



PROJECT
Web Technologies

VIRTUAL SECONDARY

1 INTRODUCTION

Welcome to the 2022 Virtual Web Technologies Competition. You will compete for 6 hours performing web technology tasks. The project will involve a series of short tasks taking 15min – 40min per task.

2 DESCRIPTION OF PROJECT AND TASKS

JUDGING CRITERIA

Skills Test [8:30am – 3:30pm] [Lunch 11:30 – 12:00]

Total Time Allowed: 6 Hours

Time for each task indicated beside each task

Objective

You will demonstrate your web development skills by completing a variety of small tasks that will covering the following topics.

- Graphic design
- Web design (HTML and CSS)
- PHP programming
- JavaScript
- Database

Below are sample tasks that you will be expected to complete. At the national competition there will be 6 hours of tasks in total. You will be provided a webserver account using cPanel. You will be provided account details to connect with sFTP and log into cPanel to access phpMyAdmin.

Sample Tasks

Task 1: Convert image to greyscale

Using your graphical editor, transform the given photo.jpg into greyscale. Save the transformed photo as photo1_greyscale.jpg.

Test Project
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Due to unforeseeable COVID-19 regulations/uncertainties, competition documents are subject to change.

Task 2: Smiley Face Feedback

You will be provided with three images representing three states for a “smiley face” feedback system – unhappy, neutral and happy. Create the CSS and JavaScript so that on the click event the smiley face transitions between the three states. The transition duration is 0.5 seconds starting from the neutral state.



Task 3: Create a HTML Form

For this task you need to use the Bootstrap framework to create a form to collect the following information:

- First Name
- Last Name
- Street Address
- City
- Province
- Postal Code

The province field is a select list that includes all Canadian provinces and territories. The fields should contain all of the appropriate classes and field types.

Task 4: Form Validation with PHP

All form submissions should be validated by the server regardless of whether there was any front-end validation. Your task is to validate the submission of a provided contact form. Ensure all fields have been filled out and that the e-mail address is properly structured. In addition, you must provide appropriate feedback to the user on form submission – inform them of any missing fields or if the submission was successful.

Task 5: Install WordPress

Install WordPress from the provided zip file along with any required databases and credentials. Create an 'editor' account in addition to the administrator account you created during the installation. Using the editor account, create one post in your WordPress installation to ensure everything works as expected. Ensure you provide the username and password for each account that you created.

Task 6: Create a Database

Create a database with two tables – products and categories. Each table must have a primary key. In addition, products must belong to a category, so you need to define this relationship in your database structure. Create three sample categories ('phones', 'tablets' and 'accessories') and create two sample products for each category ensuring that each product belongs to one category.



DIGITAL



THINKING



READING TEXT