**Project – Present a Language**

Based on 100 points

**Goal:**

* Learn a modern language that you could be hired for at your first job.
* Teach this language to the other students in the class.
* Students must leave the class with running programs that show the **major capabilities** of the language you present.

**Teams:**

* You will work in teams of 1-2-3
* Save time at the end for a larger in class assignment that you assign. You must have the solution to the problems programmed. This class assignment should be an integration of languages if possible. For example, if you are presenting Php you should create an assignment that integrates with JavaScript
* Find a compiler or interpreter (freeware or 30 days trial license) to install and an IDE
* Students must know where to get the software and IDE for your language. You must tell them what they would need to load out and where to find it, give them a handout with this information, screen shots are helpful. This is very important your classmates must be able to code in the classroom during class time at your presentation.

**Presentation**

1. (2 points) Little bit of history about the language
2. (3 points) class of problems for which the language is particularly well suited for, get your class excited about what they are about to learn.
3. What is the language really good at, it’s strength
4. What is the language not so good at, it’s weaknesses
5. existing sites on the web, applications that use this tool
6. (5 points) Basic Info – For example:

* Is your language compiled or interpreted

1. Talk about the Variables of the language:
2. Case sensitive
3. Static/dynamic
4. Strong type casting/weak type casting
5. Do variables need to be declared
6. Strong typing
7. Quickly go through the 2 example program handouts that you created and handed out to the students.
8. Does it easily integrate with other languages
9. Is it getting more popular or less popular? If less what language is replacing it. If more, what language is it replacing?

* (20 Points)Technical Presentation **-** During the presentation: speak clearly, speak loud enough for the students in the back row to hear, walk around during the student hands-on exercises to make sure that they are doing the work and check to see if they need help, **don’t read off of the slides – use them as a guide**, etc.

* (65 points) Presentation Hands-On Portion – **THIS IS WHERE YOU SHOULD SPEND 75%-80% of your presentation time**. Demonstrate the **strengths of the language**. Spend a large amount of time showing the strengths of the language through actual programs, explain how they work, let the students give it a try after each example by asking them to do something. **Look on D2L under the content tab, there is a folder entitled Presentation guide that gives a lot of detail about your language and what you want to make sure to cover.**
* **(5 Points)** – Create an appropriate in class assignment for college juniors; that the student will work on. You must have a working solution

You must be ready to present your language on the assigned date or you will receive a 0 for this grade.

Student languages:

C# (drag and drop)

XML/DOM with C#

HTML/JavaScript/Debugger/HTML5

Php with HTML/JavaScript

C-IPC with router

We will to take class time for students to work on their presentations, so that we can make sure everyone is covering the proper material and setting up their presentation correctly.

General Info:

- keep examples small, do not give large examples because if a student(s) falls behind it is hard to catch up

- let students start by doing solving a problem with a for or while loop just to get used to the language syntax and learn how to compile and run it

- try to show as many capabilities of a language as possible, meaning you do not need to show them one capability 10 times

- it is best to put pictures in your slides showing students where to click vs paragraphs of words on the slides

- do a small example first of a capability, then ask students to try their own example

- ever once in a while make slightly larger problems for the students where solution will involving using 3/4 new capabilities they just learned. For example from Wednesday presentation a problem that involves: textbox, label, listbox, button

- let students start by doing something with a for or while loop just to get used to the language syntax and learn how to compile and run it

- try to show as many capabilities of a language as possible, meaning you do not need to show them one capability 10 times