# Cloud Computing Security Homework 2.

## General Instructions.

*Questions 1 through 4 are related to HTML, CSS and JS. Starting code for these four questions is provided as a zip file attached to this assignment. Download the files and update the code as required. After you are finished,upload the resulting HTML code to AWS cloud and submit the URLs only. There are points for uploading to the Cloud. If you are unable to do so then you may zip back up your code and submit that instead. Question 5 alone has to be submitted via github.*

**Q1. (Using the Prompt Method)**. Can you help johnny fix his code? Johnny wrote this JS code to greet visitors to his website but it does not work as expected. The user can input his name at the prompt but his name is not displayed in the HTML.

**Q2. (Conditionals)** Write a simple quiz application. The application needs to do several things. The first one is already done for you in the sample code provided.

- It has to ask atleast 5 questions.
- Keep track of the number of questions the user answered correctly.
- Provide a final answer after the quiz letting the user know the number of questions they got right.
- Rank the player. If the player answered all five correctly. Give that player the gold crown. Three to four is a silver crown. One to two correct answers is a bronze crown and zero correct is no crown at all.

**Q3. (Loops)** Open the scripts.js file. Notice that it is really long (67 lines of code to be exact). Double click the index.html file and preview what Johnny tried to create. The code adds 10 colorful dots to the page. If you refresh the page you will see that the colors change. The colors are being randomly generated. Notice the five lines that are repeated over and over again 10 times. Your task is to simplify this code by adding a loop that prints not 10 but a 100 colorful dots to the page without code repetition.

**Q4. (Quote Generator).** Recall the HTML/CSS activity conducted in class to design our webpage. In this section use the hints given below as well as your knowledge of JS variables, user-defined functions and DOM based event handling to add a random quote to the top of your page every time it is loaded.

**Step 1:** Add a new  to your html page that will display the quote. Give it a unique Id. You can assign it the “card” class to help you format it.

**Step 2:** Allow HTML Body to trigger our Javascript on page load to display our quote.

```
<body onload="newQuote();">
```

**Step 3:** Declare an array variable called quotes in our Javascript.

```
var quotes = [
      'You will learn more from failure than from success. -Zahid',
      'The way to get started is to quit talking and begin doing. -Walt
Disney'
]
```

**Step 4:** Write function to randomly select one quote. You may use the Math.random() Function to select a quote from the array at random. Use the document.getElementById and innerHTML function to add the quote to your div.

```
function newQuote(){
      var randomNumber = Math.floor(Math.random() * (quotes.length));
      //add quotes[randomNumber] to your div
}
```

**Q5(Git)** . We will take another attempt at working on our class webpage. The idea is to participate in a large group to simultaneously work on a common Cloud project folder create the webpage (https://fontbonnecloud.github.io/). The objective is to develop a Cloud Computing class page with personalized profiles to market our Cloud Computing skills to the employers. The catch is that this will be one big group project with everyone in the class editing the same project folder.
Collect the following content for your profile.

1. A profile pic (something normal, a headshot, of reasonable size that can be cropped)
2. A background picture
3. A short bio
4. Taglines, favorites, social media profile links. (Not mandatory. You can customize this based on your personality)
5. The structure of this project looks something like this:

```
├── README.md
├── css
│   ├── css style sheets
│   └── fonts
│       └── font files
├── img
│   ├── lots of images here
│   └── students
│       ├── student_name_background.jpg
│       └── student_name.jpg
├── index.html
└── students
    └── student_name.html
```

In the steps given below, the file you'll alter is index.html. You will be adding two pictures to the img/students folder (they can be jpg or png files): student_name.jpg and student_name_background.jpg

Add one HTML file to the students/ folder. Use the student_name.html for reference. In fact, feel free to copy as much of the HTML from student_name.html into the new file you've created (just don't rename / override that file, as that will cause you some git headaches).

A branch is like another "copy" of your repository that you can make modifications to. Suppose you start working on "Project v.1", then you copy it to "Project v.2" to work on a big change (just in case it doesn't work and you want to revert). If it works out, you can copy the changes you made in Project v.2 back into Project v.1 ("merging", in Git). If it doesn't work, you can just delete Project v.2 and try again.

A workflow like this is nice because you can easily undo if you realize the change you made isn't working. Git makes it super easy to go backwards and undo if you work on every new feature on its own branch and only merge when a feature is working (or "stable", as we call it in industry).

## PROCEDURE

In this question, we're going to make a new branch called "`add-my-profile-page`" and make our change to that copy. When we're done, we'll commit it (to "`add-my-profile-page`") and then merge `add-my-profile-page` back into the `master` to send to GitHub.

1. Fire up Intellij
2. Choose to checkout from `version control> github> https://github.com/FontbonneCloud/FontbonneCloud.github.io.git`
3. Enter your github credentials under the password option
4. Clone your copy of the repository. Create an `IDEA Project>Create from existing sources>Accept defaults`
5. Select in the upper menu bar `VCS>Git>Branches>New Branch>Name= add-my-profile-page`
6. In this new branch, make a new HTML file in the `students/` folder. The file name should be your name. Use the file `student_name.html` to see an example of what a profile's HTML could look like.
   - For instance, we would create a file `john_adams.html` in the main `students` folder.
7. Still in this branch you created, add the photo detailed above to the `img/students` folder.
   - For example, we would add the pic titled `john_adams.jpg` to the `students` folder inside `img` folder.
   - File endings are case sensitive. When adding an <image> tag, make sure that the image source is identical to the name of the image file.
8. Once you've completed the profile, open up `index.html`. Use the pre-existing template as a model and edit the section for your profile. Your section should already be in index.html. All you need to do is edit the hyperlinks and descriptive text.
9. Test your change by firing up `index.html` in your local browser. If this was a project, you'd run your work and keep making changes until it worked. When everything works you're ready to commit.
10. Commit your change (to `add-my-profile-page` branch): via `VCS>Commit changes> Commit Message` > and write a meaningful message
11. Switch back to master branch. `VCS > Git > Branches> Local Branches >Master >Checkout`
12. Open `index.html` again. Notice that your name isn't in it (because the change is in `add-my-profile-page`)
13. Merge `add-my-profile-page` into `master` by selecting `VCS>Git>Merge Changes`
14. Open up `index.html` again. Now you should see your name.
15. Push your changes to GitHub: `VCS>git>Push`
16. Go to `https://fontbonnecloud.github.io/` and see your changes