Frameworks & Intro to JS Project | Recreate Your Favorite Website Using Bootstrap and JavaScript

OVERVIEW: For this project, you'll choose a website you admire and recreate a simplified version of it using Bootstrap. After completing the website, you'll move on to Part 2, where you'll write JavaScript functions to simulate features you'd like to implement in the future - without integrating them into the site.

This project will help you practice Bootstrap layout and components, while also developing your JavaScript skills with variables, functions, arrays, and strings.

NOTE: You have creative freedom for this project! If you can't think of a website you admire, you may create your own site, like a portfolio. You can integrate examples from other portfolios, without copying one website exactly. <u>Dribbble</u> is a great site to look at for inspiration.

INSTRUCTIONS: In VS Code, complete the following tasks in your .html and .css files.

Part 1: Bootstrap Website

Goal: Create a responsive and well-structured website using HTML, CSS, and Bootstrap.

Requirements:

1. Navigation Bar

- Add a **navbar** with at least **3 links** (e.g., Home, About, Contact).
- Ensure the **navbar is responsive** across different screen sizes (consider using Bootstrap's built-in responsiveness).

2. Home Page

- Build a **homepage** that matches the feel of the website you're emulating.
- Include **headings**, **images**, and a **hero section** to introduce the site.

3. Form Section

• Add a single **form** for user input.

Examples:

- Contact form
- Sign-up form
- Booking form
- Use at least two different input types (e.g., text, email, number, or date).

4. Table

• Include a **table** to display relevant information.

Examples:

- Event schedule
- Product comparison
- Price list

5. 3 Bootstrap Components

• Choose any **three Bootstrap components** that suit your website.

Examples:

- Cards to display projects or products
- Carousel to rotate images
- Modals for pop-ups
- **Accordions** for FAQs
- Integrate the components effectively to enhance the design of your site.

Part 2: JavaScript Functions

Goal:

Write **JavaScript functions** in a separate .js file to simulate interactive features you might add to your site in the future. Focus on using **variables**, **functions**, **arrays**, **and strings**. Your functions do not need to be connected to the website at this stage.

Requirements:

- 1. Write 4-5 JavaScript Functions
 - a. Each function should simulate a **real feature** relevant to your website.
- 2. Submit the JavaScript File Separately:
 - a. Your **JavaScript functions** should align with the website you created.
 - b. **Comment your code** to explain what each function does.

Here are some **examples** to inspire your functions:

```
Form Validation:
function validateEmail(email) {
 return email.includes("@") && email.includes(".");
console.log(validateEmail("test@example.com")); // true
Random Project Picker:
const projects = ["Portfolio", "Blog", "Weather App"];
function getRandomProject() {
 const index = Math.floor(Math.random() * projects.length);
 return projects[index];
console.log(`Featured project: ${getRandomProject()}`);
Total Price Calculation:
const prices = [19.99, 29.99, 49.99];
function getTotalPrice() {
 return prices.reduce((total, price) => total + price, 0);
console.log(`Total price: $${getTotalPrice()}`);
Feedback Storage:
let feedback = [];
function addFeedback(message) {
 feedback.push(message);
 return feedback;
console.log(addFeedback("Great website!")); // ["Great website!"]
```

📤 Submission Guidelines:

- 1. Create a GitHub repository to host your project.
 - a. Add all your HTML, CSS, Bootstrap (optional), and JavaScript files to the repository.
 - b. Include a README.md file that provides:

- i. A brief description of the website you emulated.
- ii. How you used Bootstrap components in your project.
- A summary of each JavaScript function and how you would integrate it in the future.

2. Testing and Organization:

- a. Verify that your navbar, form, and other components work correctly.
- b. Ensure the project is organized with all necessary files included and properly named.
- c. Ensure that your JavaScript file is clearly separated in the repository.

3. Submission:

a. Submit the GitHub repository link in Google Classroom.

Tips for Success

- **Plan ahead:** Choose a website with enough content to emulate but not too complex.
- **Test responsiveness:** Ensure the layout works well on both **mobile and desktop**.
- Think creatively: Use your JavaScript functions to explore new features that could enhance your site!

Grading Criteria (Out of 25 Points)

Criteria	Excellent (Full Points)	Good	Needs Improvement	Points
Navigation Bar (3 pts)	Fully functional, responsive navbar with at least 3 links	Mostly functional, minor layout issues	Incomplete or broken navbar	/3
Home Page (3 pts)	Clear design aligned with the chosen website's style	Partially resembles the original site	Lacks key design elements	/3
Form Section (3 pts)	Well-styled form with at least 2 input types	Present but missing variety or styling	Incomplete or poorly designed	/3
Table (3 pts)	Relevant, well-formatted, and fits into layout	Present but not fully styled	Missing or poorly implemented	/3
3 Bootstrap Components (3 pts)	All 3 components correctly integrated and useful	2 components correctly used	1 or no components used	/3
JavaScript Functions (3 pts)	All 4-5 functions reflect useful future features	3 functions written but lack purpose	Fewer than 3 functions or incomplete	/3
Responsive Design (2 pts)	The page is fully responsive across mobile and desktop	Partially responsive, with noticeable layout issues	Lacks proper responsiveness across devices	/2
Overall Presentation (2 pts)	The site looks polished, with attention to structure and design consistency	Some minor inconsistencies in structure/design	Unstructured or lacks consistency	/2
ReadMe (3 pts)	README is detailed, with project description, Bootstrap usage, and function summaries	README is present but lacks key details	README is missing or incomplete	/3