

10-152-175 MCSD HTML5 w/ Javascript & CSS Review

# Course Design

### Course Information

|  |  |  |
| --- | --- | --- |
|  | Description | This course helps prepare an individual for the MCSD HTML with JavaScript and CSS certification exam. This is the first of four exams that must be passed for an individual to achieve the Microsoft Certified SharePoint Developer certification. |
|  | Career Cluster | Information Technology |
|  | Instructional Level | Associate Degree |
|  | Total Credits | 1.00 |
|  | Total Hours | 27.00 |

Target Population

This review course is intended for individuals who have a background in HTML5, CSS3 and JavaScript or who have completed the 152-150 Web Programming 2 class and need focused review to help them prepare for the 70-480 Microsoft Certified Professional (MCP) exam.  This is only a review class and does not include time to complete hands-on activities which is done in the 152-150 Web Programming 2.

Pre/Corequisites

|  |  |
| --- | --- |
| Prerequisite | 10-152-150 (Minimum Grade C) |

Textbooks

Cain, George. *Exam Ref 70-480: Programming in HTML5 with JavaScript and CSS3*. N.p.: Microsoft, 2014. Print. ISBN-13: 978-0735676633

 Learner Supplies

|  |
| --- |
| Flash drive for course and project documents (required)Internet AccessPens/Pencils |

### Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize HTML5 document structures and objects |
|  | Assessment Strategies |
|  | 1.1. | Flash cards |
|  | 1.2. | Test |
|  | 1.3. | Reflection |
|  | Criteria |
|  | Performance will meet requirements when: |
|  | 1.1. | learner develops study notes on the 70-480 Exam objective 1 per instructor specifications |
|  | 1.2. | learner achieves a 70% or higher on the 70-480 objective 1 exam |
|  | 1.3. | learner reflects on their readiness to take the 70-480 certification exam objective 1 per instructor specifications |
|  | Learning Objectives |
|  | 1.a. | Describe how semantic markup is used to structure the User Interface |
|  | 1.b. | Discuss how to add HTML elements and media controls |
|  | 1.c. | Discuss how to implement HTML5 canvas and SVG graphics |
|  | 1.d. | Discuss how to apply styles to the HTML elements on the page dynamically, using JavaScript |
|  | 1.e. | Discuss how Javascript APIs are used to store data locally and make it available through the Web Storage API |
|  | 1.f. | Discuss how to create a Web application that works when disconnected by using the Application Cache API |
|  | 1.g. | Discuss how to create a Web application that uses location services from the Geolocation API |
|  | 1.h. | Discuss how to define the scope of objects and variables (local and global) |
|  | 1.i. | Discuss how to implement native objects and methods |
|  | 1.j. | Discuss how to create custom object and methods |
| 2. | Summarize how to control flow with the use of Javascript |
|  | Assessment Strategies |
|  | 2.1. | Flash cards |
|  | 2.2. | Test |
|  | 2.3. | Reflection |
|  | Criteria |
|  | Performance will meet requirements when: |
|  | 2.1. | learner develops study notes on the 70-480 Exam objective 2 per instructor specifications |
|  | 2.2. | learner achieves a 70% or higher on the 70-480 objective 2 exam |
|  | 2.3. | learner reflects on their readiness to take the 70-480 certification exam objective 2 per instructor specifications |
|  | Learning Objectives |
|  | 2.a. | Discuss the difference between conditional and iterative program flow |
|  | 2.b. | Discuss how to implement arrays in program flow |
|  | 2.c. | Discuss how to raise and handle an event |
|  | 2.d. | Discuss how to use the JavaScript language to perform structured error handling |
|  | 2.e. | Discuss how to use the WebSocket API to implement bidirectional communication |
|  | 2.f. | Discuss how to use AJAX and jQuery to make dynamic webpages |
|  | 2.g. | Discuss how to create a multithreaded JavaScript application by using web workers |
|  | 2.h. | Discuss how to use the Web Worker API to create and manage a worker process |
| 3. | Summarize how to access and secure data for HTML input types with Javascript |
|  | Assessment Strategies |
|  | 3.1. | Flash cards |
|  | 3.2. | Test |
|  | 3.3. | Reflection |
|  | Criteria |
|  | Performance will meet requirements when: |
|  | 3.1. | learner develops study notes on the 70-480 Exam objective 3 per instructor specifications |
|  | 3.2. | learner achieves a 70% or higher on the 70-480 objective 3 exam |
|  | 3.3. | learner reflects on their readiness to take the 70-480 certification exam objective 3 per instructor specification |
|  | Learning Objectives |
|  | 3.a. | Discuss how to use HTML5 elements to validate user input |
|  | 3.b. | Discuss how to use Javascript built-in functions to validate data |
|  | 3.c. | Discuss how you can prevent malicious code injection |
|  | 3.d. | Discuss how to use web services to use external data sources |
|  | 3.e. | Discuss how to JSON and XML data in a HTML5 web application |
|  | 3.f. | Discuss how to serialize and deserialize JSON and binary data |
|  | 3.g. | Discuss how the submit event can customize how form data is submitted to a web server |
| 4. | Summarize how to apply CSS to format and animate objects. |
|  | Assessment Strategies |
|  | 4.1. | Flash cards |
|  | 4.2. | Test |
|  | 4.3. | Reflection |
|  | Criteria |
|  | Performance will meet requirements when: |
|  | 4.1. | learner develops study notes on the 70-480 Exam objective 4 per instructor specifications |
|  | 4.2. | learner achieves a 70% or higher on the 70-480 objective 4 exam |
|  | 4.3. | learner reflects on their readiness to take the 70-480 certification exam objective 4 per instructor specifications |
|  | Learning Objectives |
|  | 4.a. | Discuss how to use CCS3 to style text appearance on a website |
|  | 4.b. | Discuss how to use CSS3 to style HTML box properties to alter appearance, graphic effects, and set and change an element's position |
|  | 4.c. | Discuss how to use CCS3 to create a content layout using flexible content layout |
|  | 4.d. | Discuss how to use CCS3 to create, animate and adapt a User Interface (UI) |
|  | 4.e. | Discuss how to use of CSS3 selectors to work with pseudo-elements and pseudo-classes |
|  | 4.f. | Discuss how to structure a CSS file and control inheritance from parent elements |

