# Faculty of Computing and Info. Tech. Computer Science Department



# CPCS 403 Internet Application Programming Final Project Description

Spring 2025

Date Assigned Sunday, Mar 02, 2025

Due Date: Wednesday, April 16, 2025, till 11:59 pm

Max. Marks: 40 points

# 1. Required Domain and Web Hosting

Each student is required to purchase a domain name such as <a href="http://www.myname.com">http://www.myname.com</a>. You must also have your domain/website hosted at a web server. You can find free hosting Companies (usually with advertisements), or you can choose to pay for hosting. The result of the final project will be a personalized custom website that will be available online at the domain (Web site) that you will have purchased.

## 2. Number of Pages

- o The website must have a minimum of **ten** total pages.
- o All pages must have proper content with appropriate title/headings.
- O Your website must contain the following pages (discussed in this document):
  - 1. Home page.
  - 2. Table (Schedule).
  - 3. Picture Gallery.
  - 4. Video.
  - 5. Feedback.
  - 6. Resume.
  - 7. Contact Us.
  - 8. Blog (WordPress).
  - 9. Database.
  - 10. Add any other page(s) of your own choice with proper content.

#### 3. PHP includes

- o ALL of the pages must be PHP pages (saved as \*.php). The purpose is to use PHP includes.
- o All of your pages <u>MUST</u> pass XHTML (Strict) and CSS validation via W3C.
- o ALL pages must use at least THREE php includes, for the header, footer and links sections.

#### 1. Header

- All pages should have a common "header" using PHP includes
  - This header should have your logo and possibly some basic links if your layout has links at the top of the page.
  - This header should be an include page within all other pages of the Web site.

#### 2. Footer

- All pages should have a common "footer" section using PHP includes:
  - Your footer should have BOTH w3c validation images
  - And both images should be "clickable"



#### 3. Links

- You should have an area devoted for links using PHP includes:
  - o The links that will be linked to the various sections of your Web site.
  - O Where you place these links are up to you:
    - o They could be on the left side of a two-column layout.
    - o They could be on the right side of a two-column layout.
    - o They could be on either side of a three-column layout.
    - O They could be at the top of the page.
  - The links should also be an included page within all other pages of the Web site.

# 4. Directory Structure

- o All files for your Web site should be organized into appropriate directories:
  - o All images should be saved into an "images" folder.
  - o All included files should be saved into "includes" folder.
  - o All videos should be saved into a "videos" folder.
  - O All html files should be saved into a "pages" folder.
- You can choose the names of these folders at your own choice, just make sure your files are organized appropriately.

# 5. Look (HTML, layout and CSS)

- o All pages should follow the same color scheme
  - o And this is all set in the external CSS file.
- O You <u>MUST</u> be using DIV approach to layout different components of your website (such as header, footer, links, content area etc.)
- O Your Web site should follow the hierarchical approach to Web site design
  - O Depending on the content/purpose of your site, some of the internal pages may use a linear approach.
- o All layout/design should be done in CSS
  - o Including using containers for layout.
- You should have one CSS file for your entire site:
  - o Should be saved within the "global" directory
  - o So if your CSS file is called main.css, it should be stored in global/main.css
  - o Each page of the site should link to this CSS file.

#### 6. Picture Gallery

- O You should have a Picture Gallery page that can show pictures of whatever content you wish (add minimum 10 pictures)
- O Upon clicking the link to open the picture gallery, the user should see one large picture (the first picture), and then should see all the thumbnails underneath
  - There must be two versions for each image: The actual image and its thumbnail with reduced dimensions.
- o There must be proper navigation buttons in the gallery (like next, previous buttons/icons).
- o Implement the Picture Gallery using JavaScript or CSS (or both).
- o DO NOT use any readymade plug-in/JQuery.

#### 7. Table

## 1. Design

- You should have at least one page with a table.
- O This table should not be used for the layout of the page but should be used to display some tabular data, such as a schedule or some other type of content that is best laid out within a table.
- Your table should have multiple columns and rows and it <u>MUST</u> use colspan and rowspan.
- All table elements and contents must be formatted using CSS. (Table.css along with main.css)

#### 2. Print

• Create a separate CSS (**print.css**) for customized print option. It should print only table contents (with caption) and not anything else.

#### 8. Video

- o You should have a page with a Video:
- O Create your own video (like your introduction, about the web course, or some other tutorial) and upload it on YouTube.
- o Embed this video into your website using the object tag.

