

CSc 210: Software Development

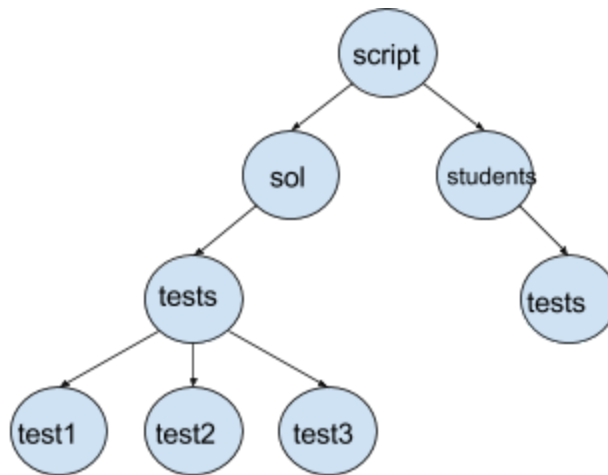
Section 14: Review

December 4th, 2017

Today we will be reviewing topics discussed in class. There is a list of topics (not necessarily comprehensive) that have been discussed in class that you should know for the final on the course website. Today you will complete the example problems below as well as ask questions on the list of topics.

Problem 1

Consider the following directory structure.



Your current directory is **sol**. With as few commands as possible, move all files in the `sol/tests` directory to the `students test` directory.

Problem 2

Someday in the future, you are working for a software consulting firm. You are sent to help the humane society speed up their system software. To help manage animals in their care, they maintain a linked list in their system that contains animals names and other information related to that animal. The primary use for this linked list is to look up an animal by name to get information about it. This is the main place the system seems to slow down. Is this linked list a good approach? Why or why not? Could this be sped up?

Problem 3

You are creating a GUI for a program to convert C to F and F to C. You have the following code in your JavaFX start method:

```
public void start(Stage primaryStage) {
    primaryStage.setTitle("Converter");
    Button fBtn = new Button();
    fBtn.setText("Convert to F");

    Button cBtn = new Button();
    cBtn.setText("Convert to C");

    Label cLabel = new Label("Celsius");
    TextField cTextField = new TextField ();
    Label fLabel = new Label("Fahrenheit");
    TextField fTextField = new TextField ();
    HBox cHb = new HBox();
    HBox fHb = new HBox();
    cHb.getChildren().addAll(cLabel, cTextField, fBtn);
    fHb.getChildren().addAll(fLabel, fTextField, cBtn);
    cHb.setSpacing(10);
    fHb.setSpacing(10);

    VBox space = new VBox();
    space.getChildren().addAll(cHb, fHb);
    space.setSpacing(20);

    StackPane root = new StackPane();
    root.getChildren().add(space);
    primaryStage.setScene(new Scene(root, 400, 250));
    primaryStage.show();
}
```

Write new code and modify the given code as necessary such that clicking the cBtn will convert the text in the fTextField to celsius and clicking the fBtn will convert the text in the cTextField to fahrenheit.