### Grading Information

Final grades will be calculated based on the following percentages:

* Attendance/Classroom Participation =      20
* Assignments/Homework                    =      80
* Total                                                   =     100

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade** | **Percentage** | **Grade** | **Percentage** |
| A | 94 – 100 | C | 74 – 76 |
| A- | 90 – 93 | C- | 70 – 73 |
| B+ | 87 – 89 | D+ | 67 – 69 |
| B | 84 – 86 | D | 64 – 66 |
| B- | 80 – 83 | D- | 60 – 63 |
| C+ | 77 – 79 | F | < 60 |

Note: Students in the Type program name. program must earn a "C" or higher in the class or retake it.

|  |
| --- |
| MetaData Tags |
| MCP,  70-480,  Microsoft Certified Professional, Certification, 70-480, Programming in HTML5 with JavaScript and CSS3  |

### Course Learning Plans and Performance Assessment Tasks

Summarize HTML5 document structures and objects

Overview/Purpose

In this learning plan you will review and discuss key concepts of creating document structure, writing code that interacts with User interface (UI) controls, Applying CSS to HMTL elements, implementing HTML5 APIs, establishing the scope of objects and variables and how to create and implement objects and methods. This lesson will account for 24% of the Microsoft Certified Profession 70-480 certification exam.

Target Competencies

|  |  |
| --- | --- |
| 1. | Summarize HTML5 document structures and objects |
|  | Assessment Strategies |
|  | 1.1. | Flash cards |
|  | 1.2. | Test |
|  | 1.3. | Reflection |
|  | Criteria |
|  | Performance will meet requirements when: |
|  | 1.1. | learner develops study notes on the 70-480 Exam objective 1 per instructor specifications |
|  | 1.2. | learner achieves a 70% or higher on the 70-480 objective 1 exam |
|  | 1.3. | learner reflects on their readiness to take the 70-480 certification exam objective 1 per instructor specifications |
|  | Learning Objectives |
|  | 1.a. | Describe how semantic markup is used to structure the User Interface |
|  | 1.b. | Discuss how to add HTML elements and media controls |
|  | 1.c. | Discuss how to implement HTML5 canvas and SVG graphics |
|  | 1.d. | Discuss how to apply styles to the HTML elements on the page dynamically, using JavaScript |
|  | 1.e. | Discuss how Javascript APIs are used to store data locally and make it available through the Web Storage API |
|  | 1.f. | Discuss how to create a Web application that works when disconnected by using the Application Cache API |
|  | 1.g. | Discuss how to create a Web application that uses location services from the Geolocation API |
|  | 1.h. | Discuss how to define the scope of objects and variables (local and global) |
|  | 1.i. | Discuss how to implement native objects and methods |
|  | 1.j. | Discuss how to create custom object and methods |

### Learning Activities

|  |  |
| --- | --- |
| 1. | Listen to a guest speaker who has earned their MCP 70-480 certification |
|  | Teaching Notes |
|  | Have a former student who has taken the test visit the classroom to discuss their success and thepositive impact it had on them in their current employment or in obtaining a job.    Also have the student describe how they prepared for the exam and extra tools they used.  This test is harder than the MTA level exams they have taken to this point and need to understand there is a different in the level of preparation required. |
| 2. | Read Chapter 1 - Implement and manipulate document structures and objects |
| 3. | Watch Video  [HTML Semantic Structure Part 1](https://mva.microsoft.com/en-US/training-courses/developing-in-html5-with-javascript-and-css3-jump-start-8223?l=lCnp5kIy_5104984382)Watch Video  [HTML Semantic Structure Part 2](https://mva.microsoft.com/en-US/training-courses/developing-in-html5-with-javascript-and-css3-jump-start-8223?l=MyzyHlIy_504984382) |
|  | Teaching Notes |
|  | These videos were created by Microsoft Virtual Academy and are available free.  They do a nice quick review of some of the key points for the 70-480 certification exam |
| 4. | Participate in an instructor led review of the Microsoft Exam 70-480 Objective 1: Implement and manipulate document and structures |

