

Personal Web Portfolio Development Report

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Introduction

The purpose of this project was to design and implement a JavaScript and jQuery-enabled website that demonstrates both technical competence and real-world development thinking. Rather than creating a fictional or throwaway website purely for assessment purposes, this assignment was approached as an opportunity to build a genuine personal web portfolio that could be used beyond university. This decision allowed the development effort to serve two purposes simultaneously: meeting the academic requirements of the module while also producing a professional artefact suitable for employers and business connections.

Hey, I'm Darius

status: **available for new projects**

Darius Moldoveanu

about me >

Web

Software

Business

Tools

Other

Projects



Portfolio Homepage

The final solution is a web portfolio with a project page dedicated to the assignment required demonstrations. The page contains an overview; a download link for the report; and a link to the site where Bootstrap implementation, raw JavaScript web development and jQuery is all showcased in an appropriate format. This structure was chosen mainly because the assignment's limitations didn't allow me to develop my portfolio to the standard I wished for. The separation was introduced upon realization to how plain the website had to be, therefore I created a separate section where I simply demonstrate the skills, instead of making them the main attraction.

Jquery, JavaScript, and Bootstrap Showcase

Demonstrating Three Main Skills with Advanced Features

Component 1: RAW JS Contact Form

Advanced form validation, interaction, and real-time calculations using pure JavaScript

Full Name *	Email Address *
Phone Number	Age *
Optional: enter 10-15 digits	Must be between 13 and 120

Project Budget Calculator

Project Type	Duration (weeks)
Select type	0

The assignment intended site

The assignment project showcases four discrete interactive components:

- One uses raw (vanilla) **JavaScript**
- One implemented using **jQuery** and **jQueryUI**
- **Bootstrap** Library Implementation
- **jQuery** combined with **JS** to demonstrate the product of their link

Each component demonstrates different programming concepts, user interactions, and problem-solving approaches, aligning fully with the module learning outcomes.

Website Structure and Design Approach

The portfolio consists of **multiple individual pages**, including a homepage, contact form, project dedicated pages (6). Navigation is manually stitched for a professional and simplistic feel. The website has a very modern theme to it due to its responsiveness, simplistic and optimal design, and animations and styles used.

Interactive Portfolio Platform

The same “back to home” button on every project page

[← Back to all projects](#)[Next: Mark →](#)

The same next and previous buttons on every project page

[Home](#)[projects](#)[about](#)[notes](#)[contact](#)

