SCNC
SKILLS CANADA
NATIONAL COMPETITION

OCMT
OLYMPIADES CANADIENNES
DES MÉTIERS ET
DES TECHNOLOGIES

SkillsCompétences
Canada
Edmonton2018

WEB DESIGN AND DEVELOPMENT

CONCEPTION ET CRÉATION DE SITES WEB

SECONDARY /
NIVEAUX SECONDAIRE

Table of Contents

1. **THE ESSENTIAL SKILLS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY**

SCC is currently working with Employment and Social Development Canada (ESDC) in order to bring awareness to the importance of Essential Skills that are absolutely crucial for success in the workforce. Part of this ongoing initiative requires the integration and identification of Essential Skills in contest descriptions, projects, and project documents. The next phase and very important aspect of our Essential Skills (ES) initiative is to provide an ES report card to each competitor at the Skills Canada National Competition. The purpose of the ES report card is to inform the competitor about their current level of essential skills based on their competition scores. With this knowledge, the competitor will be made aware which essential 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 essential skills for the workplace in the legend below:
[1]Numeracy, **[2]**Oral Communication, [3]Working with Others, [4]Continuous Learning, [5]Reading Text, [6]Writing, **[7]**Thinking, [8]Document Use, [9]Digital

These essential skills have been identified with in section 2.3 and/or 3.2 of your Contest Description. The top three Essential Skills for your area of competition have been identified on your Project and all other supporting project documents.

2. **CONTEST INTRODUCTION**

2.1 Description of the associated work role(s) or occupation(s).
http://skillscompetencescanada.com/en/skills/information-technology/website-development/

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

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[9]
- Web design principles[9]
- HTML 5[9]
- CSS 1, 2 and 3[9]
- JavaScript[9]
- jQuery[7]
- XAMPP 7 (Apache HTTP Server, MariaDB, and PHP, phpMyAdmin)[9]
- WordPress 4.8[9]

3. CONTEST DESCRIPTION

3.1 List of documents produced and timeline for when competitors have access to the documents.

DOCUMENT	DATE OF DISTRIBUTION VIA WEBSITE
Judging Criteria	January, 2018
Test Project	January, 2018

3.2 Tasks that may be performed during the competition:

- Use standard (X)HTML and CSS to create accessible and usable Web pages. [9]
- Create responsive Web page designs that utilize the WordPress content management system and are viewable in modern Web browsers (Mozilla Firefox, Google Chrome, Microsoft Edge, Apple Safari) and on numerous devices (desktop computer, tablet computer, smartphone). [9]
- Create, manipulate, and optimize raster and vector graphics. **[9]**
- Write JavaScript code and utilize libraries in order to enhance the overall user experience of Web solutions[7,9]
- Write JavaScript and PHP programs given a set of functional requirements. **[5,7,9]**
- Use relational databases with MariaDB, and write programs that operate on persistent data. [7, 9]
- Refactor and debug client- and server-side code. [7]

Essential Skills – [5]Reading Text, [7]Thinking (Problem Solving, Critical Thinking), [9]Digital

4. EQUIPMENT, MATERIAL, CLOTHING

4.1 Equipment and material provided by <u>Skills/Compétences Canada</u>
- Work desk and ergonomic chair
- Note pads

4.2 Equipment and material provided by the <u>competitor:</u>
- Personal computer containing any of the following software:
  - Operating system: Linux, Mac OS or Windows
  - Web browsers: Chrome, Edge, Firefox, Internet Explorer, Opera, Safari
  - Server environment: XAMPP 7 (Apache HTTP Server, MariaDB, PHP, phpMyAdmin)
  - Development environments: Aptana Studio, Dreamweaver, Eclipse, NetBeans, PhpStorm
  - Text editors: HTML Kit, Notepad++, Sublime, TextPad, Vim
  - Graphics tools: Fireworks, GIMP, Illustrator, Inkscape, Photoshop
  - Frameworks: Bootstrap, jQuery
  - Content management system: WordPress
- 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.
- Pen and/or pencil

4.3 Required clothing provided by <u>the competitor.</u>
- Competitors must be dressed in a business casual attire

5. SAFETY REQUIREMENTS

5.1 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.

5.2 List of required personal protective equipment (PPE) provided by the <u>competitor.</u>
- No PPE required

6. ASSESSMENT

6.1 Point breakdown

POINT BREAKDOWN	/100
WordPress Web site design and development	50
JavaScript game design and development	50

7. ADDITIONAL INFORMATION

7.1 Consecutive translation
If consecutive translation is required on site, 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.

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

7.3 Tie (No ties are allowed)
In the event of a tie, the competitor with the highest score in the Measurement (Objective) criteria will be declared the winner. If a second tie occurs, the competitor with the highest score in the Module B (measurement marks) combined will be declared the winner. You can find these criteria in the Judging Criteria document on the Skills/Compétences Canada website.

7.4 Competition rules
Please refer to the competition rules of the Skills Canada National Competition.

8. NATIONAL TECHNICAL COMMITTEE MEMBERS

Member Organization	Name
Ontario - Chair	Dalibor Dvorski
Saskatchewan	Jeff Boulton
Manitoba	Sean Taylor
Newfoundland and Labrador	David Cantwell
Alberta	Matt Waggoner

Contact the Skills/Compétences Canada national secretariat for any questions or concerns: Marilou Leduc (mariloul@skillscanada.com).