### Assessment Activities

|  |  |
| --- | --- |
| 1. | Create electronic flash cards (study notes) for Chapter 1 |
| 2. | Complete the MeasureUp 70-486 practice exam questions from the Implement and manipulate document structures and objects section. Upload a screen capture of your completed test. |
| 3. | Reflection paper on your Certification Readiness for the 70-480 Exam Objective 1 -- Discuss in thereflection1. Your MeasureUp certification mode test score. What does the score mean?2. Do you feel ready to take the certification? Why.3. How will you finishing preparing for taking the certification exam. |

Electronic flash cards (study notes) for Chapter 1

Directions

**Learning Objective:** At the conclusion of this activity, participants should have created flash cards from their book and notes taken from the instructor's lecture. -These flash cards then will become a very useful tool to help the student review the material for their certification exam.

**Learning Activity: Flash Cards – Implement and manipulate document structures and objects**

Step 1: Choose a class partner

Step 2: Go to quizlet.com and create a new free account (if you do not already have one).   If you need help using this tool, please see your instructor for assistance.

Step 3: With your partner go through the following chapters and create at least 20 flash cards for each chapter.  Make sure to share your flash cards to your instructor and class.

                 Chapter 1 –Implement and manipulate document structures and objects

 Step 4. Make sure to review each of your flash cards for accuracy, grammar and spelling.

Step 5:   In Blackboard assignments, submit the link to your quizlet flash cards

|  |  |
| --- | --- |
| Environment | Lab |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize HTML5 document structures and objects |

Rating Scale

|  |  |
| --- | --- |
| Value | Description |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student created at least 20 flash cards from this Chapter | Complete Not Complete |
| 2. | The Flash cards contain information that is important to study for the 70-480 exam | Complete Not Complete |
| 3. | The Flash cards are technically accurate | Complete Not Complete |
| 4. | The Flash cards are without spelling and grammar errors | Complete Not Complete |
| 5. | The student shared the Flash cards with the instructor | Complete Not Complete |

MeasureUp 70-480 practice exam questions from the Implement and manipulate

document structures and objects section

Directions

**Learning Objective:** At the conclusion of this activity, participants will have completed the MeasureUp practice exam.  These questions are good examples of the questions that will be encountered on the actual certification exam.  It is highly suggested that students take the time and read every explanation for each question to glean additional study material.

**Learning Activity: MeasureUp Practice Exam – Implement and manipulate document structure and objects**

Step 1: Go to MeasureUp.com and click on Login/Registration Button.  Click on MyLearning Locker.

Step 2:  Create a free MeasureUp login account (if you do not already have one)

 If you need help using this tool, please see your instructor for assistance.    Once you have the account login with your username/password.

Step 3:  You only need to do this step once – skip if you have already completed this step.  Click on the Register Key link and paste in the key your instructor provided you.  Check the I accept button and the Register button.   Click on Go To Locker.  You should now see Practice Test

Step 4: Click on Begin Test

Step 5:  Click on Custom Mode

Step 6:  Click on Show me questions randomly selected from the text objectives checked below:

                Implement and manipulate document structures and objects

Step 7.  Click OK and Next.  Begin Test.   You should be at the start to the Test.  Go through and answer each question.   You need to achieve a 70% or higher score on the test.  If you do not, you can study and retake the exam.

Step 8:  When you are done with the last question – click on Finish Test.  It should now display your score.  Print Screen and paste the image into a word document.

Step 9:  In the word document after your print screen, comment on the areas that you will need additional study.

Step 10:   In Blackboard assignments, submit the word document for grading.

|  |  |
| --- | --- |
| Environment | Outside Assignment |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize HTML5 document structures and objects |

### Scoring

Rating Scale

|  |  |
| --- | --- |
| Value | Description |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student completed the MeasureUp exam questions for this subject with a 70% or higher score | Complete Not Complete |
| 2. | The student created a word document and pasted their screen capture of their score | Complete Not Complete |
| 3. | The student commented on their current level of performance and areas of study that need to be worked on | Complete Not Complete |
| 4. | The word document is without spelling and grammar errors | Complete Not Complete |

Reflection paper on your Certification Readiness for the 70-480 Exam Objective 1

Directions

Step 1: Reflect on your current level of knowledge based on all of the learning activities for this Objective.  You now should be able to determine your readiness to pass the certification exam in this objective.