Hey, I'm Darius

status: available for new projects

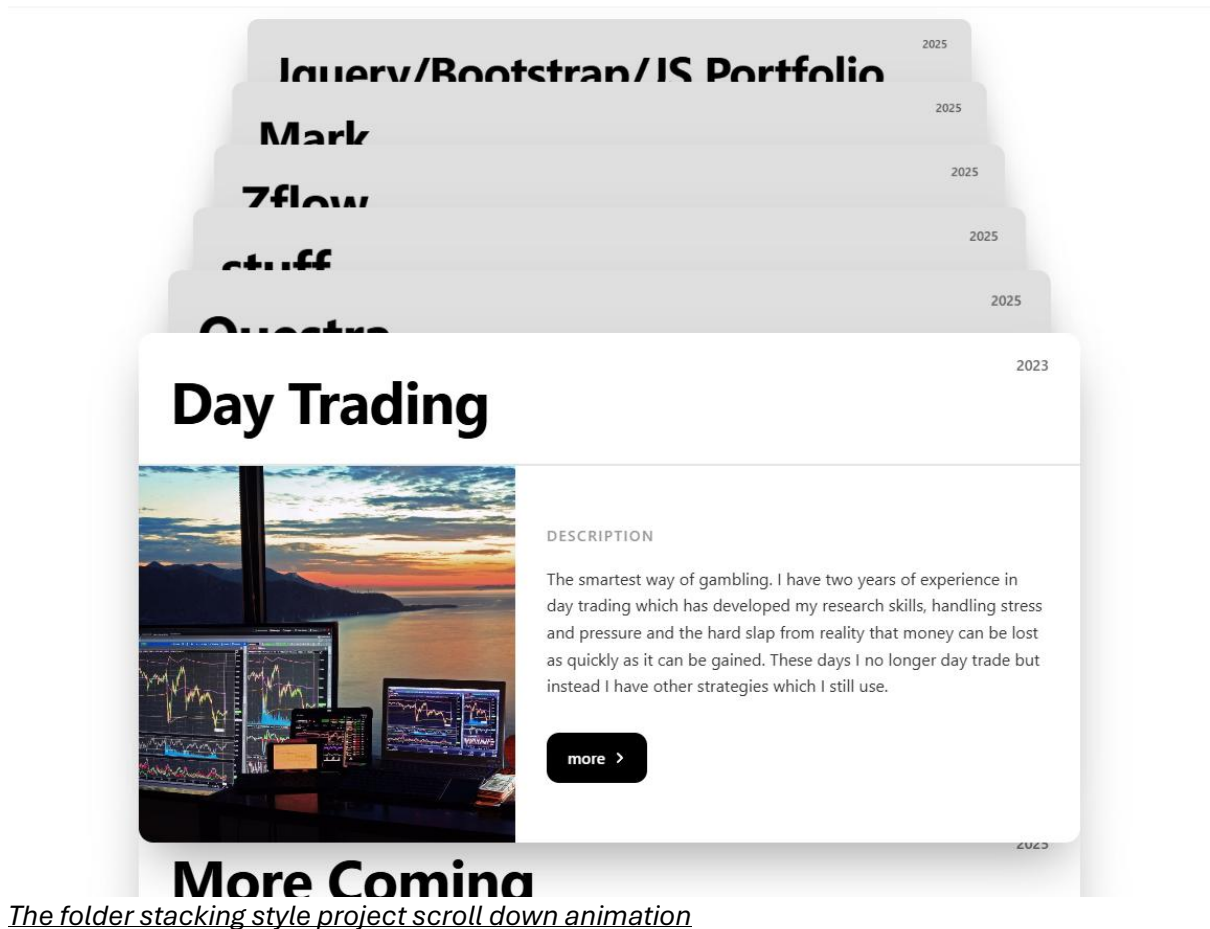
Darius Moldoveanu

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Consistent navbar on home page with all necessary buttons

Rather than following a rigid layout from the beginning, the site evolved through experimentation. I explored modern website-building platforms and templates but found them too restrictive. These platforms limited access to raw code, prevented full customisation, and restricted file access. As a result, I chose to code the site manually, allowing full control over structure, styling, logic, and animations.

Visual inspiration came from modern portfolio designs, particularly animated project sections. These were recreated using CSS animation libraries and custom styling rather than pre-built frameworks.



Component 1 – Raw JavaScript Form with Validation

Component 1 demonstrates a contact form implemented entirely using raw (vanilla) JavaScript, without reliance on jQuery or external libraries. This component focuses on form validation and user input handling, meeting the assignment requirement for a pure JavaScript implementation.

Component 1: RAW JS Contact Form

Advanced form validation, interaction, and real-time calculations using pure JavaScript

Full Name * Andrei Full Name must contain at least two words	Email Address * myemail.com Please enter a valid email address
Phone Number 1230784 Phone number must contain at least 10 digits Optional: enter 10-15 digits	Age * 148 Age must be between 13 and 120 Must be between 13 and 120

Invalid filled in fields on the form

The form validates required fields such as name, email, age, and message using custom JavaScript logic. Input is checked in real time, with visual feedback provided through dynamic class changes to indicate valid and invalid states. A live character counter updates as the user

types, ensuring message length constraints are clearly communicated.

Full Name *	Email Address *
Anakin Skywalker ✓	anilovestatooine123@gmail.com ✓
Phone Number	Age *
12312312312 ✓	48 ✓
Optional: enter 10-15 digits	Must be between 13 and 120

Valid filled in fields on the form

HTML5 validation was intentionally avoided to allow full control over validation rules, error messages, and interaction flow. This component demonstrates direct DOM manipulation, event handling, conditional logic, and reusable validation functions, highlighting a solid understanding of JavaScript fundamentals.

The budget calculator is built using raw JavaScript and updates in real time as the user changes inputs. It takes values such as project duration, hours per week, hourly rate, additional costs, and discount percentage, then performs a multi-step calculation to output a clear breakdown (base cost, subtotal, discount amount, tax, and final total). The results are rendered instantly by updating the DOM, showing how JavaScript can handle both business logic and live UI updates without any libraries.

Project Budget Calculator

Project Type	Duration (weeks)
Website ▼	40
Hourly Rate (\$)	Hours per Week
15	30
Additional Costs (\$)	Discount (%)
200	0

Budget Calculation Breakdown

Base Cost (Hours × Rate):	\$18000.00
Additional Costs:	\$200.00
Subtotal:	\$18200.00
Discount (0%):	-\$0.00
Tax (8%):	\$1456.00
Total Project Cost:	\$19656.00

Example of budget calculator in use

Component 2 – JavaScript Dynamic Search

Component 2 focuses on dynamic searching and filtering functionality, implemented using assignment-specified skills and native JavaScript. This component allows users to interact with content through real-time filtering, sorting, and visibility changes without page reloads.

