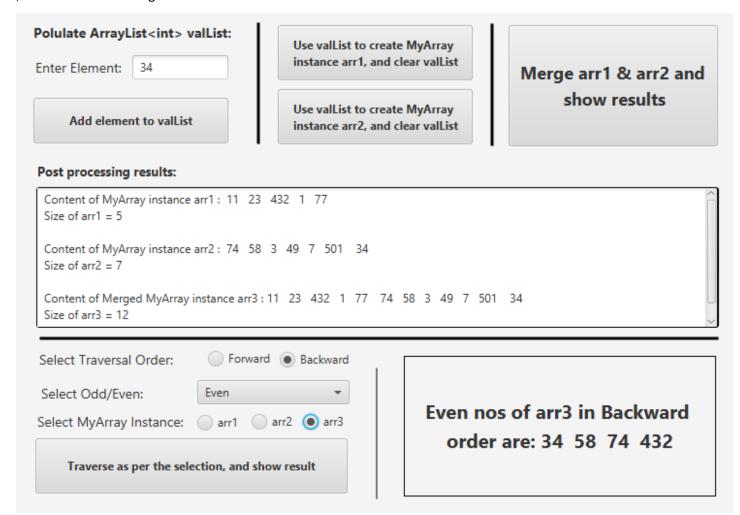
Mid Term Exam, Spring 2023 SET-C

Total Marks: 100; Duration: 90 minutes

Create a NetBeans project with the name: "Midterm_yourld_secNo". Ex: "Midterm_1234567_sec5" Now, consider the following MidExamScene.FXML scene:



Note:

- ArrayList<int> valList is a private field of Controller class
- MyArray instances: arr1, arr2 & arr3 are also private fields of Controller class
- MyArray class:
 - o private field: private ArrayList<int> vals
 - methods: constructors, getters, setters, toString and merge

P.T.O

Now, using above description, implement a NetBeans FXML project meeting following criterion:

Requirements	Marks
1) Fully implemented model class: MyArray Mark for declaring fields with scope & qualifier Mark for defining constructors, getters, setters, toString Mark for defining merge	5 5 5
2) Fully designed MidExamScene.FXML file with required fx:id s and event handler methods Mark for Design Mark for specifying required fx:id s and event handler methods	10 5
3) Fully implemented MidExamSceneController class as follows:	
3.1) Appropriate initialize method	10
 3.2) Clicking "arr1 create" button will trigger instantiateArr1AndClearValListButtonOnClick() handler method to do the following: It will instantiate MyArray handle arr1, and clear the valList. And	15
Clicking "arr2 create" button will trigger instantiateArr2AndClearValListButtonOnClick() handler method to do the following:	
o It will instantiate MyArray handle arr2, and clear the valList.	
 3.3) Clicking "Merge" button will trigger mergeAndShowButtonOnClick() handler method to do the following: It will use the model class method merge to merge arr1 and arr2 into arr3 and show all of 	15
them into resultTextArea , as per the format shown in the screenshot. O However, if any of arr1 & arr2 is empty, then you must not show arr3 in resultTextAreaand	10
(show only arr1 & arr2, and generate an appropriate error alert.	
3.4) Clicking "Traverse" button will initiate traverseAndShowButtonOnClick() handler method to do the following:	20
 It will traverse the selected MyArray instance in the selected sequence and show only ODD/EVEN (as selected) numbers in the label as shown in the screenshoot. 	20