

README FILE

Programming Assignment 1 Part 3

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State the Aggie Honor statement:

I certify that I have listed all the sources that I used to develop the solutions and code to the submitted work.

On my honor as an Aggie, I have neither given nor received any unauthorized help on this academic work.

Your Name Rong Xu

Date

List any resources used such as webpages (provide URL). Do not mention the textbook and discussions with the Instructor, TA, or Peer Teachers.

People	
Web pages (provide URL)	
Printed material	
Other Sources	

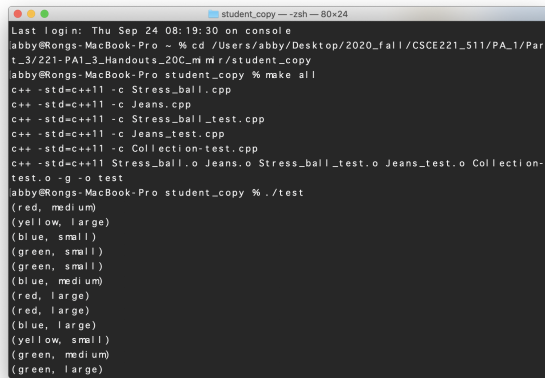
List any known problems/issues with the assignment you are turning in. For example, if you know your code does not run correctly, state that. This should be a short explanation.

none, everthing works good.

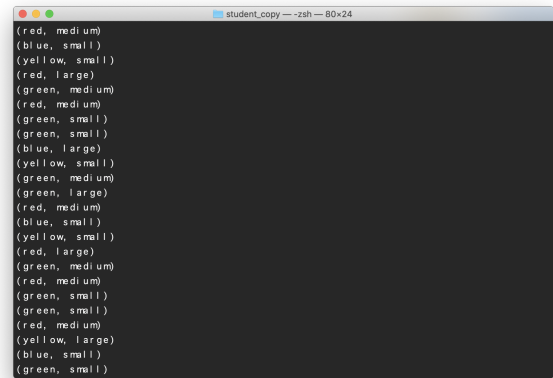
Provide a short description for the solution or pseudocode for the assignment questions.

This program is used to store different collections of the stress balls and jeans with different colors and sizes. The folder includes three class files which are Stress ball, Jeans, and Colloction, and two test files for testing the class functions. In the collection file, we use the array data type to strore the objects, since we have different objects from the part two. We used the template this time for suit with both Stress ball and Jean. It makes collection, insert and delete the object, and sort the items by selected from the sorting list: Bubble sort, Selection sort, and Insertion sort.

Provide screenshots of two test cases (from Computer Science Linux machine) and show how you compiled the program (Ex: Command Line and IDE).



```
student_copy --zsh-- 80x24
Last login: Thu Sep 24 08:19:30 on console
abby@Rongs-MacBook-Pro ~ % cd /Users/abby/Desktop/2020_fall/CSCE221_S11/PA_1/Part_3/221-PA1_3_Handouts_20C_m/r/student_copy
abby@Rongs-MacBook-Pro:student_copy % make all
c++ -std=c++11 -c Stress_ball.cpp
c++ -std=c++11 -c Jeans.cpp
c++ -std=c++11 -c Stress_ball_test.cpp
c++ -std=c++11 -c Jeans_test.cpp
c++ -std=c++11 -c Collection_test.cpp
c++ -std=c++11 Stress_ball.o Jeans.o Stress_ball_test.o Jeans_test.o Collection_test.o -g -o test
abby@Rongs-MacBook-Pro:student_copy % ./test
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student_copy --zsh-- 80x24
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(15 points) Write about generic programming using templates based on assignment part 3.

We often use the template when there are different type of data. For example, in this case, we have two different type of objects which are Stress ball and Jeans, they are created based on similar mode(both of them have the size and color, however, the colors and sizes they have are different) by using the class. So when we need to implement the class collection which is supposed to collect the different collection of stress ball or jeans, we used the template, so Obj which means object is used for declare the item is whether Jeans or Stress ball. Then F1 is used for de claring the color and F2 is used for declaring the size the item has. On the other hand, we also define the aliases in order to not to used long class name, which are “using CollectionJN = Collection<Jeans, Jeans_colors, Jeans_sizes>;” and “using CollectionSB = Collec-tion<Stress_ball, Stress_ball_colors, Stress_ball_sizes>;”.

Your Name (signature)

Rong

Xu

Date

2020/09/24