

Recap Assignments

JavaScript

This section will test your ability to implement concepts such as arrays, control flow, and higher-order functions, as well as your ability to write clean, organized code. Additionally, it would require you to think critically and to problem-solve, as you would need to design the program's logic and functionality.

Choose one of the following programs and build it using JavaScript only. Some of the projects involve using the fetch API. You can learn about it for those projects. It's not that complicated.

All these projects don't involve traversing the DOM, so there is no UI, and they should get the user's input only with prompts and show alerts.

1. Create a program that simulates a simple to-do list application:
 - The program should have an array of to-do items
 - A menu that allows the user to perform different actions (e.g. add a new item, mark an item as done, remove an item, display all items)
 - Use of if, else statements, switch cases to determine the user's action
 - Use of the map, foreach, filter methods to process and display the to-do items
 - Proper error handling for invalid inputs
 - Implement a function that allows the user to search within the to-do list
 - Bonus point for allowing the user to sort the items by date, name or priority

2. Create a program that simulates a basic calculator. The program should have the following features:
 - A menu that allows the user to perform different actions (e.g. add, subtract, multiply, divide)
 - Use of if, else statements, switch cases to determine the user's action
 - Use of functions to perform calculations
 - Proper error handling for invalid inputs
 - Implement basic mathematical operations such as square root, power, and modulus
 - Implement a function that allows the user to undo the last operation
 - Bonus point for allowing the user to store and recall the calculations history.

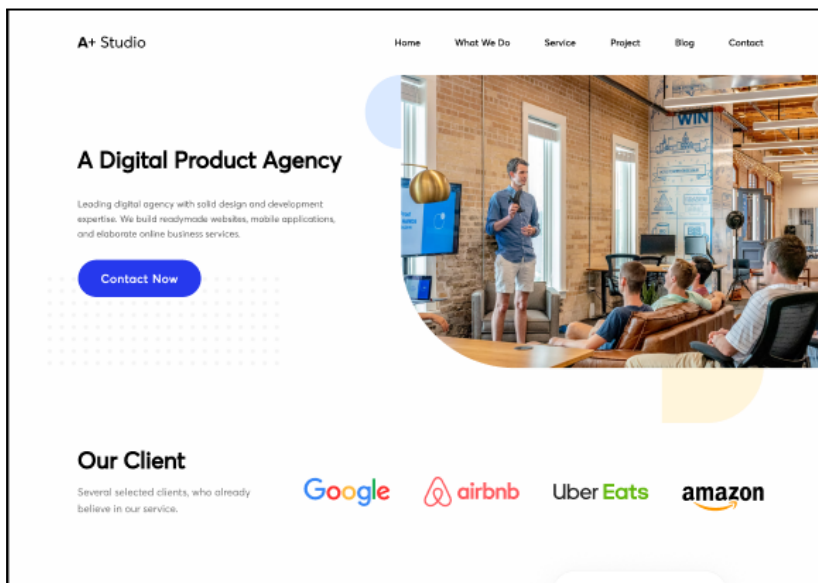
3. Create a program that simulates a basic text analysis tool. The program should have the following features:
 - Use of JavaScript functions to analyze a given text, such as word count and most frequently used words.
 - Use of if, else statements, switch cases to determine the type of analysis.
 - Use of loops and string manipulation methods to perform the analysis.
 - Proper error handling for invalid inputs
 - Implement a feature that allows the user to analyze multiple texts
 - Bonus point for allowing the user to save and export the analysis results to a CSV file.
4. Create a program that simulates a basic random password generator. The program should have the following features:
 - Use of JavaScript functions to generate a random password based on user-specified criteria, such as length and character types (uppercase letters, lowercase letters, numbers, special characters).
 - Use of if, else statements, switch cases to determine the criteria used.
 - Use of loops and random number generation to perform the password generation.
 - Proper error handling for invalid inputs
 - Implement a feature that allows the user to generate multiple passwords at once.
 - Bonus point for allowing the user to validate the password strength and give feedback to the user.
5. Create a program that simulates a basic budgeting application. The program should have the following features:
 - Use of JavaScript functions to allow the user to input and track their income and expenses.
 - Use of if, else statements, switch cases to determine the type of transaction (income or expense).
 - Use of loops and arrays to store and display the transactions.
 - Proper error handling for invalid inputs and negative values.
 - Implement a feature that allows the user to view the current balance and a breakdown of expenses by category.
 - Bonus point for allowing the user to set a budget and alert the user if they exceed it.
6. Create a program that simulates a basic e-commerce website (In this repository, in the js folder, you will find a file with an array of the products). The program should have the following features:
 - Use of JavaScript functions to allow the user to view a list of products, add items to a cart, and perform checkout.
 - Use of if, else statements, switch cases to determine the user's action.
 - Use of loops and arrays to store and display the products and cart items.
 - Proper error handling for invalid inputs and negative values.
 - Implement a feature that allows the user to filter products by category, price, and rating

