

Final Lab Assignment

Note:

- This is a graded assignment. Only those students who are going to opt for Advanced Programming, need to submit the assignment. Grades will be counted only for those who are opting for AP.
- It is mandatory for all the students to make GUI applications for this assignment.
- Java Swing should be used for this assignment.
- **Deadline is till Thursday, 20th August, 2020, 11:59 pm.**
- **Submissions done after 11:59 pm will not at all be graded.**
- There will also be Demos (online) for this assignment for which you will get the slots from the assigned TAs.
- Naming Convention to be followed: RollNo._A0.zip

A student of IIITD did a survey to find the status of COVID-19 cases in his society. He worked for a few months and found that, out of 1000 people in his society (in different towers of his society) 20 were COVID-19 positive. So according to the detailed report he summarized the below mentioned data. A person will recover after 21 days. Now he wanted to categorize the cases.

Patient Name	Age	Tower	Date of Reporting
Flora	6	A	01/04/2020
Denys	24	B	01/04/2020
Jim	42	C	18/05/2020
Hazel	87	D	23/06/2020
Caery	72	A	01/06/2020
David	7	B	14/06/2020
Kevim	37	D	05/06/2020
Tom	67	D	20/06/2020
Bob	74	A	04/07/2020
Rachel	48	C	24/07/2020
Thomas	21	C	11/06/2020

Mary	17	D	21/06/2020
Smith	89	A	07/08/2020
Pearson	47	B	04/06/2020
Anderson	62	B	27/07/2020
Johnson	10	D	01/08/2020
Robertz	50	A	09/08/2020
Julie	86	B	02/05/2020
Edith	42	D	07/06/2020
John	95	D	01/06/2020

Problem:

Make an interactive Java GUI application that finds and displays the **total number of active cases on a particular date and number of recovered cases on a particular date** in each category (tower) along with the **patient details with their recovery dates**.

All the information of the patients must be provided in the class named as Patient. You can make use of appropriate OOP concepts wherever possible, to enhance your code.

Input:

The program prompts the user for the Tower and the reporting date as input. For the tower category, use a Checkbox.

Constraint- All the input dates must lie within these 5 months(April 2020 - August 2020) only.

Output:

The application displays: The number of active cases, number of recovered cases on a particular date(date taken as input) from each category(tower). It should also display all patient details (either Active or Recovered) along with their recovery dates.

Use appropriate labels wherever required.