**COMP229– Web Application Development**

**Assignment 1**

**Express Portfolio Site**

Due: Week 4, Saturday, 11:59 PM (Eastern Time Zone)

Value 15%

Express Portfolio Site

**Maximum Mark: 100**

**Overview**: Create your Personal Portfolio Website using **ExpressJS** and implementing the **EJS templating**

**engine**. Your site must be hosted live on a cloud service such as **Microsoft Azure**, **Heroku,** or **Digital Ocean**.

**Instructions:**

This Express site must include the pages from your Personal Portfolio 5 pages – your **home page**,

an **About Me** page, a **Projects page**, a **Services page**, and a **Contact Me** page.

1. You Site must include the appropriate content for a **Personal Portfolio (17 Marks: Content)**

a. You must include a **Navigation Bar** or other Navigation scheme that allows the user to view

each page of your site. (2 Marks: Content).

b. You must include a **Custom Logo** for your site, this should be placed in or around the main

Navigation bar. The **Custom Logo** can be as simple or artistic as you desire (e.g. you could

use a primitive colour-filled shape like a triangle or hexagon with your initials positioned

inside). Please do not use a logo that belongs to another company or person. (2 Marks:

Content).

c. Your **Home Page** should include some sort of welcome message and link or button that

allows the user to redirect to your About Me Page and / or other pages. I recommend also

including some sort of **Mission Statement** (2 Marks: Content).

d. Your **About Me Page** should include your legal name, an image of you (I recommend a head

and shoulders shot), a short paragraph about who you are. Keep this clean and simple as it

may be viewed by perspective employers. (1 Mark: Content)

e. Your **About Me page** should include a link to a PDF version of your Resume (1 Mark:

Content).

f. Your **Projects Page** should include images and information for at least 3 Projects you wish

to highlight. These could be current projects you are working on or past projects you have

completed. Include an image for each Project and a short description of your role and the

outcome. (2 Marks: Content). g. Your **Services Page** should include a short list of services you offer (e.g. general

programming, web development, mobile apps, etc.). I recommend including images that

make this more appealing to view. (2 Marks: Content).

h. Your **Contact Page** should include your contact information in a panel or other construct. (1

Mark: Content).

i. Your **Contact Page** should include a short interactive form that allows the user send you a

message and provide basic contact information (First Name, Last Name, Contact Number,

Email Address, Message, etc.). This form does not have to be fully functional initially.

However, it should be able to capture the information entered by the user and redirect

them back to the Home Page (4 Marks: Content).

2. Your Portfolio site will use **ExpressJS** and **NodeJS** and your web pages have been split to use

different **View templates** and partials by implementing the **EJS templating engine** and Express

Routes **(8 Marks: GUI, 26 Marks: Functionality):**

a. Your site should include at least 2 View templates – one for your **Home Page** and one for

your **Contact Me** page. **Note**: You may include additional templates as needed to

accommodate other site pages (13 Marks: Functionality, 8 Marks: GUI).

b. An Express Route must exist for each page of your site. **Note**: You will need to use the

**router.get(path, callback(req, res, next))** method structure with a **res.render(view, locals)**

method call to render each view (13 Marks: Functionality).

3. Your site will use the new structure created by the **Express Generator**. Your site files will be

migrated to work within the **public**, **routes** and **views** folders **(26 Marks: Site Structure):**

a. Generate your site structure with the Express Generator. **Note**: You must use the **-e** option

to ensure that you implement the **EJS templating engine** for Express (9 Marks: Site

Structure).

b. Your **JavaScript**, **CSS and Multimedia Asset Files** should be moved to separate folders

within the **public** folder. Using the Twitter Bootstrap CSS framework is strongly

recommended, though not required. **Note:** the **public** folder is part of the path and does

not have to be referenced (6 Marks: Site Structure).

c. You will define routes for all of your site pages in the **index.js** file in your **routes** folder (2

Mark: Site Structure).

d. Your **view**s folder will contain your **EJS page templates**. You will create a separate folder

named **partials** for all of your partial **EJS files**. You will need several partials including

**header.ejs**, **content.ejs**, **footer.ejs** and others. (6 Marks: Site Structure).

e. All Your Code (HTML, CSS, JavaScript, jQuery, etc.) is error free (3 Marks: Site Structure).

