Final Project

Policy:

You may work alone, or with at most 2 classmates

Due Dates:

1. Update project document: Sun 4/24 @ 11:59pm
2. Post recording: Tues 04/26 @ 6:00pm
3. View 3 recordings: Tues 04/26 by 11:59pm
4. Submit PPT and demo code: Wed 04/27 @ 3:00pm
5. Class presentations: Wed/Fri, 04/27 – 04/29

Electronic submission:

See "step 4: electronic submission" for more details

Step 1: Select team, select topic, update shared doc (Sun 04/24, 11:59pm)

The first step is to decide if you are working alone, or working in a team with at most 2 others from class. Then decide on a project topic. Any topic related to programming languages is fair game; recall that some suggested topics were discussed in class on Monday, April 18th (PDF, PPT). Avoid the selection of libraries such as pthreads or jQuery, since these are just an API and don't really have anything to do with programming languages or language design.

Once your team and topic is selected, update the shared google doc. Fill in your name, list your team members, and provide a summary of your project topic. Here's the link to the shared doc:

https://docs.google.com/spreadsheets/d/15bK5Zhg51w7OFuQKnEBWuslmZrlxLxT82PTAd6kqz0w/edit?usp=sharing

IF you are working in a team, update just one row of the shared doc with your names, project title, and link to your recorded presentation. Then, find the other rows of the document for your team members and place

"**see XYZ**" in the cell under "List Partners", where XYZ is the name of the team member that you filled in. This way each project appears only once in the shared doc, and all feedback can be found in that row of the spreadsheet.

Step 2: Learn Topic, Create PPT + Demo, Post Recording (Tues 04/26, 6:00pm)

Read and learn about your topic, create a demo, and then create a short presentation targeting a length of 6-8 minutes. Use presentation software, such as PowerPoint or Keynote.

Whenever you give a talk, think about the most important details, and ignore the rest. Example: if you are trying to summarize a new language such as Apple's Swift, you don't have time to talk about the entire language. One of the keys to a good presentation is figuring out what topics to keep, and what topics to discard, so that your talk fits into the given timeframe. In the case of Swift, you would only have time to mention the paradigm(s) that the language supports, discuss a couple of the most interesting features that make it different / interesting / novel, and then do a demo. Your demo should take up 3-4 mins of the presentation, perhaps more. Assume an audience of your peers, so don't waste time defining concepts that your peers already know.

After you have created your presentation, you will need to practice it a few times, time it, eliminate unnecessary details, etc. If you are working in PowerPoint for the first time, press F5 to run your presentation. By default, PPT uses what is called "Presenter mode": the audience sees your PPT while you see the PPT + speaker notes + next slide. I find this difficult to use, and disable it as follows: Slideshow menu, uncheck Presenter mode, and above that checkbox select Primary Monitor.

During these practice sessions, set your screen resolution to 1280x768, and make a recording of your entire presentation (audio and screen). We don't need to see your face — what we need is to hear your voice and see the entire presentation on your screen. If you are working in a team, each team member must have a speaking role in the presentation. In terms of software, use the simplest software available — many screen capture programs include video recording (I use **Snagit** on Windows). Other suggestions:

Cross-platform: **Open Broadcaster** is open source & cross-platform: https://obsproject.com/

Windows: 5 freely-available tools: http://www.hongkiat.com/blog/win-screen-recording-softwares/

Mac: built-in QuickTime: http://www.loopinsight.com/2014/01/08/your-macs-built-in-screen-recorder/

If all else fails, use a smartphone or digital camera.

Once you have a recording you like, upload your recording to a shared location: YouTube, Dropbox, UIBox, Google Drive, etc. Do NOT upload to Blackboard. Create a shared link to your recording that is viewable by all, and paste this link into your row of the shared google doc under "Link to Presentation" (scroll to the right):

https://docs.google.com/spreadsheets/d/15bK5Zhg51w7OFuQKnEBWuslmZrlxLxT82PTAd6kqz0w/edit?usp=sharing

Make sure the link you post is actually readable by students and staff; test your link from another computer to make sure permissions are not required for access.

Step 3: View at least 3 student presentations (Tues 04/26, 11:59pm)

Each member of your team must view at least 3 different presentations. The idea is that if we each review 3 presentations, everyone in the class will get at least 3 reviews. Since the recordings are due Tuesday by 6pm, think of Tuesday night as "viewing night".

Look through the shared google doc and find presentations in need of viewing — scroll the shared doc to the right to see the "Rating" and "Feedback" columns. Provide:

1. A rating of how interesting you found the presentation: 1, 2, or 3 (1 == okay, 2 == good, 3 == great)
2. Brief feedback on what you liked most, or your most important suggestion for improvement

All feedback is anonymous. Make note of the student(s) whose presentation you watched… When you are done, login to BB and take the pre-class quiz "**04-26-final-project-viewings**". Answer the 3 "questions" by entering the names of the students for each presentation you viewed.

Step 4: Electronic Submission (Wed 04/27, 3:00pm)

Before class on Wednesday, April 27th, submit your final project on BB. In addition to your presentation file (PPT) & demo source code, create a "readme.txt" file describing what is required to compile and run your demo: platform (Mac, Windows, Linux), hardware required, software required, makefile, etc. We need to be able to run your demo program.

Place all files[1] into a folder, compress, and submit the resulting compressed file to Blackboard under the assignment "**FinalProject**"; only one team member needs to submit (this should be the same team member whose row was filled in on the shared google doc).

Step 5: Class presentations (Wed 04/27 and Fri 04/29)

The last two days of class will be dedicated to presentations. Unfortunately, not everyone will be able to present, but at least 8-10 students / groups will have a chance. You'll have at most 8 minutes for your presentation. Presenters will be called at random, and you must be present if called — if you are not present if/when called, your project will receive a score of 0.

Grading

Your grade will be determined based on how much effort we felt you put into the final project. Did you put reasonable effort into creating a good presentation? Is your demo program merely "hello world", or something requiring more effort to research and create? As long as you made a reasonable effort to learn and and create a good presentation, your score will be 100. If you are working in a team, all team members

[1] Do *not* submit the video recording to BB, we will access your recording via the posted link.

receive the same score. [**Note**: a class presentation is not required to obtain a score of 100. But you are required to complete steps 1-4, and then be present in class in case you are selected.]