Microsoft

20480C: Programming in HTML5 with JavaScript and CSS3

Classroom Setup Guide

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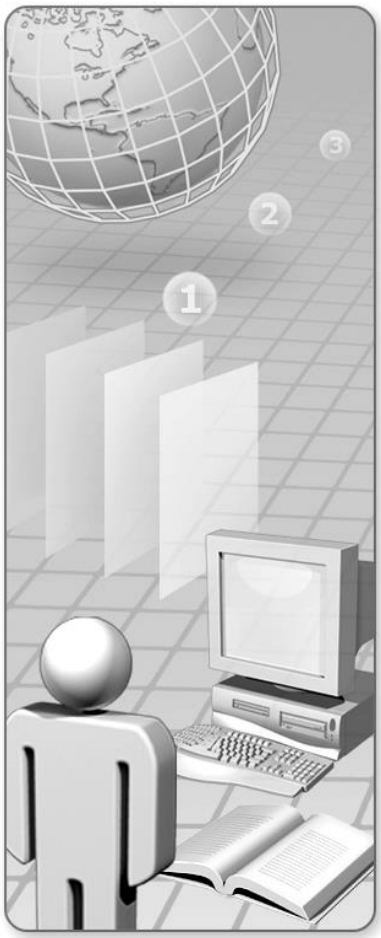

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Template v2.0

Product Number: 20480C

Introduction – No VM Courseware

This course's lab experience was designed to run on the student's own computers. The course does not ship with a dedicated virtual machine. Students should install the required software specified below on their computers. Training centers interested in providing the development environment for their enrolled students should follow the installation steps below for each classroom computer.

Digital Courseware

If you are using digital courseware via the Skillpipe reader from Arvato, and if the course contains a "boot to vhd" or "native boot" scenario in some or all of the labs, students will not be able to view the online courseware content and lab steps in the Skillpipe reader while their host machine is offline. In this particular scenario, there are available options:

- Have two network interface cards (NICs) in the host machines.
- Print out the lab steps for the particular module.
- Ask students who have their own devices to bring them to the class.
- Configure two virtual machines prior to the class to allow access to the content offline.

Depending on your particular situation, consider implementing one of the above options. Further details and considerations for these workarounds and options are available on the Born To Learn website at https://borntolearn.mslearn.net/, and have also been sent out via partner and MCT newsletters.

Setup Overview

The host computers must be set up with Windows 10 Professional or Windows 10 Enterprise and must be running on 64-bit hardware.

Classroom Requirements

This learning product requires a classroom with a minimum of one computer for the instructor and one for each student. Before the class begins, use the following information and instructions to install and configure all the computers.

Hardware

The classroom computers require the following hardware and software configuration.

Hardware Level 6

- Processor: Intel Virtualization Technology (Intel VT) or AMD Virtualization (AMD-V)
- Hard Disk: Dual 120 GB hard disks 7200 RM SATA or better (Striped)
- RAM: 4 GB expandable to 8GB or higher
- DVD/CD: DVD drive
- Network adapter
- Video Adapter/Monitor: 17-inch Super VGA (SVGA)
- Microsoft Mouse or compatible pointing device
- Sound card with amplified speakers

In addition, the instructor computer must:

- Be connected to a projection display device that supports SVGA 1024 x 768 pixels, 16-bit colors.
- Have a sound card with amplified speakers

*__Note:__ To determine what features your processor supports, download Coreinfo from http://aka.ms/coreinfo

Software

Please note that, unless otherwise indicated, this software is not included in the Trainer Materials disc. This learning product was developed and tested on supported Microsoft software, which is required for the classroom computers.

Also required, but not included in the Training Materials: Microsoft Office PowerPoint® 2007 (instructor computer only).

Important: Windows 10 is required for running this course. Before starting the installations, make sure that your copy of Windows is up to date.

Classroom Configuration

Estimated Time to Set up the Classroom: 60 Minutes

Instructor and Student Computer Checklist

- ☐ 1. Install Microsoft Visual Studio 2017 Community Edition.
- ☐ 2. Get Allfiles and the associated lab and demos documentation and instructions from GitHub.
- ☐ 3. Install Node.js.
- ☐ 4. Get the Microsoft PowerPoint slide deck.

Instructor and Student Computer Setup

Use the instructions in the following section to set up the classroom manually. Before starting the installation of the instructor computer, a supported operating system and Microsoft Office Power Point® 2007 must be installed on the computer.