- Bonus point for allowing the user to save the cart and previous orders.
7. Create a program that simulates a basic weather forecasting application. The program should have the following features:
 - Use of JavaScript **fetch** function to retrieve the current weather and the forecast for the next 5 days from an API such as OpenWeatherMap API (<https://openweathermap.org/api>).
 - Use of if, else statements, switch cases to determine the type of weather and display an appropriate icon.
 - Use of loops and JSON parsing to display the weather forecast.
 - Proper error handling for API errors and invalid inputs.
 - Implement a feature that allows the user to search for a specific city and retrieve its weather forecast.
 - Bonus point for allowing the user to save and display the forecast for multiple cities.
 8. Create a program that simulates a dynamic trivia game. The program should have the following features:
 - Use of JavaScript **fetch** function to retrieve questions from the Open Trivia Database API (https://opentdb.com/api_config.php) based on user-specified criteria such as category, difficulty, and number of questions.
 - Use of if, else statements, switch cases to determine the user's answer and check it against the correct one.
 - Use of loops and JSON parsing to load and display the questions.
 - Proper error handling for API errors and invalid inputs.
 - Implement a feature that allows the user to select a category, difficulty, and number of questions.
 - Implement a feature that keeps track of the user's score and displays it at the end of the quiz.
 - Bonus point for allowing the user to save and display a leaderboard of the highest scores.

HTML CSS

For the next assignment, please register to [Figma](#).

Choose a design from the following links and build a single page website with three sections from the design you chose. The sections you choose don't have to be the first three sections in the design.



WORKOUT

EXERCISES

TRAINERS

PRICING

LOGIN

NEW

High intensity workout to burn calories

Cardio Exercise

38:14
TIME


165
EST CALORIES

Get Started


Preview

Popular Exercises


SEE MORE EXERCISES



Treadmill 58:24
250 est calories



Stretching 58:24
250 est calories



Yoga 58:24
250 est calories

TeamFlow

Product

Solution

Enterprise

Pricing

Login

Sign Up

Welcome to TeamFlow

Work the way that works for you

Create, Build, Collaborate and ship products very faster

Get Started

Lucy

Lucy Niana
Develop Communication Plan
★★★★★

Mark Anderson
Update Contract Agreement
★★★★★

Pending

See why over 100,000 teams choose TeamFlow.com

hulu

STUDIOS

UNIVERSAL

Adobe



[Our Services](#)[About](#)[Blog&News](#)[Contact](#)


[Account](#) | [+2349067322844](#)

[Hosting](#)[Domain](#)[SEO](#)[Email](#)

Premium Web Hosting for Your Website



Blazing fast web hosting for individuals and businesses of all sizes backed by 24×7×365 Support.

[Create an Account](#)[Choose your plan](#)



True Cloud Web Hosting

True Cloud Web Hosting All of the hosting packages we offer are deployed instantly on our SSD powered cloud. We don't use dedicated servers that operate on single pieces of hardware. Our entire infrastructure is built to be reliable, secure, and scalable.



Logo

@ email@mail.com

📞 (000) 888-88

[Home](#)[Products](#)[Pages](#)[Blog](#)[Contact us](#)

[English](#)[Sign up](#)


Start accepting payments in 3 minutes

Integrate xyz payment gateway without any technical knowledge.


[Start now](#)[Read the developer docs](#)

4.7


top rated on trustpilot




CODE FREE SETUP

 One click integration

LOWEST PRICE

 1% transaction fee, lowest in industry

GLOBAL WITHDRAWALS

 Instant transfer to your bank account

