPT**







What is ChaGPT?

What is Prompt in ChatGPT?

How was the previous experience with ChatGPT?









### **Problem Statement**

Create an interactive web page that fetches and displays information about countries using an external API. The goal is to design a user-friendly web page that allows users to explore details about various countries, search for specific countries by their official names, and navigate through the information seamlessly. The web page should be designed using Bootstrap's grid system for responsiveness and should adhere to modern web design principles.





## Required Skill Set

- Design responsive web page using:
  - HTML5, CSS3, Bootstrap
- Develop interactive web page that should:
  - Make HTTP request to external REST API using Axios
  - Handle asynchronously HTTP response using Promise
    - On success, perform DOM manipulation to display fetched details
    - On error, display different error message for different HTTP Status code received with the response







- Was the prompt effective?
- What information was missing in the prompt?
  - Responsiveness not mentioned
  - Which details about the country should be displayed is not mentioned
  - Layout structure is not mentioned
  - No mention for header / footer requirement
  - Search functionality not mentioned









- Was the prompt effective?
- What information was missing in the prompt?
  - How to implement responsiveness is not mentioned
    - Using bootstrap / media queries?
  - Layout structure is not mentioned
  - Search functionality not mentioned
  - No mention for the pagination implementation











- Was the prompt effective?
- What information was missing in the prompt?
  - Layout structure with bootstrap grid system not mentioned
  - How to handle async requirements is not mentioned
  - No mention regarding displaying countries in sorted order





## **List of Prompts**

- Main prompt
  - Generate separate .html, .css and .js code for requirements given below:
    - Design responsive and interactive web page that fetches common name, official name, region, capital, currency, capital, flag image of all countries from the api https://restcountries.com/v3.1/all using Promise with then and catch and Axios.
    - Use bootstrap grid system to display country details
    - The countries should be sorted by their official name
    - Details of each country should be displayed using bootstrap card
    - The card should be divided into two parts, one part should display flag of the country and the other part should display the country details.
    - The page should allow users to search for country by its official name
    - A page should display maximum of 10 countries. Implement pagination to display all country details





## **List of Prompts**

- Additional Prompts (one at a time)
  - Ensure bootstrap cdn is used for responsiveness
  - Provide complete code with all cdns
  - Countries are not sorted by their common name
  - Cards are too big in size
  - The search box and left column of the cards are not aligned
  - The pagination links should be displayed as numbers
  - The pagination links are not getting displayed as buttons and are not rendered in a row







- Was this prompt effective?
- Did ChatGPT fulfil all the requirements stated in the prompt or did it miss out the requirements?





Menu

## Summarizing...

- Benefits
  - Improvement in Productivity:
    - Could you develop the desired web page in less than estimated time of 150 mins.
- Limitations
  - Prompt Effectiveness
    - Incomplete or unclear information in prompt will have counter effect on productivity
  - Reliability
    - Response from ChatGPT needs to be verified and validated
    - ChatGPT should be used once the technical competency is achieved in relevant technologies





## Summarize Benefits of Working with ChatGPT

- Reduced time
- Well commented code
- Quick at refactoring





## Summarize Limitations of Working with ChatGPT

- Code needs to be tested to ensure
  - Required output is generated
  - All requirements are fulfilled
- Code needs to be validated to ensure
  - Best practices are followed
  - Design principles are implemented



