University of Brighton

School of Architecture, Technology & Engineering

Assessment Brief

Module Title:	Web Application Development
Module Code:	CI527
Author(s)/Marker(s) of Assignment	Marcus Winter

Assignment No:	1
Assignment Title:	REST API client
Percentage contribution to module mark:	50%
Weighting of component assessments within this assignment:	n/a
Module learning outcomes covered:	LO1: Demonstrate an understanding of client-server Web applications and related concepts, protocols and technologies LO2: Design and develop standards-compliant, responsive, Web clients consuming REST APIs

Assignment Brief and Assessment Criteria: See following pages.

Date of issue:	05/02/2024
Deadline for submission:	08/03/2024 at **3pm** Note: Students are allowed to submit work within two weeks of the published deadline, or the last working day immediately prior to the feedback date if this is shorter than two weeks. Late work is capped at the pass mark of 40%.
Method of submission:	e-submission via MyStudies
Date feedback will be provided	05/04/2024

1. *A copy of your coursework submission may be made as part of the University of Brighton's and School of Architecture, Technology & Engineering procedures which aim to monitor and improve quality of teaching. You should refer to your student handbook for details.*
2. *All work submitted must be your own (or your team's for an assignment which has been specified as a group submission) and all sources which do not fall into that category must be correctly attributed. The markers may submit the whole set of submissions to the JISC Plagiarism Detection Service.*

Assignment brief – REST API client

In this assignment, you will research and develop a Web-based client application that uses the public API (v.2) of the Victoria & Albert Museum (V&A) to search and browse the museum's collection.

Your REST API client will:

1. be a dynamic, fully responsive, standards compliant, web page
2. follow the Single Page Application (SPA) design pattern
3. provide an HTML form for users to enter a search term
4. use asynchronous HTTP requests to query the API with the search term
5. dynamically display the search results (image, title, description, date)
6. follow best practice with regard to coding standards, usability and accessibility
7. use vanilla HTML, CSS and JavaScript (no frameworks or external libraries)

You will study the V&A API documentation to understand query parameters, request methods, status codes and returned data (see point 5 above for the data you are looking), and carry out the required technical research to design, build and test the web application. To support you in the process, there will be lab sessions where we discuss related concepts and patterns, develop technical prototypes and provide formative feedback.

V&A API documentation (v.2)

- API Guide: https://developers.vam.ac.uk/guide/v2/welcome.html
- API Reference: https://api.vam.ac.uk/docs

Notes - please read carefully

1) Your API client should do a simple text search query and request results with images. There is no requirement for further qualifiers, other media types or results pagination.

2) Make sure to access your REST API client via HTTPS in order to avoid CORS header problems.

Deliverables

Your REST API client application **must be hosted on your personal university web space**
e.g. https://*username*.*brighton.domains*/ci527/assignment1/index.html

The assignment must be submitted online, through the CI527 assessment area on MyStudies. Please submit the following:

1. A **single ZIP file** containing the source code of your website, i.e. the complete folder structure with all HTML, CSS, JavaScript files and any other assets used.

   The zip file should be named as follows:
   lastname_firstname_studentnumber_CI527_assignment1.zip

2. The **URL to your live website** in the text field of the submission form.

   Make sure the link works!

Marking criteria

The work will be assessed on Technical competence (50%) and User interface (50%).

	A 70% and above	B 60% to 69%	C 50% to 59%	D 40% to 49%	E 30% to 39%	F Less than 30%
Technical competence 50%	The REST API client provides functionality appropriate to the brief. The page is fully standards-compliant[1,2], bug-free and uses best practice coding principles throughout.	The REST API client provides functionality appropriate to the brief. The page is mostly standards-compliant and bug-free and uses best practice coding principles.	The REST API client provides most of the functionality specified in the brief. The page is mostly standards-compliant and but has some bugs or issues with coding principles.	The site provides some functionality towards the brief but has bugs and/or issues with standards compliance and/or coding principles.	The site does not meet the brief, has serious bugs and/or is not standards compliance and/or poorly coded.	Work submitted, but criteria for grade E not met.
User interface 50%	The site is fully responsive across a range of device classes[3] and well presented, meeting usability and accessibility[4] guidelines to the highest standard.	The site is responsive across at least two device classes and mostly well presented, meeting usability and accessibility guidelines to a good standard.	The site is responsive to some degree and fairly well presented, meeting usability and accessibility guidelines to a satisfactory standard.	The site is not responsive or has some presentation problems and/or usability or accessibility problems.	The site is not responsive and/or poorly presented, with serious usability and/or accessibility problems.	Work submitted, but criteria for grade E not met.

[1] W3C Markup validation service at https://validator.w3.org/
[2] W3C CSS Validation service at https://jigsaw.w3.org/css-validator/
[3] Mobile-friendly test https://search.google.com/test/mobile-friendly
[4] Web Accessibility https://wave.webaim.org/