Step 2:  Create a word document.  In this document answer the following questions:

1. Your MeasureUp test score for this objective.  What does the score mean?
2. Do you feel ready to take the certification?  Why.
3. How will you finishing preparing for taking the certification exam.
4. Any additional resources you will use to prepare for the certification.
5. Any additional assistance you would like from the instructor
6. Other comments

Step 3:   In Blackboard assignments, submit the word document for grading.

|  |  |
| --- | --- |
| Environment | Outside Assignment |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize HTML5 document structures and objects |

### Scoring

Rating Scale

|  |  |
| --- | --- |
| Value | Description |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student created a word document and included their MeasureUp test score for this objective | Complete Not Complete |
| 2. | The student demonstrated reflection in their answer to the question - Do you feel you are ready to take the certification? Why? | Complete Not Complete |
| 3. | The student demonstrated they have a plan in their answer to the question - How will you finishing preparing for this certification exam? | Complete Not Complete |
| 4. | The word document is without spelling and grammar errors | Complete Not Complete |

Summarize how to control flow with the use of Javascript

Overview/Purpose

In this learning plan you will review and discuss key concepts of working with arrays, raising events, exception handing, callback, and web worker processes. This lesson will account for 25% of the Microsoft Certified Profession 70-480 certification exam.

Target Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to control flow with the use of Javascript |
|  | Assessment Strategies |
|  | 1.1. | Flash cards |
|  | 1.2. | Test |
|  | 1.3. | Reflection |
|  | Criteria |
|  | Performance will meet requirements when: |
|  | 1.1. | learner develops study notes on the 70-480 Exam objective 2 per instructor specifications |
|  | 1.2. | learner achieves a 70% or higher on the 70-480 objective 2 exam |
|  | 1.3. | learner reflects on their readiness to take the 70-480 certification exam objective 2 per instructor specifications |
|  | Learning Objectives |
|  | 1.a. | Discuss the difference between conditional and iterative program flow |
|  | 1.b. | Discuss how to implement arrays in program flow |
|  | 1.c. | Discuss how to raise and handle an event |
|  | 1.d. | Discuss how to use the JavaScript language to perform structured error handling |
|  | 1.e. | Discuss how to use the WebSocket API to implement bidirectional communication |
|  | 1.f. | Discuss how to use AJAX and jQuery to make dynamic webpages |
|  | 1.g. | Discuss how to create a multithreaded JavaScript application by using web workers |
|  | 1.h. | Discuss how to use the Web Worker API to create and manage a worker process |

### Learning Activities

|  |  |
| --- | --- |
| 1. | Watch video [Processes with Web Workers Reviewing a shared workers example](https://www.youtube.com/watch?v=JYVvN1KJGuo) |
| 2. | Read Chapter 2 - Implement Program Flow |
| 3. | Watch Video [Javascript Core Capabilities Part 1](https://mva.microsoft.com/en-US/training-courses/developing-in-html5-with-javascript-and-css3-jump-start-8223?l=x3IWJmIy_204984382)Watch Video [Javascript Core Capabilities Part 2](https://mva.microsoft.com/en-US/training-courses/developing-in-html5-with-javascript-and-css3-jump-start-8223?l=BskKTmIy_7204984382) |
| 4. | Participate in an instructor led review of the Microsoft Exam 70-480 Objective 2:  Implement Program Flow |

### Assessment Activities

|  |  |
| --- | --- |
| 1. | Create electronic flash cards (study notes) for Chapter 2 |
|  | Teaching Notes |
|  | Have the students pair up and with a classmate go through the book Chapter 2. Create study notes in the form of electronic flash cards.\*\* make sure to show the students how to use a free tool to create their study notes such as quizlet. |
| 2. | Complete the MeasureUp 70-480 practice exam questions from the Implement program flow section. Upload a screen capture of your completed test. |
| 3. | Reflection paper on your Certification Readiness for the 70-480 Exam Objective 2 -- Discuss in thereflection1. Your MeasureUp certification mode test score. What does the score mean?2. Do you feel ready to take the certification? Why.3. How will you finishing preparing for taking the certification exam.4. Any additional resources you will use to prepare for the certification. |

Electronic flash cards (study notes) for Chapter 2

Directions

**Learning Objective:** At the conclusion of this activity, participants should have created flash cards from their book and notes taken from the instructor's lecture. -These flash cards then will become a very useful tool to help the student review the material for their certification exam.

**Learning Activity: Flash Cards – Implement Program Flow**

Step 1: Choose a class partner

Step 2: Go to quizlet.com and create a new free account (if you do not already have one).   If you need help using this tool, please see your instructor for assistance.

Step 3: With your partner go through the following chapters and create at least 20 flash cards for each chapter.  Make sure to share your flash cards to your instructor and class.

                  Chapter 2 –Implement Program Flow

 Step 4. Make sure to review each of your flash cards for accuracy, grammar and spelling.