Filter & Sort Projects

Year:

2025

Product Type:

Digital Product

Category:

Web Development

Sort By:

Name (A-Z)

Technology Stack:

All

JavaScript

jQuery

React

Python

AI

CSS

Web Design

API

Grid

Screenshot of the dynamic search input interface with selections

Users can search and filter content based on multiple criteria, with results updating instantly as inputs change. JavaScript manages the internal state of active filters and dynamically shows or hides elements by manipulating the DOM. Sorting logic reorders elements in real time, demonstrating array processing and conditional comparison techniques.



2023

The smartest way of gambling. I have two years of experience in day trading.

ServiceFinancePythonData AnalysisTrading Algorithms

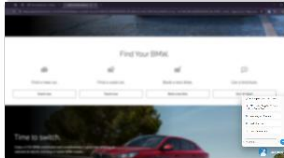


Interactive Portfolio Platform

2025

A full-stacked web development showcase demonstrating advanced JavaScript, jQuery, Bootstrap, and jQueryUI integration.

DigitalWebJavaScriptjQueryBootstrapCSS



Mark

2025

Mark is a AI powered, website navigational assistant. Its design is made for action, not responses.

DigitalAIJavaScriptCSSWeb DesignServer Hosting



Questra

2025

Gamers sometimes struggle finding what to play as you may struggle what to watch.

PlatformGamingReactJavaScriptAPI Integration



stuff.

2025

WATER GUNS is something all kids love. But society changes as kids are starting to grow up with social media.

PhysicalBusinessProduct DesignMarketingManufacturing



Zflow

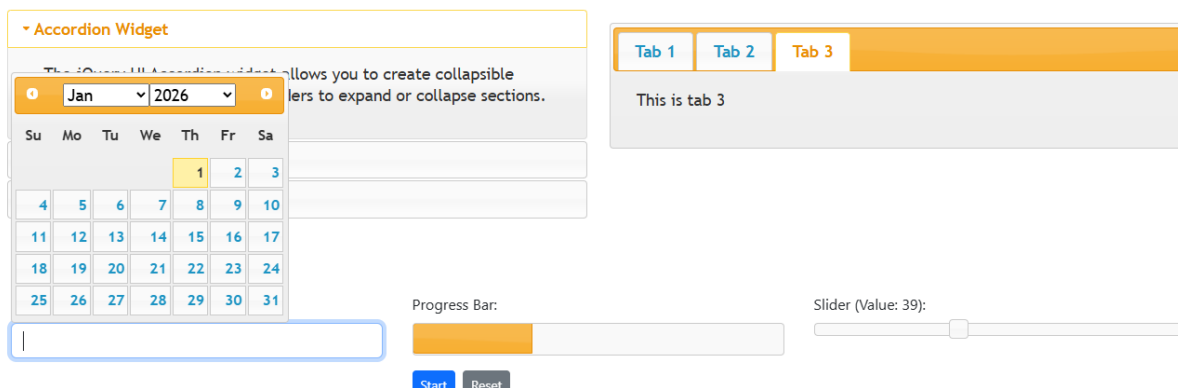
2025

The provided projects of which the search works on

This component is distinct from the form-based validation in Component 1 and instead demonstrates JavaScript’s ability to manage dynamic content, user-driven state changes, and responsive interface updates.

Component 3 – jQuery and jQueryUI Widgets

Component 3 demonstrates the use of jQuery and jQueryUI to implement interactive interface elements. This component was originally developed as part of a single-page assignment site but was later separated into its own page due to CSS and interaction conflicts when combined with other components.



The screenshot displays a collection of jQueryUI widgets. On the left, an 'Accordion Widget' is shown with a title bar and a list of items. Below it is a datepicker for January 2026, showing a calendar grid with the 1st highlighted. To the right of the datepicker is a text input field. Further right is a progress bar labeled 'Progress Bar:' with a blue fill and 'Start' and 'Reset' buttons. On the far right is a slider labeled 'Slider (Value: 39):' with a blue track and a white handle. Above the slider is a tabbed interface with three tabs: 'Tab 1', 'Tab 2', and 'Tab 3', with 'Tab 3' being the active tab. The content of 'Tab 3' is 'This is tab 3'.

