

## ASSIGNMENT INSTRUCTIONS

1. Assignment 02: **75 points w/ 5 E.C. points**
2. Due Date & Time: **02-25-2022 at 11:55 PM**

## WHAT TO SUBMIT

1. Assignment Report
2. Code

## HOW TO SUBMIT AND THE RULES TO FOLLOW

- Submit via iLearn, the Assignment Submission section
- Please refer to Assignment 01 for the Assignment Guidelines
- Please follow the Assignment Report Template
- Please follow the Course Policy on Student Conduct and Academic Honesty

| PERFORMANCE TRACKER |            |            |
|---------------------|------------|------------|
| ASMT                | GRADE      | YOUR GRADE |
| ZOOM                | 05         |            |
| 01                  | 20         |            |
| 02-PREPARATION      | 25         |            |
| 02                  | 75         |            |
| <b>TOTAL</b>        | <b>125</b> |            |

**A:** 90-100% **B:** 80-89% **C:** 70-79% **D:** 60-69% **F:** 0-60%  
 The course grader provides feedback to your assignments on iLearn.

## ABOUT

CSC 210, a good foundation in Java programming, is CSC 220's course prerequisite. We were supposed to have a prerequisite exam to demonstrate our knowledge of Java programming.

Instead of a test, this assignment is our opportunity to review (and to learn) a number of important Java topics and to get us ready for Data Structures. Please study our review materials including PKG 01 and PKG 02 thoroughly, which will help us complete this assignment and succeed in this course.

The **supporting materials** for this assignment are organized under this directory:

- Please see: <http://csc220.ducta.net/Assignments/assignment-02-Materials/index.php>
- We must use the provided starter code and follow the assignment instructions below to get credit.

*Happy coding!*

## PART A – OOP Class Design Guidelines, 15 points

Y. Daniel Liang's 8 Class Design Guidelines:

- <http://csc220.ducta.net/Assignments/assignment-02-Materials/ClassDesignGuidelines.pdf>

Please choose 3 guidelines and discuss them in-depth. For each guideline, use at least **one page** for your discussion. It is OK to use code to help demonstrate your points. The code portion, if any, should not take up more than 1/3 of each guideline's discussion.

## PART B – OOP, 60 points

Our commencement ceremony will be hosted at Oracle Park, home of the San Francisco Giants. The Giants is hiring us to develop a messenger application to help them take SF Giants Thank You card orders from SF State students.

The **6 complete sample outputs** are posted on the File Manager. Please read all the sample outputs carefully.

- <http://csc220.ducta.net/Assignments/assignment-02-Materials/index.php>

To get credit, our program must meet the **output requirements** and the **programming requirements** which are described in the following.

Output Requirements:

- **Identical:** Our program must produce output **identical** to the complete sample output provided on File Manager. Please read each sample output for further information and assistance.

| Complete Sample Output | Main Topic                         | Output Requirement | Pts |
|------------------------|------------------------------------|--------------------|-----|
| SampleOutput-01.pdf    | 3 pillars of OOP (CSC 210)         | Identical          | 25  |
| SampleOutput-02.pdf    | Internationalization (CSC 210/220) | Identical          | 7   |
| SampleOutput-03.pdf    | Date and Time (CSC 210/220)        | Identical          | 7   |
| SampleOutput-04.pdf    | Exception Handling (CSC 210)       | Identical          | 7   |
| SampleOutput-05.pdf    | ANSI Colors (CSC 210)              | Identical          | 7   |
| SampleOutput-06.pdf    | File I/O (CSC 210)                 | Identical          | 7   |

\*\*\* Please use this table to communicate clearly to our grader which output requirements we completed successfully.

#### Programming Requirements:

1. We must use this starter code:

- <http://csc220.ducta.net/Assignments/assignment-02-Materials/Assignment-02-Code.zip>

2. We **can add code**. Our task to complete implementing the incomplete classes among the provided starter-code files.
3. We **cannot change** and **cannot remove** the **provided code**, especially the code in file "**Messenger.java**".
4. We must keep **all** of our data fields "**private**". We must not create any new classes.
5. We must use a programming style provided in the directory **File Manager/Assignments**. 3 styles were provided.
6. In our assignment report, we must demonstrate to our grader that:
  - Our program runs properly on the latest version of NetBeans and that
  - Our program meets the requirements successfully.
  - Please document each sample run clearly so that our grader can see how much work and passion we put into developing our program.

#### **PART C – Database, 5 EXTRA CREDIT points**

Make our program allow students to choose which SF Giants player to chat with. Our program should output updated player's information as listed on Wikipedia:

- [https://en.wikipedia.org/wiki/2022\\_San\\_Francisco\\_Giants\\_season#Current\\_roster](https://en.wikipedia.org/wiki/2022_San_Francisco_Giants_season#Current_roster)

Please create our creative demonstration to show our successful implementation of this requirement to get credit.

*Thank you and happy coding!*

#### **REMINDER:**

We should start ASMT 02-Preparation and ASMT 02 at the same time. **ASMT 02-Preparation is a team learning experience. Each team should have five members. ASMT 02 is a regular assignment. We can work alone or work with one classmate on ASMT 02.** Please refer to the Assignment Template and the Guidelines for All Assignments.

*Thank you and happy learning.*