#### 9. Feedback Form

#### 1. Look

- O You should have a Feedback form.
- Your form should be divided into at least two sections. Use fieldsets to divide the sections.
- o Give proper labels to all form elements
- o Your form should contain AT LEAST the following elements:
  - 7 text boxes including email ID (e.g. First Name, Last Name, Email etc.).
  - 2 radio/option inputs (e.g. Male, Female).
  - 2 check boxes (e.g. Hobbies)
  - 1 dropdown selection lists (e.g. City Names).
  - 1 text area box for feedback.
- o Apply CSS for the form elements

#### 2. JavaScript Validation

- Validation must be applied to the feedback form
  - Input validation
    - Form should not be submitted with invalid data.
  - o Mandatory fields validation
    - Form should not be submitted with empty/unselected mandatory fields
  - Add all validation code in a separate file validation.is
- All error messages should be displayed within the page. DO NOT use browser's prompt messages
- Shift the focus (cursor) to the first error element of the form
- All error messages must be formatted using CSS (e.g. Same Form.css)

# 3. Server Processing and Validation

- O Store all data on server in the database (create a table "feedback" for this purpose).
- Apply validation on email ID so that there should be only single entry for an email ID.
- o In case the email ID is new, store the feedback data, otherwise give error message to user without saving it.
- Use either an independent page to display server side error or redirect the user to form page again with error message.

#### 10. Resume

- o Make your resume in MS Word (or whatever program you prefer), and then save it as a PDF
  - O You can easily find free online converters.
  - o The pdf resume must be displayed within your web page.
  - o No download, no new tab.
  - You need to use <object> tag for it.

# 11. Contact Page

- O You should have a page showing how to contact you.
- o You should NOT directly type your email onto this page.
- o Rather, you MUST use JavaScript to scramble your email and then print it to the HTML file when read from the browser.
  - o The JavaScript must be in an External JS file that you link to e.g. email.js

# 12. Integrating third party Blog - WordPress

- O You must install a WordPress blog site at a sub-domain of your site which you will name "blog".
- o So, if your domain is www.alzahrani.com, you will make a subdomain at blog.alzahrani.com and will install WordPress at that location.
- The title, graphic (logo), and colors of the blog must all be set by you (meaning, they must be changed).
- O You must make a minimum of three different "blog entries" on three different days prior to the due date.

#### 13.Database (PHP + MySQL)

- o Create a database on your hosting.
- o Add at least two tables to the database (other than feedback table as mentioned in section 9).
- There must be relationship between these two tables (primary/foreign keys)
- o Add some data to the tables.
- o Fetch data from both tables and display via PHP page.
- o Give proper title to this page according to the content you choose.

#### 14. Report

o Submit a detailed report of all your activities with screenshots

# **Deliverables (what to submit)**

- o You must submit one ZIP file containing all files & folders of your Website to Blackboard.
  - With the exception of the "blog" as this is strictly for the "live" portion of your Web site (It will be checked online from your website)
- O Your files must also be uploaded to your domain
  - o Meaning, your site must be "live", showing your final project at the domain you purchased

# **Deadline (when to submit)**

o Wednesday April 16, 2025 till 11:59 PM

# **Grading Criteria**

Sr#	Criterion	Grade
1	PHP includes	2
	All pages should have a common header, footer and navigation links using PHP includes.	2
2	Number of valid pages	4
	The website must have a minimum of ten valid XHTML and CSS pages with .php extension.	Т
3	Directory Structure	2
	All files for Website should be organized into appropriate directories.	
4	Look (CSS)	
	One external CSS file should be used for entire website and saved in the "global" directory. The file	4
	should contain styles for all the elements used in the website.	
5	Picture Gallery	
	Implement the Picture Gallery using JavaScript and CSS with proper navigation. Upon clicking the	2
	link to open the picture gallery, the user should see one large picture (the first picture), and then	_
	should see all the thumbnails underneath.	
6	Table Design	2
	Tabular data with multiple columns and multiple rows.	
7	Table Print	2
	A separate CSS (print.css) that should print only table contents and not anything else.	_
8	Video	_
	Video page should embed your own flash player to play the video or embed any external video	2
	using the object tag.	
9	Feedback Form Interface	
	Design HTML form that should have at least seven input boxes including email ID. Use at least two	2
	fieldsets to divide the sections. The form should contain at least one element of Text boxes,	
10	radio/option inputs, check boxes, dropdown selection lists, and textarea boxes for feedback.	
10	Feedback Form JavaScript Validation	
	Validation must be applied to the feedback form, including:	4
	Input validation: Form should not submit with invalid data Mandatory fields validation: Form should not submit with empty/unselected mandatory fields	4
	Add all validation code in a separate file validation.js.	
11	Feedback Form Server Processing and Validation	
11	All data from form must be saved to server in the database	
	Apply validation on email ID so that there should be only single entry for an email ID. In case the	4
	email ID is new store the data, otherwise give error message to user without saving it.	
12	PDF Resume Page	
12	The pdf resume must display within your web page (No download, no new tab) using an <object></object>	2
	tag for it.	_
13	Contact Page	_
	Scramble the contact email and then print it to the HTML file when read from the browser.	2
14	WordPress sub-domain	
	A WordPress blog site must be installed as a subdomain of your site which you should name	2
	"blog". Add at least three posts to the blog.	
15	Database (PHP + MySQL)	
-	A database must be created on hosting website and at least two tables must be added to the	4
	database with some data. Fetch data and display via PHP pages	
16	Report + Presentation	10
	Detailed report of all your activities with screenshots. Overall clear presentation.	10
Total		