

GUI Assignment

You will be creating a seating arrangement application using JavaFX. The project will comprise of two sections: the interface and the Java code.

The application will feature a 3x3 seating chart and a form below the seating chart. The form will ask the user to input a name and choose a color to represent the student. Below is an example.

Teacher

<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Student Name

Student Color

When the user clicks on the button, the application will check that the text field is not empty. It will also check to determine if the color has already been chosen for a seating arrangement. If the text field is empty, the user receives an error message.

The screenshot shows a web application interface for a teacher. At the top, there is a blue header bar with the word "Teacher" in white. Below the header is a 3x3 grid of empty square seats. Underneath the grid, the text "Error message appears now" is displayed in red. At the bottom of the interface, there are two input fields: "Student Name" with a text box and "Student Color" with a dropdown menu showing "White". Below these fields is a blue button labeled "Add Student".

Teacher		
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Error message appears now

Student Name

Student Color

If the name is not empty and the color has not been chosen already, the application randomly chooses a placement for the student. If the color has already been chosen, an error message appears.

The app will only place the student in an empty slot and will give an error message when there are no more places available.

See below for screenshots.

Teacher

<div></div>	<div></div>	<div></div>
<div></div>	<div></div>	<div></div>
Ben		
<div></div>	<div></div>	<div></div>

Student Name

Ben

Student Color

#e6b34d

Add Student

Teacher

<div></div>	<div></div>	<div></div>
<div></div>	<div></div>	<div></div>
Ben		
<div></div>	<div></div>	<div></div>
	Java	

Student Name

Java

Student Color

#80b3b3

Add Student

#	Rubric Task	Description	Weight in %
1	Stylish GUI	Original layout. Does not copy sample outline of Assignment. Uses good color combinations.	15
2	Uses appropriate GUI structures	Uses controls, layouts, shapes, etc	7.5
3	Actions evoke appropriate GUI structures	Components are not visible until appropriate actions	7.5
4	Seating is chosen at random	Pattern of choosing seating is not hard-coded. Chosen at random.	27.5
5	Verifications are completed	<p>Application checks if color is chosen: gives error if it is. Does not place student in seating arrange if color has already been choses</p> <p>Application checks if student name is not blank. This includes checking for spacebar entries, where no characters are inputted: gives error if it is. Does not place student.</p>	27.5
6	Add Student button works correctly.	Color and Student Name appear in seating arrangement when user has inputted an entry with no errors.	10
7	Seating Complete	<p>Congratulatory message is showed when seating has been completed.</p> <p>Error message shows up when user tries to add another Student Name when Seating arrangement is full.</p>	5

Submission Instructions

Name your project package **guiAssignment_#####**, where ##### is your student number.

Navigate to the src directory of the project and zip up the files (.java , .fxml, etc).

Name the zipped file **guiAssignment_#####**, where ##### is your student number.

Submission Due Date

The due date for this project is July 1, 2018 @ 11:59PM