

**CS 501 E1, E2**  
**Assignment 4**  
**To be submitted via gradescope.**

Please work with your team on this assignment. This assignment is longer than past assignments. You must collaborate in your group, DO NOT divide and conquer. Everyone must understand every part of the assignment. **EVERYONE MUST BE ABLE TO COMPILE EVERY PROGRAM!**

Be sure to include the names (real name and nickname) of all of your team members in your submission. Please submit as a group on gradescope. Your team only needs to submit once for everyone, so be sure you choose someone reliable to perform the submission.

The expectation is that everyone will understand every part of the submission. Do not simply assign problems to one another to solve. Everyone has to be involved.

**Only implement the requirements asked for in all problems.**

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**From the In Class worksheet #4 Complete the following Problems.**

**Problem 0b - Simple Flash Light App.**

**Part 1: Initial Project Ideas - *Note the problems asks for you to elaborate on 3 project ideas. If you have some certainty around your project, feel free to limit to two, provided you go into good detail.***

**Part 2: Flinging Money**

**Part 4: Pulling it all together**

**Part 5: Hangman**

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**Readings:**

Re-Read Chapter 3.

Read Chapter 4.

## **Short answer(s) and simple programming task(s).**

After performing the readings and reviewing your lecture notes. Answer the following Questions from the text.

**Chapter 4:**

**Multiple Choice/Short Answer Problems: 4.1-4.10; (IMPORTANT: For Multiple Choice please write out the complete answer).**

**Simple Programming Task: 4.33 (NOTE: Disregard the pieces about using Transitions, models and persistence in between runs.**

***Additional Notes: Textbook programming challenges require you to come up with your own designs. Before coding these items, discuss the design and layout with your team. You only need to code for portrait orientation.***

**In Addition, complete the worksheet from class (attached below). You may omit the part about using a fling in problem 1.**

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**IMPORTANT: Naming conventions for Android Studio Projects.**

It is important that there be consistency for submission of android studio projects. Please use the following naming conventions.

1. For programming challenge(s), from the text, create one project for each problem. Give the project an intuitive name, for example, Chapter 3 Problem 23, is a programming challenge, create a project for this named "C3\_P23"

2. For programming challenge(s) from worksheets, use the same approach. For Example Worksheet 4 Parts 2, 3 and 4, respectively, use the names, "W4\_P2", "W4\_P3", "W4\_P4"). Submit each of these as complete projects (the whole project directory) as individual zip files.

If you need to, include a readme.txt that explains what the different files are in your submission. Keep it simple. For the short answers and multiple choice simply include these in separate document, eg, assignment4.pdf, .assignment4.txt, whatever.

Please submit no later than Monday, the evening before class at 11:59 PM.  
AS ALWAYS NEVER EMAIL HOMEWORK.

## **Submission:**

**Please follow the naming conventions above. INCLUDE A README TO CLARIFY THE CONTENTS OF YOUR SUBMISSION.**

Please submit no later than Saturday, February 26<sup>th</sup>, at 11:59 PM.

Submit via group on gradescope.

You may upload a zip file that contains all of your work OR you may upload a github repo. Please choose only one option.

**AS ALWAYS NEVER EMAIL HOMEWORK AND NO LATE HOMEWORKS ARE ACCEPTED.**