Showcase of the form with all the elements in active use

The component includes jQueryUI widgets such as tabs, accordions, sliders, datepickers, tooltips, and progress bars. These widgets provide structured, accessible, and user-friendly interactions that would be complex to recreate using raw JavaScript alone.

jQuery simplifies DOM selection and event handling, while jQueryUI provides pre-built, well-tested widgets with built-in accessibility support. Separating this component into its own page ensured predictable behaviour and resolved issues caused by overlapping CSS rules and competing JavaScript logic.

Component 4 – Combined JavaScript and jQuery Form Logic

Component 4 demonstrates the combined use of raw JavaScript and jQuery to create a more complex, real-world interaction system. This component integrates JavaScript-driven validation and logic with jQuery-based event handling and jQueryUI widgets.

Registration Form with Combined Technologies

Form Completion: 29%

Full Name *

?
Please enter your full name (first and last name).

Email Address *

Phone Number

?
Format: (XXX) XXX-XXXX

Password (Optional) *

Birth Date *

Click to select date

Jan

2008

Su

Mo

Tu

We

Th

Fr

Sa

1

2

3

4

5

Country *

?
Please select a valid country from the list.

Experience Level: Beginner

Preferred Theme Color

The top half of the form filled in with invalid examples

JavaScript is responsible for core decision-making, calculations, and validation rules, while jQuery simplifies user interaction handling and dynamic DOM updates. Features such as progress tracking, live counters, dynamic UI feedback, and enhanced input controls operate together to provide a responsive user experience.

Country *

?

Start typing to search for your country

United States
United Kingdom
Australia
Belgium
Portugal
Austria
Czech Republic
South Korea
South Africa

Country Selector

Monthly Budget: \$0 *

Minimum budget is \$100.

Experience Level: Intermediate

Preferred Contact Time

--:--

🕒

When would you like to be contacted?

Preferred Theme Color

#007bff

Select a color for your theme preference

Interests/Tags

Type and press Enter to add tags

Press Enter after each tag

Skills (Select at least 2) *

☐ JavaScript

☐ jQuery

☐ HTML/CSS

☐ React

☐ Python

☐ Node.js

Selected: 0 skills

Experience Levels re-arranging the form live

Monthly Budget: \$0 *

Minimum budget is \$100.

Experience Level: Advanced

Preferred Contact Time

--:--

🕒

When would you like to be contacted?

Preferred Theme Color

#007bff

Select a color for your theme preference

Company Name

This field appears for Advanced/Expert users

“Advanced” adds company name input

This component illustrates how different technologies can be linked effectively, showing an understanding of when raw JavaScript is more appropriate and when jQuery improves efficiency and clarity.

Time Selector

Live colour selector

Live Selection Counter with minimum set

Component 3 – Bootstrap Library Implementation

Bootstrap 5.3.0 is used within the website to provide structure, layout consistency, and responsive behaviour across all component pages. It is loaded via CDN and supports the project without replacing any JavaScript or jQuery functionality.

Jquery, JavaScript, and Bootstrap Showcase

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Full page overview showing navbar, container and input boxes

The Bootstrap grid system is used throughout to control layout and responsiveness. Containers, rows, and responsive column classes (such as col-md-* and col-lg-) *organise content into flexible layouts that adapt across screen sizes.*

Full Name *

Email Address *

Phone Number

Optional: enter 10-15 digits

Age *

Must be between 13 and 120

Project Budget Calculator

Project Type

Duration (weeks)

Hourly Rate (\$)

Hours per Week

Additional Costs (\$)

Discount (%)

