



CONTEST DESCRIPTION

## **Web Technologies**

TEAM CANADA

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## 1 THE SKILLS FOR SUCCESS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY

In response to the evolving labour market and changing skill needs, the Government of Canada has launched the new Skills for Success (*former Essential Skills*) model defining nine key skills needed by Canadians to participate in work, in education and training, and in modern society more broadly. SCC is currently working with Employment and Social Development Canada (ESDC) to bring awareness of the importance of these skills that are absolutely crucial for success in Trade and Technology careers. Part of this ongoing initiative requires the integration and identification of the Skills for Success in contest descriptions, projects, and project documents. The next phase and very important aspect of our Skills for Success (SfS) initiative is to provide a *Skills Report Card* to each competitor at the Skills Canada National Competition. The purpose of the report card is to inform the competitor about their current level of nine identified Skills for Success based on their competition scores. With this knowledge, the competitor will be made aware which skill may require improvement. Full implementation is expected in the next Skills Canada National Competition.

The following 9 skills have been identified and validated as key skills for success for the workplace in the legend below:

<sup>1</sup>Numeracy, <sup>2</sup>Communication, <sup>3</sup>Collaboration, <sup>4</sup>Adaptability, <sup>5</sup>Readingt, <sup>6</sup>Writing, <sup>7</sup>Pro blem Solving, <sup>8</sup>Creativity and Innovation, <sup>9</sup>Digital

These Skills for Success have been identified in section 2.4 and/or 3.2 of your Contest Description and if applicable, in your Project and supporting documents.

## 2 CONTEST INTRODUCTION

### 2.1 Description of the associated work role(s) or occupation(s)

[https://www.skillscompetencescanada.com/en/skill\\_area/web-technologies/](https://www.skillscompetencescanada.com/en/skill_area/web-technologies/)

### 2.2 Purpose of the Challenge

To provide competitors with the opportunity to demonstrate through practical application their skills in client and server-side Web design and development.

### 2.3 Duration of contest

12 hours (6 hours per day for two days)

## 2.4 Skills and Knowledge to be tested.

This modular competition will test the competitor's knowledge and skills dealing with:

- Graphics for the Web<sup>9</sup>
- Web design principles<sup>9</sup>
- HTML <sup>5,9</sup>
- CSS <sup>9</sup>
- JavaScript, jQuery <sup>7,9</sup>
- XAMPP (Apache HTTP Server, MariaDB, and PHP, phpMyAdmin)<sup>7,9</sup>

*Essential Skills – <sup>5</sup>Reading, <sup>7</sup>Problem Solving, <sup>9</sup>Digital*

## 3 CONTEST DESCRIPTION

### 3.1 List of documents produced and timeline for when competitors have access to the documents on the Skills/Compétences Canada website

DOCUMENT	DATE OF DISTRIBUTION
Sample Test Project	January 2021
Final Test Project	First day of competition

### 3.2 Tasks that may be performed during the contest

- Use standard (X)HTML and CSS to create accessible, usable Web pages. <sup>9</sup>
- Create responsive Web page designs that utilize are viewable in modern Web browsers (Mozilla Firefox, Google Chrome, Microsoft Edge, Apple Safari) and on numerous devices (desktop computer, tablet computer, smartphone). <sup>9</sup>
- Create, manipulate, and optimize raster and vector graphics. <sup>8,9</sup>
- Write JavaScript code and utilize libraries in order to enhance the overall user experience of Web solutions <sup>7,9</sup>
- Write JavaScript and PHP programs given a set of functional requirements. <sup>6,7</sup>
- Use relational databases with MariaDB, and write programs that operate on persistent data. <sup>7,9</sup>
- Refactor and debug client- and server-side code. <sup>7,8</sup>

*Skills for Success – <sup>6</sup>Writing, <sup>7</sup>Problem Solving, <sup>8</sup>Creativity & Innovation, <sup>9</sup>Digital*

## 4 EQUIPMENT, MATERIAL, CLOTHING

### 4.1 Equipment and material provided by Skills/Compétences Canada

- Work desk and ergonomic chair

**COMPETITORS WILL BE REQUIRED TO USE THE MATERIAL AND EQUIPMENT PROVIDED BY SCC. ALL OTHER MATERIAL AND EQUIPMENT WILL BE REMOVED FROM THE SKILL AREA.**

