Course Project

Due: Last day of class

Step 1: Get your team proposal accepted by the professor (No later than November 3rd)

- Team of three
- Select a team leader to communicate with the professor
- Email the professor or speak to him during class to get the basic okay for your project
- after you have received the basic OK from the professor, the add your team and project information to the Google doc at https://docs.google.com/spreadsheets/d/1o7LfkmkEgUfTHOVNwNDd13o8kFPZ6bj1DmylsZi8_fM/edit?usp=sharing

Step 2: Make an appointment for your presentation (No later than November 17th – email me)

- Appointments will be scheduled backwards. I'll start scheduling from the last presentation class, unless you ask for a specific date.
- Each presentation must be 13 minutes long (a maximum of 4 presentations per class). All your team members must speak. I will stop you at the 13th minute, finished or not. You may be tempted to speak quickly – don't. Better fewer slides and slower talk. Your presentation is 10 minutes long including a demo, plus 2 minutes for questions, and one minute for setup.
- You are expected to (1) Have a title slide with your project name and your team member's names, (2) describe what your application is about, use 1 slide. (3) describe the architecture you used: one slide for front end, one slide for back end, one slide for special technology or techniques, one slide on what you learned positive, one slide on what you learned negative. (4) You must demo your application. (5) Questions.
- Diagrams are often better than text in this type of presentation.
- You must email me your presentation. You will be using my laptop for your presentation.

Step 3: The project

- The minimum requirements for the project are:
  - a modern website
  - uses a minimum of 4 Internet technologies **per teammate**. Note: HTML 5 / CSS / CGI are 3 Internet technologies worth 2 points.
  - the use of 3 or less frameworks
    - Technologies are evaluated through a point system:
      - HTML5/CSS/CGI .. .. 2 points
      - JavaScript/DOM .. .. 2 points
      - JavaApplets 1point
      - XAMPP .. .. 2 point (using the servers from COMP 206 do not count for points),
      - PHP .. .. 1 point
      - MySQL .. .. 2 points
      - JSON/XML/text .. .. 1 point
      - React .. .. 1 point
      - Java Servlets .. .. 1 point
      - Python/Perl/C/Bash .. .. 1 point
      - socket programming .. .. 2 points

  - Security .. .. 1 or 2 points
  - You may suggest others .. .. ?? points
- The **minimum** points you must use are 10.

- If your application stack is all one language, like JavaScript, then I need to consider this carefully. Mix something into it, like SQL and HTML5.
- HTML5 means using the version 5 features

Step 4: Submission

- A readme.txt file with your team member names
- An HTML file that links directly to your website or an easy download of your application
- A ZIP of the back-end source and databases/files
- A ZIP of the front-end source and databases/files
- Instructions to the TA on how they can run it
- All team members submit the entire project

Step 5: Demo with the TA and professor

- The TA will arrange an appointment with you to demo both the running program and the code.

Example good project structures:

Standard website (best learning outcome)

FRONT END	BACK END
HTML5+CSS+CGI	SQL
JavaScript+DOM	Security
JSON	PHP + Slim
	Apache

Tool driven website

FRONT END	BACK END
JavaScript+DOM	Apache
HTML5+CSS	SQL
AJAX	Security
JQuery	Python

MEAN Based

FRONT END	BACK END
Angular+DOM	NodeJS
HTML5+CSS	MongoDB
AJAX / jQuery	Express.js

DJANGO Based

FRONT END	BACK END
DJANGO Web Templates	Apache / DJANGO
HTML5+CSS	SQL or MongoDB
	Python

Stand-alone Social Application (no website for the user to access directly)

FRONT END	BACK END
C	SQL
GUI	Python
Sockets	Security
JSON	XAMPP
Encryption	

HOW IT WILL BE GRADED

The presentation is graded separately from the project. At the presentation, the website only needs to be partially functional (however functional in a non-trivial way, but not finished).

Your project is due the last day of classes on myCourses. Your project demo will be scheduled within the first 7 days after the last day of classes. The demo will last 15 minutes and will run in either: (a) localhost on your computer or (b) on TA / Prof computer by accessing the live website.

Your project is graded partly based on the demo with the TA /Prof and partly from an analysis of the source code uploaded to myCourses.

- Total 100 points (assumes 3 members in a team)
- +20 points for a fully running website
- +80 points for technology use
    - If technology was used correctly and not in a trivial way.
- -10 points for not following instructions
- Points are awarded proportionally
- Teams with less or more members will be scaled accordingly