Step 5:   In Blackboard assignments, submit the link to your quizlet flash cards

|  |  |
| --- | --- |
| Environment | Lab |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to control flow with the use of Javascript |

### Scoring

Rating Scale

|  |  |
| --- | --- |
| Value | Description |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student created at least 20 flash cards from this Chapter | Complete Not Complete |
| 2. | The Flash cards contain information that is important to study for the 70-480 exam | Complete Not Complete |
| 3. | The Flash cards are technically accurate | Complete Not Complete |
| 4. | The Flash cards are without spelling and grammar errors | Complete Not Complete |
| 5. | The student shared the Flash cards with the instructor | Complete Not Complete |

MeasureUp 70-480 practice exam questions from the Implement program flow section

Directions

**Learning Objective:** At the conclusion of this activity, participants will have completed the MeasureUp practice exam.  These questions are good examples of the questions that will be encountered on the actual certification exam.  It is highly suggested that students take the time and read every explanation for each question to glean additional study material.

**Learning Activity: MeasureUp Practice Exam –  Implement program flow**

Step 1: Go to MeasureUp.com and click on Login/Registration Button.  Click on MyLearning Locker.

Step 2:  Create a free MeasureUp login account (if you do not already have one)

 If you need help using this tool, please see your instructor for assistance.    Once you have the account login with your username/password.

Step 3:  You only need to do this step once – skip if you have already completed this step.  Click on the Register Key link and paste in the key your instructor provided you.  Check the I accept button and the Register button.   Click on Go To Locker.  You should now see Practice Test

Step 4: Click on Begin Test

Step 5:  Click on Custom Mode

Step 6:  Click on Show me questions randomly selected from the text objectives checked below:

                Implement program flow

Step 7.  Click OK and Next.  Begin Test.   You should be at the start to the Test.  Go through and answer each question.   You need to achieve a 70% or higher score on the test.  If you do not, you can study and retake the exam.

Step 8:  When you are done with the last question – click on Finish Test.  It should now display your score.  Print Screen and paste the image into a word document.

Step 9:  In the word document after your print screen, comment on the areas that you will need additional study.

Step 10:   In Blackboard assignments, submit the word document for grading.

|  |  |
| --- | --- |
| Environment | Outside Assignment |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to control flow with the use of Javascript |

Rating Scale

| Value | Description |
| --- | --- |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student completed the MeasureUp exam questions for this subject with a 70% or higher score | Complete Not Complete |
| 2. | The student created a word document and pasted their screen capture of their score | Complete Not Complete |
| 3. | The student commented on their current level of performance and areas of study that need to be worked on | Complete Not Complete |
| 4. | The word document is without spelling and grammar errors | Complete Not Complete |

Reflection paper on your Certification Readiness for the 70-480 Exam Objective 2

Directions

Step 1: Reflect on your current level of knowledge based on all of the learning activities for this Objective.  You now should be able to determine your readiness to pass the certification exam in this objective.

Step 2:  Create a word document.  In this document answer the following questions:

1. Your MeasureUp test score for this objective.  What does the score mean?
2. Do you feel ready to take the certification?  Why.
3. How will you finishing preparing for taking the certification exam.
4. Any additional resources you will use to prepare for the certification.
5. Any additional assistance you would like from the instructor
6. Other comments

Step 3:   In Blackboard assignments, submit the word document for grading.

|  |  |
| --- | --- |
| Environment | Outside Assignment |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to control flow with the use of Javascript |

Rating Scale

| Value | Description |
| --- | --- |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student created a word document and included their MeasureUp test score for this objective | Complete Not Complete |
| 2. | The student demonstrated reflection in their answer to the question - Do you feel you are ready to take the certification? Why? | Complete Not Complete |
| 3. | The student demonstrated they have a plan in their answer to the question - How will you finishing preparing for this certification exam? | Complete Not Complete |
| 4. | The word document is without spelling and grammar errors | Complete Not Complete |

Summarize how to access and secure data for HTML input types with Javascript

Overview/Purpose

In this learning plan you will review and discuss key concepts of  validating user input by using HTML5 elements and Javascript, how to consume JSON and XML data by using web services and how to serialize, deserialize and transmit data. This lesson will account for 26% of the Microsoft Certified Profession 70-480 certification exam.

Target Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to access and secure data for HTML input types with Javascript |
|  | Assessment Strategies |
|  | 1.1. | Flash cards |
|  | 1.2. | Test |
|  | 1.3. | Reflection |
|  | Criteria |
|  | Performance will meet requirements when: |
|  | 1.1. | learner develops study notes on the 70-480 Exam objective 3 per instructor specifications |
|  | 1.2. | learner achieves a 70% or higher on the 70-480 objective 3 exam |
|  | 1.3. | learner reflects on their readiness to take the 70-480 certification exam objective 3 per instructor specification |
|  | Learning Objectives |
|  | 1.a. | Discuss how to use HTML5 elements to validate user input |
|  | 1.b. | Discuss how to use Javascript built-in functions to validate data |
|  | 1.c. | Discuss how you can prevent malicious code injection |
|  | 1.d. | Discuss how to use web services to use external data sources |
|  | 1.e. | Discuss how to JSON and XML data in a HTML5 web application |
|  | 1.f. | Discuss how to serialize and deserialize JSON and binary data |
|  | 1.g. | Discuss how the submit event can customize how form data is submitted to a web server |