### 4.2 Equipment and material provided by the competitor

- Headphones, MP3 player or Phone (phone must be in airplane mode with wifi turned off)
- Laptop with Windows 10 Operating System - competitor has administrative privileges on laptop
  - Graphics manipulation program installed (e.g. Photoshop, Gimp)
  - Integrated Development Environment for code editing (e.g. VSCode)
  - XAMPP Server Environment for local development
- May bring: Mouse and external keyboard (to work with laptop)
- If competitors are bringing a computer or laptop from their school (instead of their personal computer), please ensure that the computer is unlocked so documents and possibly software can be saved/installed to the hard drive and technology support can be provided onsite. This may require access to CMOS settings.

### 4.3 Required clothing provided by the competitor

- Competitors must be dressed in a business casual attire.

## 5 HEALTH AND SAFETY

### 5.1 Safety program

SCC has implemented a comprehensive safety program as health and safety is an integral part of our competitions. Our safety program includes guidelines and procedures to make the work environment in each skill area safer.

#### 5.1.1 Safety manual

As part of our program a safety manual has been created in order to monitor and document health and safety within each skill area. It includes a definite plan of action designed to prevent accidents. The safety manual will be provided for every skill and these instructions must be followed and respected by all participants and officials at the SCNC.

### 5.1.2 Safety workshop

During orientation, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the competition. Any Competitor breaking any health, safety, and environmental rules, may be required to undertake a second safety workshop, this will not affect the Competitor's competition time.

### 5.2 List of required personal protective equipment (PPE) provided by competitors

- No PPE required

### 5.3 COVID-19 Protocol

The COVID-19 guidelines will be shared as soon as they are available.

The COVID-19 guidelines will be subject to change based on the BC COVID-19 guidelines in place at the time of the competition.

## 6 SAFETY REQUIREMENTS

### 6.1 Safety workshop

Upon arrival at the Skill area, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the competition. Any Competitor breaking any health, safety and environmental rules, may be required to undertake a second safety workshop, this will not affect the Competitor's competition time.

### 6.2 List of required personal protective equipment (PPE) provided by Skills/Compétences Canada

- No PPE required.

### 6.3 List of required personal protective equipment (PPE) provided by the competitor

- No PPE required.

**Note:** Contestants who do not have the required protective gear will not be allowed to participate in the contest

## 7 ASSESSMENT

### 7.1 Point breakdown

**Note:** This list is subject to change.

TASKS	/100
Module A: WordPress	25
Module B: Back End Development (PHP)	25
Module C: Front End Development (Javascript, jQuery)	25
Module D: Databases, Graphic Design/Manipulation	25

## 8 CONTEST SPECIFIC RULES

Contest specific rules cannot contradict or take priority over the Competition Rules. They do provide specific details and clarity in areas that may vary from contest to contest. Any additional contest rules will be reviewed during the competitor orientation.

TOPIC/TASK	CONTEST SPECIFIC RULE
Module Completion	All modules will be distributed at the beginning of the competition, but modules must be submitted at the end of each 3-hour block.

## 9 ADDITIONAL INFORMATION

### 9.1 Interpreter

If a competitor requires the help of an interpreter once onsite during the competition, the Skills/Compétences Canada Provincial/Territorial offices must advise Skills/Compétences Canada National Secretariat a minimum of 1 month prior to the competition or this service might not be guaranteed.

### 9.2 Ties

- Tiebreaker #1: The competitor with the highest score in the Measurement criteria in Module B will be declared the winner.
- Tiebreaker #2: The competitor with the highest score in the Measurement criteria in Module C will be declared the winner.
- Tiebreaker #3: The competitor with the highest score in the Measurement criteria in Module D will be declared the winner.

### 9.3 Test Project change at the Competition

Where the Test Project has been circulated to Competitors in advance, Expert shall change a maximum of 30% of the work content. Please refer to the Competition Rules.

### 9.4 Competition rules

Refer to the competition rules of the Skills Canada National Competition which can be found on our website.

## 10 TEAM CANADA EXPERT

David Cantwell
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Contact the Skills/Compétences Canada national secretariat for any questions or concerns: Sophie Courchene at [sophiecc@skillscanada.com](mailto:sophiecc@skillscanada.com)