Component 1 showing split form example and container within container

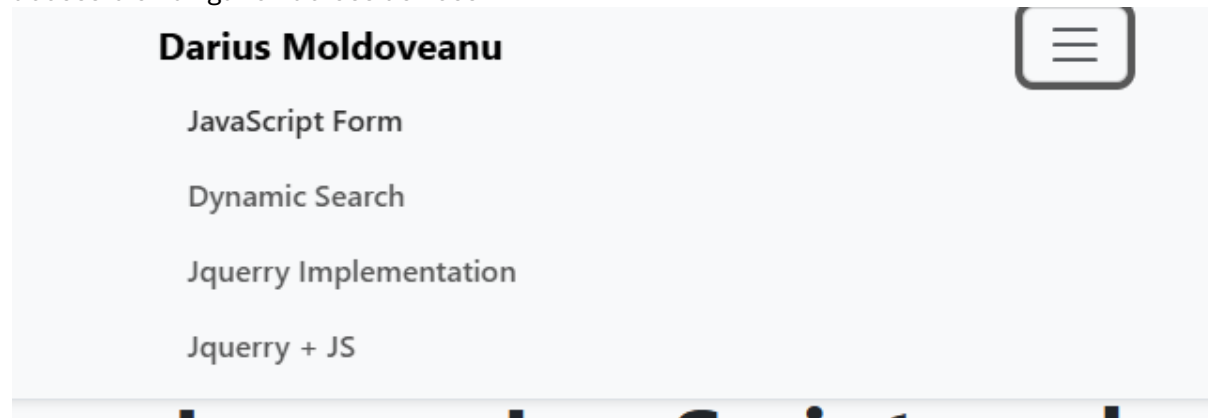
Spacing utilities are used extensively to manage margins and padding, reducing the need for custom CSS.

Navigation between Component 1–4 pages is handled using a fixed-top Bootstrap navbar.

Darius Moldoveanu	JavaScript Form	Dynamic Search	Jquery Implementation	Jquery + JS
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Full navbar showing all elements

The navbar collapses into a mobile menu on smaller screens, providing consistent and accessible navigation across devices.



Full navbar in mobile view

Bootstrap form components (form-control, form-label, form-select, and form-check) are used to structure inputs and labels, while all validation and interaction logic is handled separately using JavaScript and jQuery.

Birth Date * must be 18 or older.

Click to select date

Jan 2008

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Bootstrap styling was used to design this

Card components are used to group related content such as the budget calculator and project sections, improving readability and visual hierarchy.

Project Budget Calculator

Project Type

Select type

Duration (weeks)

0

Hourly Rate (\$)

0

Hours per Week

0

Additional Costs (\$)

0

Discount (%)

0

Calculator using Bootstrap card container

Buttons, badges, alerts, and progress bars are styled using Bootstrap utility classes to provide clear feedback and consistent UI behaviour.

Submit

Clear

Error! Please correct the errors below.

Bootstrap buttons used on forms as well as messages

Cra

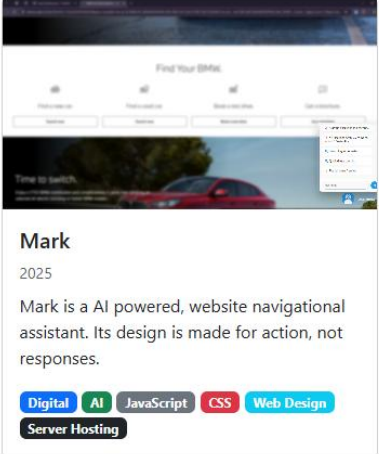


Interactive Portfolio Platform

2025

A full-stacked web development showcase demonstrating advanced JavaScript, jQuery, Bootstrap, and jQueryUI integration.

Digital Web JavaScript jQuery Bootstrap CSS

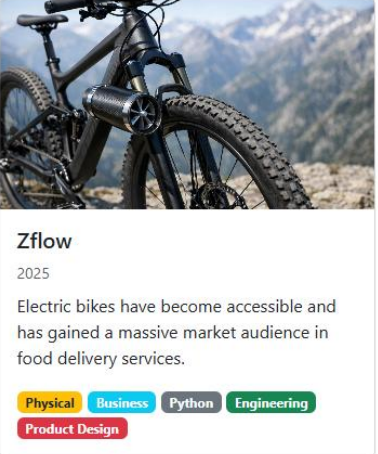


Mark

2025

Mark is a AI powered, website navigational assistant. Its design is made for action, not responses.

Digital AI JavaScript CSS Web Design Server Hosting



Zflow

2025

Electric bikes have become accessible and has gained a massive market audience in food delivery services.

Physical Business Python Engineering Product Design

Cards and badges use Bootstrap

Progress Bar:

Start

Reset

Bootstrap style was used on the progress bar and its animation

Additional typography, colour, and flexbox utilities are used where appropriate to control alignment and emphasis.

Project Type

Select type

Select type

Website

Web Application

Mobile App

E-commerce

Custom Solution

Dropdowns and form elements use Bootstrap

Technology Stack:

All

JavaScript

jQuery

React

Python

AI

CSS

Web Design

API

Grid



Interactive Portfolio Platform

2025

A full-stacked web development showcase demonstrating advanced JavaScript, jQuery, Bootstrap, and jQueryUI integration.

