

# Week 1 Lab

**Due** Aug 28 by 11:59pm **Points** 80 **Submitting** a file upload **File Types** html, jpg, and jpeg **Available** until Aug 28 at 11:59pm

This assignment was locked Aug 28 at 11:59pm.

1. (50pt) Create an HTML page **progfest.html** that looks like what's shown in the following picture:



## The Challenge

This year's ProgFest will be different from prior years. It consists of data structure and algorithm exercises within Android applications. The first part of the day will be a 2 hour hands-on workshop on creating very basic Android applications. The rest of the day will involve creating Android games that require the use of relatively sophisticated algorithms and data structures.





- All exercises will be done in Java (with a small amount of XML) - a good grasp of Java is required.
- Knowledge of at least these Java data structures is needed: HashMaps, ArrayLists, Sets, Trees, Tries.
- Knowledge of recursion would be helpful, along with algorithms such as breadth-first search and depth-first search.
- Knowledge of basic text Java IO would also be helpful.
- Practice using Android Studio and deploying Android apps to an emulator will make doing the projects easier.

## Prior Problem Sets


- [Progfest 2014 Problem Set](#)
- [Progfest 2013 Problem Set](#)



## Sponsors

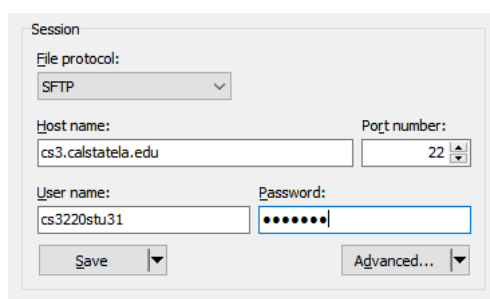


- The text of the page can be found in [progfest.txt](#)  ([https://calstatela.instructure.com/courses/80633/files/11500699/download?download\\_frd=1](https://calstatela.instructure.com/courses/80633/files/11500699/download?download_frd=1)) .
- The ProgFest banner image can be downloaded [here](#)  (<https://csns.cysun.org/download?fileId=6377573>) .
- The URLs for the Cal State LA logo and the Microsoft logo are [http://branding.calstatela.edu/sites/default/files/groups/California%20State%20University%2C%20Los%20Angeles/master\\_logo\\_full\\_color\\_h](http://branding.calstatela.edu/sites/default/files/groups/California%20State%20University%2C%20Los%20Angeles/master_logo_full_color_h)  [http://branding.calstatela.edu/sites/default/files/groups/California%20State%20University%2C%20Los%20Angeles/master\\_logo\\_full\\_color\\_horizontal\\_centered](http://branding.calstatela.edu/sites/default/files/groups/California%20State%20University%2C%20Los%20Angeles/master_logo_full_color_horizontal_centered) and <http://img-prod-cms-rt-microsoft-com.akamaized.net/cms/api/am/imageFileData/RE2qVsJ?ver=3f74>  <http://img-prod-cms-rt-microsoft-com.akamaized.net/cms/api/am/imageFileData/RE2qVsJ?ver=3f74> , respectively.
- You may use any URL for the Problem Sets.

You must use absolute URLs to link to the CSULA and Microsoft logo images, and use a relative URL to link to the ProgFest banner image - this means you need to download a copy of the ProgFest banner image and place it in the same folder as the progfest.html file.

Clicking on the Cal State LA logo should take the user to <https://www.calstatela.edu/>, and clicking on the Microsoft logo should take the user to <https://www.microsoft.com/>  (<https://www.microsoft.com/>) .

2. (20pt) Each student in the class has an account on the server **cs3.calstatela.edu** (which we'll call the CS3 server). You should have received your account username and password by email; if not, please contact the instructor or the TA to get your account information. Please upload the progfest.html file you created in the previous exercise and the ProgFest banner image to the **public\_html** folder of your account on CS3 server. For transferring files you can download and install either [WinSCP](#)  (<http://winscp.net/>) or [FileZilla Client](#)  (<http://filezilla-project.org/>) (not FileZilla Server). WinSCP is easier to use but is Windows only, while FileZilla Client supports Windows, MacOS, and Linux. If you use WinSCP, please choose SFTP protocol for file transfer as shown in the screenshot below:



For FileZilla Client, the SFTP protocol must be specified in the Host field like in a URL, as shown in the screenshot below:



You may leave the Port field empty as it will use the default port number (which is 22 for the SFTP protocol).

If you run into problems uploading the files, please check out one of videos in the [Additional Videos section](#).

After you uploaded the files, open the web page at the URL **http://cs3.calstatela.edu/~<username>/progfest.html** and make sure it works properly. Note that there's a tilde in the URL, and you should replace <username> with your actual account username on CS3.

3. (10pt) Create another HTML file **lab1.html** which contains a hyperlink to your progfest.html page on the CS3 server. For example:

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <title>CS3220 Lab 1</title>
</head>
<body>
  <p><a href="http://cs3.calstatela.edu/~<username>/progfest.html">Lab 1</a></p>
</body>
</html>
```

Again, replace <username> with your actual CS3 username. Submit both lab1.html and progfest.html to Canvas.