

Web Development Competency Levels for Students

Entry Criteria

1. Web development tool is installed.
2. Internet is connected.
3. Student is familiar with basic computer terminology.
4. Student has basic computer skills.
5. Student is familiar with basic web terminology and can browse the web.
6. Student can use email client.

Exit Criteria

1. Student is aware of basic web development concepts (i.e. server, client, etc)
2. Student is aware of concept of languages related to web development (html, CSS, java script)
3. Student is capable of developing a simple web site
4. Student can handle some web development tool settings and do minor troubleshooting

Competency Levels

Level 1:

The student knows the concept of web development

The Student knows:

1. what is web development
2. what is web designing
3. Data Communication on Internet with respect to web Server and web Client

Level 2:

The person is aware of basic resources of web development (independent of any web development tool)

1. Student knows basic html concepts (i.e. structure of page, elements, attributes) and at least the following tags:
 - a. <html>
 - b. <title>
 - c. <body>
 - d.

 - e. <p>
 - f. <H1>...<H6>
 - g. <Dir>
2. student knows how to structure a web page through HTML (html tags)
3. student is aware of concept of CSS.
4. Student is only aware of 'java script' in web page source, no need to practicing them.

Level 3:

The person is aware of the concept of encoding

1. student is aware of Unicode Standard (utf-8, utf-16)

Level 4:

The person is capable of making a web page from scratch using web development tool

1. Simple Web Page development:
 - a. Student is aware of advantages of graphical web development tool
 - b. Student can develop a simple web page (only displaying a text) in web development tool

2. Upload:
 - a. Student is aware of upload procedure (free upload location, domain purchase) and can upload a web page
3. Testing:
 - a. Student can test his constructed page as a client on his own machine
 - b. Student can test his constructed page as a client on another machine
4. Advanced Web Page development:
 - a. Student can develop an interactive page (asking some input from user, i.e. by links, text boxes, buttons)
 - b. Student can develop a formatted page (text formatting, images)

Level 5:

Advanced features

1. student can develop a relatively enhanced web page having:
 - a. links
 - b. buttons
 - c. formatted text
 - d. images
 - e. data tables
2. student can use tables and can use all the advance features of tables.
3. Student should be aware of browser dependent issues(attribute's values, elements depreciated)

Level 6:

Designing

Student is aware of:

1. Difference between web development and web designing
2. Importance of web designing
3. design conventions (colors, arrangement of content across the web site)
4. design ethics (plagiarism, morally offensive content)
5. how to construct web pages, having different layouts

Level 7:

Trouble shooting

1. Students should handle upload errors due to:
 - a. Connection speed problems
 - b. upload parameters (location to upload should be correct, name of default page of site etc.)
2. encoding problems
3. Tags synatx (start and end tags)