Digital

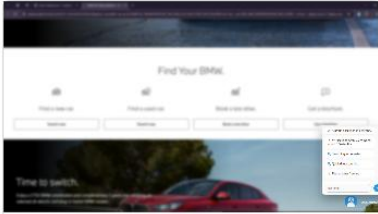
Web

JavaScript

jQuery

Bootstrap

CSS



Mark

2025

Mark is a AI powered, website navigational assistant. Its design is made for action, not responses.

Digital

AI

JavaScript

CSS

Web Design

Server Hosting



Zflow

2025

Electric bikes have become accessible and has gained a massive market audience in food delivery services.

Physical

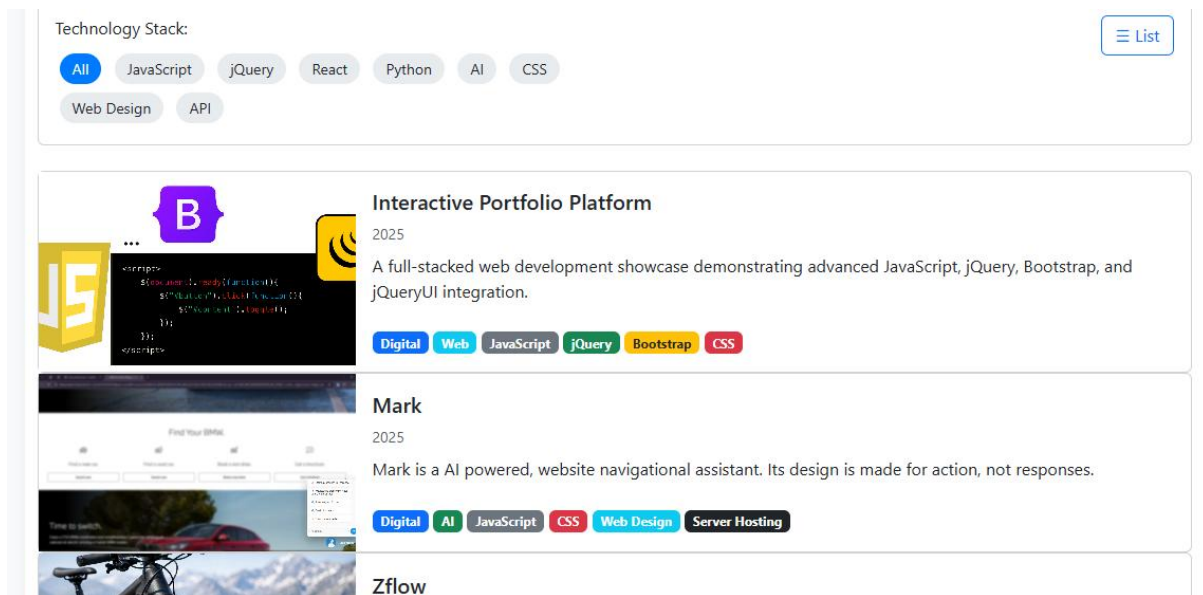
Business

Python

Engineering

Product Design

Dynamic search in grid mode provided by bootstrap



List mode also made with Bootstrap

Overall, Bootstrap provides a clean and reliable structural foundation for the assignment website, ensuring responsive behaviour and consistent styling while allowing custom CSS and JavaScript to handle specific design and interaction requirements.

Evaluation and Reflection

This project reinforced the importance of having a clear development workflow. Web development offers many tools and approaches, and productivity depends on choosing systems that suit how a developer works.

While the website is not intended to be technically groundbreaking, it meets all assignment criteria in a clear and efficient way. The strongest aspects are design consistency, attention to detail, and thoughtful interaction choices. Small UI details, such as hover effects and contextual elements, contribute to a polished experience.

If extended, the code would be split into multiple files for better maintainability. However, keeping everything on a single page helped make the assessment requirements clear and easy to evaluate.

Conclusion

This project demonstrates the ability to design and implement an interactive website using raw JavaScript, jQuery, jQueryUI, Bootstrap, and combined approaches. By clearly separating four components, the project shows an understanding of when and why different technologies should be used.

Overall, the work reflects Level 5 understanding through independent research, informed technical decisions, and practical application of modern web development techniques.

References

- **W3Schools – JavaScript, jQuery, jQueryUI, Bootstrap documentation**
- **cssbuttons.io – UI inspiration**
- **Dubey, K. *Xtract* – design inspiration**
- ***Nitro – Easyfast* portfolio template**
- **OpenAI ChatGPT – code review and validation guidance**