### Learning Activities

|  |  |
| --- | --- |
| 1. | Watch video  [SQL Injection Basics Demonstration](https://www.youtube.com/watch?v=h-9rHTLHJTY) |
|  | Teaching Notes |
|  | This video show very easily how not validating forms can be used to login to a web application |
| 2. | Read Chapter 3 - Access and secure Data |
| 3. | Watch video [Beginner JavaScript Tutorial - 40 - Simple Form Validation](https://www.youtube.com/watch?v=RzVURjrIFxo) |
| 4. | Participate in an instructor led review of the Microsoft Exam 70-480 Objective 3 Access and secure Data |

### Assessment Activities

|  |  |
| --- | --- |
| 1. | Create electronic flash cards (study notes) for Chapter 3 |
| 2. | Complete the MeasureUp 70-480 practice exam questions from the Access and secure data section. Upload a screen capture of your completed test. |
| 3. | Reflection paper on your Certification Readiness for the 70-480 Exam Objective 3 - Access and secure data1. Your MeasureUp certification mode test score. What does the score mean?2. Do you feel ready to take the certification? Why.3. How will you finishing preparing for taking the certification exam.4. Any additional resources you will use to prepare for the certification. |

Electronic flash cards (study notes) for Chapter 3

Directions

**Learning Objective:** At the conclusion of this activity, participants should have created flash cards from their book and notes taken from the instructor's lecture. -These flash cards then will become a very useful tool to help the student review the material for their certification exam.

**Learning Activity: Flash Cards – Access and secure data**

Step 1: Choose a class partner

Step 2: Go to quizlet.com and create a new free account (if you do not already have one).   If you need help using this tool, please see your instructor for assistance.

Step 3: With your partner go through the following chapters and create at least 20 flash cards for each chapter.  Make sure to share your flash cards to your instructor and class.

                  Chapter 3 – Access and secure data

 Step 4. Make sure to review each of your flash cards for accuracy, grammar and spelling.

Step 5:   In Blackboard assignments, submit the link to your quizlet flash cards

|  |  |
| --- | --- |
| Environment | Lab |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to access and secure data for HTML input types with Javascript |

### Scoring

Rating Scale

|  |  |
| --- | --- |
| Value | Description |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student created at least 20 flash cards from this Chapter | Complete Not Complete |
| 2. | The Flash cards contain information that is important to study for the 70-480 exam | Complete Not Complete |
| 3. | The Flash cards are technically accurate | Complete Not Complete |
| 4. | The Flash cards are without spelling and grammar errors | Complete Not Complete |
| 5. | The student shared the Flash cards with the instructor | Complete Not Complete |

MeasureUp 70-480 practice exam questions from the Access and secure data section

Directions

**Learning Objective:** At the conclusion of this activity, participants will have completed the MeasureUp practice exam.  These questions are good examples of the questions that will be encountered on the actual certification exam.  It is highly suggested that students take the time and read every explanation for each question to glean additional study material.

**Learning Activity: MeasureUp Practice Exam –  Access and secure data**

Step 1: Go to MeasureUp.com and click on Login/Registration Button.  Click on MyLearning Locker.

Step 2:  Create a free MeasureUp login account (if you do not already have one)

 If you need help using this tool, please see your instructor for assistance.    Once you have the account login with your username/password.

Step 3:  You only need to do this step once – skip if you have already completed this step.  Click on the Register Key link and paste in the key your instructor provided you.  Check the I accept button and the Register button.   Click on Go To Locker.  You should now see Practice Test

Step 4: Click on Begin Test

Step 5:  Click on Custom Mode

Step 6:  Click on Show me questions randomly selected from the text objectives checked below:

                Access and secure data

Step 7.  Click OK and Next.  Begin Test.   You should be at the start to the Test.  Go through and answer each question.   You need to achieve a 70% or higher score on the test.  If you do not, you can study and retake the exam.

Step 8:  When you are done with the last question – click on Finish Test.  It should now display your score.  Print Screen and paste the image into a word document.

Step 9:  In the word document after your print screen, comment on the areas that you will need additional study.

Step 10:   In Blackboard assignments, submit the word document for grading.

|  |  |
| --- | --- |
| Environment | Outside Assignment |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to access and secure data for HTML input types with Javascript |

### Scoring

Rating Scale

|  |  |
| --- | --- |
| Value | Description |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student completed the MeasureUp exam questions for this subject with a 70% or higher score | Complete Not Complete |
| 2. | The student created a word document and pasted their screen capture of their score | Complete Not Complete |
| 3. | The student commented on their current level of performance and areas of study that need to be worked on | Complete Not Complete |
| 4. | The word document is without spelling and grammar errors | Complete Not Complete |

Reflection paper on your Certification Readiness for the 70-480 Exam Objective 3

Directions

Step 1: Reflect on your current level of knowledge based on all of the learning activities for this Objective.  You now should be able to determine your readiness to pass the certification exam in this objective.

