API List with Descriptions and Project Instructions

Students are required to analyze all the APIs listed below. Choose any one API from the list and design a website using ReactJS that replicates the respective reference website mentioned for that API (i.e., design it to be identical in structure, layout, and functionality). At the end of the project, integrate and consume the chosen API to add dynamic features and complete the project.

The project is divided into a 6-week task breakdown to guide students on what to accomplish each week. Students will start with static design using HTML, CSS, and Bootstrap in the initial weeks, then transition to ReactJS from Week 3 onwards:

Week 1 (18/08/2025 – 23/08/2025): Research and Initial Static Design

- Analyze all the APIs in the list, reviewing their descriptions, URLs, and reference websites.
- Choose one API that interests you and aligns with your skills.
- Study the chosen API's documentation and the reference website to understand its features and data structure.
- Start designing the website statically using HTML, CSS, and Bootstrap: Create basic structure, layout, and static pages to begin replicating the reference site's design.

Week 2 (25/08/2025 – 30/08/2025): Complete Static Frontend

- Dissect the reference website: Identify key components such as layout, navigation, UI elements, and functionalities.
- Continue building the static version using HTML, CSS, and Bootstrap, including responsive design to match across devices.
- Add styling to make visuals (colors, fonts, spacing) as close as possible to the reference site.
- Test the static site for compatibility and commit it to a version control system like Git.

Week 3 (1/09/2025 – 6/09/2025): Transition to ReactJS - Setup and Core Components

- Set up the ReactJS project environment (e.g., using Create React App).
- Migrate the static HTML/CSS/Bootstrap design into ReactJS components and structure.
- Implement basic routing (using React Router if needed) and core UI components to replicate the layout.
- Ensure the initial React build matches the static version's structure.

Week 4 (8/09/2025 – 13/09/2025): ReactJS Implementation - Part 1

- Build advanced UI features in ReactJS, such as forms, modals, or interactive elements from the reference website.
- Implement responsive design within React using CSS or integrated libraries.
- Focus on static elements in React, ensuring identical navigation and pages.
- Perform testing for bugs and compatibility in the React environment.

Week 5 (15/09/2025 – 20/09/2025): ReactJS Implementation - Part 2

- Add state management (e.g., using Redux or Context API) for handling data flows.
- Refine styling and interactions to achieve a near-identical replica of the reference site.
- Implement any remaining frontend features and optimize for performance.
- Conduct iterative testing and refinements.

Week 6 (22/09/2025 – 27/09/2025): API Integration and Completion

- Integrate the chosen API into your ReactJS application using fetch or Axios to consume data dynamically.
- Implement features that use the API data, such as displaying real-time information, searches, or updates.
- Ensure the website functions identically to the reference site, with dynamic content loaded from the API.
- Finalize the project: Conduct thorough testing, optimize performance, and prepare a demo or presentation. Submit the complete codebase and a brief summary of challenges and learnings.

This document presents a curated list of APIs, including their names, URLs, reference websites, and accurate descriptions sourced from official documentation. The data is organized in a clear table format for easy reference.

Sr.	API Name	API URL	Reference Website	Description
1	Currency Converter	https://github.com/fawazahmed0/exchange-api/blob/main/README.md	https://www.oanda.com/currency-converter/en/?from=EUR&to=USD&amount=1	A free currency exchange rates API supporting over 200 currencies with no rate limits, providing real-time and historical exchange rates. It is ideal for financial applications requiring accurate and reliable currency conversions without usage restrictions.
2	RAWG API	https://api.rawg.io/docs/	https://rawg.io/	The RAWG API is the largest open video games database, offering access to over 500,000 games across 50 platforms with rich metadata including tags, genres, release dates, ratings, developers, and more. It is perfect for building gaming news portals, discovery apps, or recommendation systems.

Sr.	API Name	API URL	Reference Website	Description
3	Open Library	https://openlibrary.org/developers/api	https://openlibrary.org	The Open Library API is a suite of RESTful APIs providing access to millions of books, authors, subjects, and metadata in formats like JSON, YAML, and RDF/XML. It supports searches by ISBN, title, or author, retrieval of works and editions, and book covers, making it ideal for e-library platforms, book search tools, and reading trackers.
4	Fake Store API	https://fakestoreapi.com	https://flipkart.com	The Fake Store API is a free RESTful API offering simulated e-commerce data, including products, categories, users, carts, and authentication via JWT. It is designed for prototyping, testing frontend applications, or practicing API integrations without needing a real backend.
5	News API	https://newsapi.org	https://timesofindia.indiatimes.com	News API is a simple REST API delivering JSON results for current and historic news articles from over 150,000 sources worldwide, supporting 14 languages and 55 countries. It offers advanced filtering by keywords, dates, publishers, and more, ideal for building news apps, dashboards, or alert systems.
6	OpenWeatherMap	https://openweathermap.org/api	https://openweathermap.org	The OpenWeatherMap API provides current weather, forecasts (hourly, daily up to 16 days), historical data, and specialized info like air pollution and solar irradiance in JSON, XML, or CSV formats. Available via free and paid plans, it's perfect for weather apps, travel platforms, or IoT devices.

Sr.	API Name	API URL	Reference Website	Description
7	CoinGecko (Crypto Data)	https://www.coingecko.com/en/api	https://www.coingecko.com	The CoinGecko API offers comprehensive cryptocurrency data, including real-time prices, market stats, NFT floor prices, trading volumes, and historical data across 70+ endpoints and 200+ networks. It covers 12 million coins and 1,500 exchanges, ideal for crypto apps, analytics, or dashboards.
8	Recipe Website	https://www.themealdb.com/api.php	https://www.food.com	The MealDB API is a free recipe API providing access to meal data, including searches by name, ingredients, categories, or areas, with details, thumbnails, and ingredient lists. Use test key "1" for development; ideal for cooking apps, meal planners, or educational tools.
9	TV Maze	https://www.tvmaze.com/api	https://www.tvmaze.com	The TVMaze API is a free REST API delivering JSON data on TV shows, episodes, casts, crews, and schedules, following HATEOAS and HAL principles. Features include fuzzy search and country-based schedules, perfect for TV info apps, websites, or entertainment platforms.
10	IMDB	https://imdbapi.dev/	https://www.imdb.com	The imdbapi.dev is a free API providing access to IMDb data on movies, TV shows, celebrities, ratings, and more, supporting GraphQL, REST, and gRPC protocols. It enables developers to retrieve entertainment datasets for building recommendation engines, review platforms, or media apps.
11	Bhagvat Gita	https://rapidapi.com/bhagavad-gita-bhagavad-gita-	https://bhagavadgita.io	The Bhagavad Gita API is an open-source REST API offering verses, translations, and interpretations

Sr.	API Name	API URL	Reference Website	Description
		default/api/bhagavad-gita3		from the Srimad Bhagavad Gita. It allows integration of the sacred text into web or mobile apps, with endpoints for chapters, verses, and commentaries, ideal for spiritual or educational applications.

Dear Students,

You are required to select one API from the provided list.
Please submit your response using the Google Form link below by 14/08/2025:

🔗 https://forms.gle/vvox5qzUwZPjPwKb8