

King Abdulaziz University

Faculty of Computing & Information Technology
Information Technology Department

Course: CPIT-405 (Internet Applications)

Semester: Fall 2025

Assignment 2:

Fetch & Display Data from Public APIs

Submission Deadline: 13-11-2025

Objective

The aim of this project is to help you understand how to interact with public APIs using JavaScript's fetch API. You will build a small web application that fetches data from any free public API of your choice, displays the data on a webpage, and includes at least one input interaction such as a search box or a button to fetch new data.

Project Requirements

1. Use of JavaScript Fetch API

- Use JavaScript to fetch data from any free public API.
- You can pick any API you like, as long as it does not require authentication (for simplicity).

2. Data Display

- o Display the fetched data clearly and neatly in your HTML page.
- Use appropriate HTML elements to present the information in a user-friendly manner (e.g., lists, tables, cards).

3. User Interaction

- o Include at least one input element that allows user interaction:
 - This could be a search input (e.g., typing a university name to search using the API: http://universities.hipolabs.com/search?name=king)
 - Or a button to fetch new data (e.g., clicking a button to get a new random user using the API: https://randomuser.me/api).
- Based on the user's input or action, update the displayed data accordingly.

4. Frontend Only

- This is a **frontend-only** project no backend or database is required.
- All work should be done using HTML, CSS, and JavaScript. You may use ReactJS if you prefer.

Examples & API Suggestions

If you are not sure where to start, here are a few beginner-friendly APIs and examples:

• Random User Generator:

API: https://randomuser.me/api

Example Project: https://randomuser.me/

→ This page displays a random fake user profile with their name, photo, address, etc. every time it is loaded or refreshed. You can create something similar using the API and a "Generate User" button.

University Search API:

API: http://universities.hipolabs.com/search?name=king

- → This API allows you to search for universities by name. The name parameter is a query parameter for example:
 - o name=king returns universities that include the word "king"
 - o name=harvard returns Harvard University, if available

• More APIs to Explore:

- o https://apipheny.io/free-api/
- https://github.com/public-apis/public-apis

Submission Requirements

- Upload the project to **GitHub Pages** and include the live link in the submission.
- Submit a **ZIP file** containing all project files.
- Name the ZIP file as **your student ID.zip** (e.g., 12345678.zip).
- Upload the ZIP file to the **Microsoft Teams** section of the course.

Grading Rubric

Your project will be evaluated based on the following criteria. Use the table below to self-assess your work.

| Criterion | Mark |
|--|------|
| Successfully fetches data from an API | 0.5 |
| Displays data clearly and meaningfully | 0.5 |
| Implements interactive input (such as an input text field or a button to fetch new data) | 0.5 |
| GitHub Pages live link provided | 0.5 |
| Total | / 2 |