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| **TEXAS CTE LESSON PLAN**[www.txcte.org](http://www.txcte.org) |
| **Lesson Identification and TEKS Addressed** |
| **Career Cluster** | Information Technology |
| **Course Name** | Web Technologies |
| **Lesson/Unit Title** | Website Publishing/Going Live |
| **TEKS Student Expectations** | **130.308.(c) Knowledge and Skills**(8) The student employs knowledge of web administration to develop and maintain web applications. (A) The student is expected to compare the advantages and disadvantages of running a personal server versus using a server provider(B) The student is expected to explain the Transmission Control Protocol/Internet Protocol(F) The student is expected to simulate the administration of web servers, including uploading and managing files(G) The student is expected to collect and analyze usage statistics(H) The student is expected to maintain documentation of the server environment such as specifications, passwords, and software versions(I) The student is expected to summarize the process of server backup and restoration of software features(J) The student is expected to propose security measures to protect web servers from electronic threats such as unauthorized access and negative intentions |
| **Basic Direct Teach Lesson**(Includes Special Education Modifications/Accommodations and one English Language Proficiency Standards (ELPS) Strategy) |
| **Instructional Objectives** | **Performance Objective:**Upon completion of this assignment, the student will be able to identify appropriate web servers for hosting websites and use FTP clients to upload a website to a server so that it may be viewed online.**Specific Objectives:**Students will be able to:* choose an appropriate domain name and determine availability
* know how to select web servers for hosting website,
	+ understand the difference in personal web servers and commercial web servers, know the purpose of each server, and
	+ know the difference in shared and dedicated web servers
* be able to explain the required protocol for uploading files to a web server
* use FTP software for uploading website files to their web server
* understand how to protect and secure their website files
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| **Rationale** | Through this lesson, students will explore website publishing and going live online. Students will have the opportunity to locate available domain names and check the price for registration. |
| **Duration of Lesson** | 90 minutes |
| **Word Wall/Key Vocabulary***(ELPS c1a,c,f; c2b; c3a,b,d; c4c; c5b) PDAS II(5)* |  |
| **Materials/Specialized Equipment Needed** | **Materials Needed:*** Printouts of the Domain Name & Web Hosting Activity
* Printout of the FTP Simulation Activity
* Printout of the Lesson Quiz

**Equipment Needed:*** Students will need to use computers with Internet access for the lesson activities.
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| **Anticipatory Set**(May include pre-assessment for prior knowledge) | **Ask,** "Why do you think it is important for a business or organization to havetheir own domain name.?" Discuss this with them.**Say,** "When a business or organization has its own top-level domain name, its website has more credibility and makes the organization look more professional."Discuss the role of website designers. Not only do they need to design and build a website, but they must also be able to publish the website online for public interaction.Have students open their web browser and go to a website. Point out the different parts of the domain name including the protocol and the top-level domain ending (.com, .net, .org, .edu etc.). |
| **Direct Instruction \*** | **NOTE:** Students will need to have their web browsers open. They will be asked to look up domain names, domain registers, and FTP hosting services1. Domain name registration
	1. Choosing a domain name
		1. Student practice
	2. Selecting a register
		1. Student practice
2. Website hosting
	1. Types of servers
	2. Personal web server
		1. Commercial web server
			1. Free servers
			2. Shared servers
			3. Dedicated servers
		2. Selecting a commercial web host
			1. What to consider
			2. Student practice
3. Transferring files
	1. Required access information
	2. Using an FTP client (NOTE: FTP means File Transfer Protocol. Have students do a web search for a good FTP client.
4. Protecting your site/security
	1. Password security
	2. IP blocking
	3. Backing up data
5. Student independent practice (**NOTE:** Following the two discuss with students what they found and what their choices were. Have each student give one of the domain names they came up with in the Domain Name Activity.)
	1. Selecting domain names
	2. Selecting register and hosting service activity
	3. FTP client simulation activity
6. Lesson quiz
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| **Guided Practice \*** | Students should follow along. They will be asked to1. choose an available domain name for a sample organization
2. locate a domain name register and check the price for registration
3. look up a web hosting company and check the lowest cost for a shared website
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| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | Following the lesson, students should complete the Domain Name Activity, Web Hosting Activity, and the FTP Client Simulation Activity. |
| **Lesson Closure** | Provide students with a copy of handouts and have them complete the three activities with the lesson. |
| **Summative/End of Lesson Assessment \***  | **Informal Assessment** The instructor should check the information the students come up with, particularly the domain names. They should be appropriate for the organizations assigned. Discuss with students why they feel they name is appropriate. If the name selected by the student does not appropriately represent the organization, direct the student to select a new name and assist him/her in identifying a domain name.The instructor should also make sure the web hosting companies the students are selecting are reputable. There is a good chance that whatever companies the students use in this lesson are what they will use outside of class for any sites they choose to publish. Discuss with them while they are searching, why they selected the company they did, and not another company.**Formal Assessment** Students should submit their Independent Practice activities for evaluation. They should also complete the lesson quiz, checking their general knowledge of the information presented. |
| **References/Resources/****Teacher Preparation** |  |
| **Additional Required Components** |
| **English Language Proficiency Standards (ELPS) Strategies** |  |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **Recommended Strategies** |
| **Reading Strategies** |  |
| **Quotes** |  |
| **Multimedia/Visual Strategy****Presentation Slides + One Additional Technology Connection** |  |
| **Graphic Organizers/Handout** | Choosing a Domain NameWebsite Hosting Quiz/KeyWesbsite Hosting ActivityFTP SimulationFTP Simulation Quiz/Key |
| **Writing Strategies****Journal Entries + 1 Additional Writing Strategy** |  |
| **Communication****90 Second Speech Topics** |  |
| **Other Essential Lesson Components** |
| **Enrichment Activity**(e.g., homework assignment) | After completing this exercise, students should have a general understanding of how to select a domain name, register it, and publish a website. If appropriate, have students work with a school organization or local business in developing a website and helping them get it published. You will most likely have to guide them through the process as this lesson only provides a simulation of the process. |
| **Family/Community Connection** |  |
| **CTSO connection(s)** | SkillsUSA, TSA |
| **Service Learning Projects** |  |
| **Lesson Notes** |  |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)