Step 2:  Create a word document.  In this document answer the following questions:

1. Your MeasureUp test score for this objective.  What does the score mean?
2. Do you feel ready to take the certification?  Why.
3. How will you finishing preparing for taking the certification exam.
4. Any additional resources you will use to prepare for the certification.
5. Any additional assistance you would like from the instructor
6. Other comments

Step 3:   In Blackboard assignments, submit the word document for grading.

|  |  |
| --- | --- |
| Environment | Outside Assignment |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to access and secure data for HTML input types with Javascript |

### Scoring

Rating Scale

|  |  |
| --- | --- |
| Value | Description |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student created a word document and included their MeasureUp test score for this objective | Complete Not Complete |
| 2. | The student demonstrated reflection in their answer to the question - Do you feel you are ready to take the certification? Why? | Complete Not Complete |
| 3. | The student demonstrated they have a plan in their answer to the question - How will you finishing preparing for this certification exam? | Complete Not Complete |
| 4. | The word document is without spelling and grammar errors | Complete Not Complete |

Summarize how to apply CSS to format and animate objects.

Overview/Purpose

In this learning plan you will review and discuss key concepts of style HTML text and box properties, create a flexible content layout, create an animated and adaptive User Interface (UI), use CSS selectors and jQuery to find elements, and structure a CSS file using CSS selectors. This lesson will account for 25% of the Microsoft Certified Profession 70-480 certification exam.

Target Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to apply CSS to format and animate objects. |
|  | Assessment Strategies |
|  | 1.1. | Flash cards |
|  | 1.2. | Test |
|  | 1.3. | Reflection |
|  | Criteria |
|  | Performance will meet requirements when: |
|  | 1.1. | learner develops study notes on the 70-480 Exam objective 4 per instructor specifications |
|  | 1.2. | learner achieves a 70% or higher on the 70-480 objective 4 exam |
|  | 1.3. | learner reflects on their readiness to take the 70-480 certification exam objective 4 per instructor specifications |
|  | Learning Objectives |
|  | 1.a. | Discuss how to use CCS3 to style text appearance on a website |
|  | 1.b. | Discuss how to use CSS3 to style HTML box properties to alter appearance, graphic effects, and set and change an element's position |
|  | 1.c. | Discuss how to use CCS3 to create a content layout using flexible content layout |
|  | 1.d. | Discuss how to use CCS3 to create, animate and adapt a User Interface (UI) |
|  | 1.e. | Discuss how to use of CSS3 selectors to work with pseudo-elements and pseudo-classes |
|  | 1.f. | Discuss how to structure a CSS file and control inheritance from parent elements |

### Learning Activities

|  |  |
| --- | --- |
| 1. | Share Experience - in animating a client website (before/after) |
|  | Teaching Notes |
|  | Share one of your own experiences or have a professional developer you know share one of theirs.Students need to understand that effect of making animiated/interactive and flexible user interfaces and how they can effect the amount of traffic to a website.  They need to hear the importance and theramification if it is not done. |
| 2. | Read Chapter 4 - Use CCS3 in applications |
| 3. | Watch Video  [CSS3 Selectors and Style Properties Part 1](https://mva.microsoft.com/en-US/training-courses/developing-in-html5-with-javascript-and-css3-jump-start-8223?l=yXa1ZlIy_3604984382)Watch Video  [[CSS3 Selectors and Style Properties Part 2](https://mva.microsoft.com/en-US/training-courses/developing-in-html5-with-javascript-and-css3-jump-start-8223?l=XQh5hlIy_8404984382)](https://mva.microsoft.com/en-US/training-courses/developing-in-html5-with-javascript-and-css3-jump-start-8223?l=MyzyHlIy_504984382) |
|  | Teaching Notes |
|  | These videos were created by Microsoft Virtual Academy and are available free.  They do a nice quick review of some of the key points for the 70-480 certification exam |
| 4. | Participate in an instructor led review of the Microsoft Exam 70-486 Objective 4:  Use CSS3 in applications |

### Assessment Activities

|  |  |
| --- | --- |
| 1. | Create electronic flash cards (study notes) for Chapter 4 |
|  | Teaching Notes |
|  | Have the students pair up and with a classmate go through the book Chapter 1. Create study notes in the form of electronic flash cards.\*\* make sure to show the students how to use a free tool to create their study notes such as quizlet. |
| 2. | Complete the MeasureUp 70-480 practice exam questions from the  Use CSS3 in applications section.  Upload a screen capture of your completed test. |
| 3. | Reflection paper on your Certification Readiness for the 70-480 Exam Objective 4 -- Discuss in the reflection  1. Your MeasureUp certification mode test score.  What does the score mean?
2. Do you feel ready to take the certification?  Why.
3. How will you finishing preparing for taking the certification exam.
4. Any additional resources you will use to prepare for the certification.
 |

Electronic flash cards (study notes) for Chapter 4

Directions

**Learning Objective:** At the conclusion of this activity, participants should have created flash cards from their book and notes taken from the instructor's lecture. -These flash cards then will become a very useful tool to help the student review the material for their certification exam.

