

WorldSkills UK

Web Development

2025 Pre-Competition Activity

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PRE-COMPETITION ACTIVITY

Alongside the marking guidelines and other materials detailed in this document, competitors are advised to get ready for the competitions by utilising the example assessments given below. The tasks included in the pre-competition activities, drawn from past competitions, are intended to demonstrate the kinds of tasks and skills that will be expected from participants along with the 2025 WSUK National Competition test projects and solutions.

Sample Assessments and Training Resources

Example assessments for each module can be accessed and downloaded from the resource repository provided below. Additionally, a variety of training materials, expert guidance, and examples of student work are being added to assist participants in preparing for this year's competition. [Sample Test Projects \(https://github.com/worldskillsuk/national-resources\)](https://github.com/worldskillsuk/national-resources)

Entry Stage (Stage 1) - What to expect

Shortly after registration closes, you will be sent details of this year's online entry assessment. This stage of the competition will be online and will be testing your knowledge of:

- Web technologies and browsers
- File types
- Core HTML, CSS, JS & PHP knowledge
- Accessibility

Participants will be able to take the test one time only, and the test will be formatted as a quiz with a duration of 1 hour and 45 questions.

National Qualifier (Stage 2) - What to expect

For the national qualifier, you will be required to put your coding skills to test.

A brief/specification, a mock-up, assets (such as images and logos), and text for a sample website or web application will be provided to you. You will need to use your practical skills in HTML, CSS, and JavaScript to create a functioning webpage that matches the given design and functional requirements.

This task will take place under supervised conditions on a remote assessment platform, and you will have 3 hours to complete it. Full instructions will be given once you reach this stage.

National Finals (Stage 3) - What to expect

The National Finals are designed to challenge your skills and test your abilities. This competition will assess all core competencies through four modules conducted over two days. Participants are required to compete in person at the host venue, providing a hands-on and interactive experience.

Module A - Design Implementation

You will be required to develop a working website or web application based on a provided specification using HTML, CSS, and JavaScript. Given a brief, assets, and content, you will be expected to match the design as closely as possible, aiming for pixel-perfect accuracy. Best practices, accessibility (including adaptive and responsive website development techniques), and advanced use of CSS will also be assessed. While the use of front-end frameworks is permitted, it is not necessary, as the test project is designed to be completed using only vanilla CSS and JavaScript.

Assessment Duration: 3 hours

Internet Access: None

Module B - Front-End Development

You will be required to implement a solution to a given set of tasks using JavaScript. These tasks may include adding interactivity through events and DOM manipulation, debugging and fixing erroneous code, retrieving and handling data from a database through a provided API, and demonstrating best practices. Maintaining a clear project structure and documenting your code effectively are also assessed. While the use of front-end frameworks is not necessary to complete the test project, their use is highly encouraged to demonstrate advanced skills and industry-relevant practices.

Assessment Duration: 3 hours

Internet Access: None

Module C - Back-End Development

You will be required to develop a website or web application with server-side functionality. Typical requirements include authentication; interacting with a database to create, read, update, and delete data (CRUD); and securing parts vulnerable to exploits. You may write your solution in one of the permitted back-end languages of your choice.

Assessment Duration: 3 hours

Internet Access: None

Module D - Speed Test

You will be required to solve a series of mini-tasks that are categorised based on the approximate required time to solve them:

- Easy / 5 min
- Medium / 5–15 min
- Complex / 15-30 min

Assessment Duration: 3 hours

Internet Access: None

This aspect will assess your organisational skills, time management and ability to work under pressure.

WEB DEVELOPMENT TOOLS AND RESOURCES

Below, a list of the current software, applications, libraries and frameworks for use in the WorldSkills competitions is provided for your convenience. It is important to note that not all the software listed are required; participants are encouraged to select the applications that best suit their preferences and needs.

As a recommendation, consider focusing on software that aligns with your strengths and project requirements, ensuring you are comfortable and proficient with your chosen tools to maximise your performance in the competition.

NOTE: *Although some design tools, are listed below as examples, they are not part of this competition. Instead, all design elements must be created directly through code, requiring participants to implement and refine the visual aspects of the project on the go.*

R = Recommended

M = Must

Code Editors (IDEs)		
Tool	Available Platform/Purpose	Licence Type
Visual Studio Code (R ¹)	Win/macOS/Linux	Free
PhpStorm (R ²)	Win/macOS/Linux	Free (EDU Licence)
WebStorm	Win/macOS/Linux	Free (EDU Licence)
Design Tools		
Figma (R ¹)	Win/macOS	Free (3 Collaborative)
Lunacy (R ²)	Win/macOS/Linux	Free
Axure (Prototyping)	Win/macOS	Free (EDU Licence)
Database Tools		
MySQL (R)	Win/macOS/Linux (Part of localhosts as well)	Free
PostgreSQL	Win/macOS/Linux	Free
Cross-platform web servers (localhosts)		
AMPPS (R ¹)	Win/macOS	Free (No automatic updates)
XAMPP (R ²)	Win/macOS/Linux	Free
WampServer	Win	Free
Version Control		

GitHub (R)	Win/macOS/Linux	Free + (EDU Licence)
GitLab	Win/macOS/Linux	Free
Frameworks and Libraries		
Bootstrap	CSS/JS	Free
TailwindCSS	CSS	Free
Font Awesome	Icons	Free
Google Fonts	Icons	Free
React	JS	Free
Vue.js	JS	Free
Laravel	PHP	Free
Node.js	JS	Free
NPM	Library & Package Manager	Free - Part of Node.js
Browsers and plugins		
Chrome	Win/macOS/Linux	Free
Mozilla	Win/macOS/Linux	Free
Edge	Win/macOS/Linux	Free
AXE DevTools (R)	Chrome/Mozilla/Edge	Free
WCAG ContrastChecker(R)	Chrome/Mozilla/Edge	Free
Web Developer (R)	Chrome/Mozilla/Edge	Free
WAVE Accessibility	Chrome/Mozilla/Edge	Free
Learning material and additional resource		
DevDocs (M)	<i>Official Documentations used in competition</i>	Free
Laracast	Laravel Learning	Free
CodeWars	Peer Skill Development	Free
CodeAcademy	Interactive Courses	Paid (Discount for Students)
freeCodeCamp	Interactive Courses	Free
SoloLearn	Interactive Courses	Paid
HappyCoding	Interactive Courses	Free