1. Install Visual Studio 2017 Community Edition

In this task, you will install the Visual Studio 2017 Community Edition software on the machine.

1. Go to https://www.visualstudio.com/downloads/ and under Visual Studio Community 2017, click **Free download**.
2. Make sure that the downloaded Visual Studio Community version is **15.6.6** or later.
3. Double-click the downloaded .exe file and on the **User Account Control** dialog box, click **Yes**.
4. In the Visual Studio dialog box, click **Continue**.
5. On the **Workloads** page, under **Windows (3)**, select **Universal Windows Platform development**, and on the summary pane, make sure that following are selected:
    - Windows 10 SDK (10.0.15063.0) for UWP: C#,VB,JS
    - Windows 10 SDK (10.0.14393.0)
    - Windows 10 SDK (10.0.10586.0)
    - Windows 10 SDK (10.0.10240.0)
6. On the **Workloads** page, under **Web & Cloud (7)**, select **ASP.NET and web development** and on the summary pane, make sure that the following are selected:
    - .NET Framework 4 – 4.6 development tools
    - Cloud Explorer
    - ASP.NET MVC 4
    - .NET Framework 4.6.2 development tools
    - Entity Framework 6 tools
7. Click **Install**.
8. If a **Reboot required** dialog box appears, click **Restart**.
9. After the system reboot is complete, open **Visual Studio 2017**.
10. On the Visual Studio **Welcome** page, click **Not now, maybe later.**
11. On the **Start with a familiar environment** page, select a theme of your choice and then click **Start Visual Studio**.
12. Click **Start**, if necessary, click **All Apps**, scroll down, right-click the **Visual Studio 2017** tile, and then select **Pin to Start.**

2. Install Node.js

1. In your browser, go to https://nodejs.org/en/.
2. Under **Download for Windows (x64)**, click **Current Latest Features**.
3. Once the download of the installer is complete, go the **Downloads** folder and double click **node-v10.12.0-x64.msi**.
4. In the **Node.js Setup** windows, click **Next**.
5. To agree to the License Agreement, select the check box, and then click **Next**.
6. Click **Next**.
7. Click **Next**.
8. Click **Install**.
9. In the **User Account Control** window, click **Yes**.
10. Once the installation is complete, click **Finish**.

3. Get Allfiles and the associated instructions from GitHub

The source files (Allfiles directory) for this course are hosted and maintained on GitHub.

11. In your browser, in the address bar, type https://github.com/MicrosoftLearning/20480-Programming-in-HTML5-with-JavaScript-and-CSS3.
12. Expand **Clone or Download**, and then click **Download ZIP**.
13. After the download is complete, navigate to your **Downloads** folder, right-click the downloaded archive, and then click **Extract All...**
14. In the **Extract Compressed (Zipped) Folders** window, delete the default path, type **c:**, and then click **Extract**.
15. The downloaded folder includes all the relevant documentation:
    - **Lab Manual**. A set of tasks for each module.
    - **LAK**. A set of step-by-step instructions for performing the labs.
    - **DEMO**. A set of instructions for executing the included demos.
    - **Allfiles**. A directory which contains all the needed source code.
16. Once the extraction is complete, navigate to **C:\20480-Programming-in-HTML5-with-JavaScript-and-CSS3-master**, select the **Allfiles** and **Instructions** folders, right-click either of them, and then click **Copy**.
17. Navigate to **C:** and paste the two folders directly under C:\.
18. After completing the above steps, you should have the **Allfiles** and **Instructions** folders under **C:**. The rest of the files that were downloaded as a part of the repository from GitHub are not needed.

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4. Get the PowerPoint slide deck – instructor machine only

In this task, you will download the PowerPoint slide deck for this course.

1. Go to the MCT Download Center at https://learningdownloadcenter.microsoft.com.
2. Sign in with your MCT credentials.
3. In the search box, type **20480**, and then press **Enter**.
4. In the search results, expand **20480C: Part 1 - Trainer Files – Programming in HTML5 with JavaScript and CSS3**.
5. In the list, locate the PowerPoint resource, select the check box next to it, and then click **Add to Download Queue**.
6. To download the PowerPoint files, follow the instructions on the webpage.
7. Save the files to the **C:\20480-Programming-in-HTML5-with-JavaScript-and-CSS3-master** folder, which was created when the GitHub repository was extracted in the previous section.