**Learning Activity: Flash Cards – Use CSS3 in applications**

Step 1: Choose a class partner

Step 2: Go to quizlet.com and create a new free account (if you do not already have one).   If you need help using this tool, please see your instructor for assistance.

Step 3: With your partner go through the following chapters and create at least 20 flash cards for each chapter.  Make sure to share your flash cards to your instructor and class.

                  Chapter 1 – Use CSS3 in applications

Step 4. Make sure to review each of your flash cards for accuracy, grammar and spelling.

Step 5:   In Blackboard assignments, submit the link to your quizlet flash cards

|  |  |
| --- | --- |
| Environment | Lab |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to apply CSS to format and animate objects. |

### Scoring

Rating Scale

|  |  |
| --- | --- |
| Value | Description |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student created at least 20 flash cards from this Chapter | Complete Not Complete |
| 2. | The Flash cards contain information that is important to study for the 70-480 exam | Complete Not Complete |
| 3. | The Flash cards are technically accurate | Complete Not Complete |
| 4. | The Flash cards are without spelling and grammar errors | Complete Not Complete |
| 5. | The student shared the Flash cards with the instructor | Complete Not Complete |

MeasureUp 70-480 practice exam questions from the Use CSS3 in applications section

Directions

**Learning Objective:** At the conclusion of this activity, participants will have completed the MeasureUp practice exam.  These questions are good examples of the questions that will be encountered on the actual certification exam.  It is highly suggested that students take the time and read every explanation for each question to glean additional study material.

**Learning Activity: MeasureUp Practice Exam –  Use CSS3 in applications**

Step 1: Go to MeasureUp.com and click on Login/Registration Button.  Click on MyLearning Locker.

Step 2:  Create a free MeasureUp login account (if you do not already have one)

 If you need help using this tool, please see your instructor for assistance.    Once you have the account login with your username/password.

Step 3:  You only need to do this step once – skip if you have already completed this step.  Click on the Register Key link and paste in the key your instructor provided you.  Check the I accept button and the Register button.   Click on Go To Locker.  You should now see Practice Test

Step 4: Click on Begin Test

Step 5:  Click on Custom Mode

Step 6:  Click on Show me questions randomly selected from the text objectives checked below:

                Use CCS3 in applications

Step 7.  Click OK and Next.  Begin Test.   You should be at the start to the Test.  Go through and answer each question.   You need to achieve a 70% or higher score on the test.  If you do not, you can study and retake the exam.

Step 8:  When you are done with the last question – click on Finish Test.  It should now display your score.  Print Screen and paste the image into a word document.

Step 9:  In the word document after your print screen, comment on the areas that you will need additional study.

Step 10:   In Blackboard assignments, submit the word document for grading.

|  |  |
| --- | --- |
| Environment | Outside Assignment |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to apply CSS to format and animate objects. |

### Scoring

Rating Scale

|  |  |
| --- | --- |
| Value | Description |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  |  |  |
| --- | --- | --- |
|  | Criteria | Ratings |
| 1. | The student completed the MeasureUp exam questions for this subject with a 70% or higher score | Complete Not Complete |
| 2. | The student created a word document and pasted their screen capture of their score | Complete Not Complete |
| 3. | The student commented on their current level of performance and areas of study that need to be worked on | Complete Not Complete |
| 4. | The word document is without spelling and grammar errors | Complete Not Complete |

Reflection paper on your Certification Readiness for the 70-480 Exam Objective 4

Directions

Step 1: Reflect on your current level of knowledge based on all of the learning activities for this Objective.  You now should be able to determine your readiness to pass the certification exam in this objective.

Step 2:  Create a word document.  In this document answer the following questions:

1. Your MeasureUp test score for this objective.  What does the score mean?
2. Do you feel ready to take the certification?  Why.
3. How will you finishing preparing for taking the certification exam.
4. Any additional resources you will use to prepare for the certification.
5. Any additional assistance you would like from the instructor
6. Other comments

Step 3:   In Blackboard assignments, submit the word document for grading.

|  |  |
| --- | --- |
| Environment | Outside Assignment |

Evaluator(s)

Instructor

Target Course Competencies

|  |  |
| --- | --- |
| 1. | Summarize how to apply CSS to format and animate objects. |

### Scoring

Rating Scale

|  |  |
| --- | --- |
| Value | Description |
| Complete | The item was included in the student's assignment |
| Not Complete | The item was not included in the student's assignment |

Scoring Standard

You must achieve a rating of complete on each criterion to pass

### Scoring Guide

|  | Criteria | Ratings |
| --- | --- | --- |
| 1. | The student created a word document and included their MeasureUp test score for this objective | Complete Not Complete |
| 2. | The student demonstrated reflection in their answer to the question - Do you feel you are ready to take the certification? Why? | Complete Not Complete |
| 3. | The student demonstrated they have a plan in their answer to the question - How will you finishing preparing for this certification exam? | Complete Not Complete |
| 4. | The word document is without spelling and grammar errors | Complete Not Complete |



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