4. Include **Internal Documentation** for your site **(5 Marks: Internal Documentation):**

a. Ensure you include a **comment header** for your **CSS and JavaScript files** that indicate: the

**File name**, **Student’s Name**, **StudentID, and Date,** (2 Marks: Internal Documentation).

b. Ensure you include a **section headers** for all of your **HTML structure, CSS style sections,** and

any **JavaScript functions** (1 Marks: Internal Documentation)

c. Ensure all your code uses **contextual variable names** that help make the files

humanreadable (1 Marks: Internal Documentation). d. Ensure you include **inline comments** that describe your GUI Design and Functionality. **Note:**

Please avoid “over-commenting” (1 Marks: Internal Documentation)

5. Share your files on **GitHub** to demonstrate Version Control Best Practices and push your site to a

cloud host **(4 Marks: Version Control, 4 Marks: Cloud Hosting).**

a. Your repository must include **your code** and be well structured (2 Marks: Version Control).

b. Your repository must include **commits** that demonstrate the project being updated at

different stages of development – each time a major change is implemented (2 Marks:

Version Control).

c. You must deploy your site to your Cloud Server using **git** (4 Marks: Cloud Hosting).

6. Create a Short Video presentation on **YouTube** or another streaming provider. You must include a

short **PowerPoint** (or Google Slides) Slide Deck that includes a **single slide** to start your video (10

Marks: Video)

a. The **first** (and only) **Slide** of your Slide Deck must include a **current image** of you (no avatars

allowed) that is displayed appropriately on the page. You must also include your **Full Name**,

**Student ID**, the **Course Code**, **Course Name,** and your **Assignment** information. (2 Marks:

video)

b. You will **demonstrate** your site’s functionality. You must show each page working properly

(2 Marks: Video)

c. You will **describe** the code in your app.js file that drives the functionality of your site (2

Marks Video).

d. Sound for your Video must at an appropriate level so that your voice may be **clearly heard,**

and your screen resolution should be set so that your code and site details are **clearly**

**visible** (2 Marks: Video).

e. Your Short Video should run no more than 5 minutes (2 Marks: Video).

**SUBMITTING YOUR WORK**

Your submission on eCentennial should include:

1. A zip archive of your website’s Project files

2. A link to GitHub (preferable).

3. A link to your live portfolio site hosted with a Cloud provider

4. A link to your video on YouTube (preferable).**Example:**

**Evaluation Criteria**

**Feature**

**Description**

**Marks**

Content

Appropriate Content is added to each page of your portfolio site

17

GUI / Interface Design

Display elements meet requirements. Appropriate spacing, graphics, colour, and

typography used.

8

Functionality

Site deliverables are me and site functions are met. No errors, including submission

of user inputs.

26

Site Structure

Well organized site files. Separate HTML and CSS. Appropriate links to external

documents and code. Code is error free. JavaScript libraries use a CDN. 4 marks for

initial deployment to Cloud Host

26

Internal Documentation

File header present, including site & student name & description. Functions and

classes include headers describing functionality & scope. Inline comments and

descriptive variable names included.

5

Version Control

GitHub commit history demonstrating regular updates. 2 marks for initial commit

4

Cloud Deployment

Deploy site to Cloud Service. 2 marks for initial deployment

4

Video Presentation

Your short video must demonstrate your site and describe your code

10

**Total**

**100**

This assignment is weighted **15%** of your total mark for this course.

Late submissions: 20% deducted for each day late. **External code**

(e.g. from the internet or other sources) can be used for student submissions within the following

parameters:

1. The code source (i.e. where you got the code and who wrote it) must be cited in your

internal documentation.

2. It encompasses a maximum of 10% of your code (any more will be considered cheating).

3. You must understand any code you use and include documentation (comments) around

the code that explains its function.

4. You must get written approval from me via email.