PROGRAM PACKAGES TEMPLATE

1. STUDENT/PROJECT INFORMATION:

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Student's Section Number:	2
Selected project:	Egyptian Museum Desktop Application
Project description:	The project introduces a desktop application to Egyptian Museum. The project contains three main packages: one for GUI, one for database and the last one for backend. The project allow user to create his own account, explore the museum and look forward to the map of the museum. The different art pieces exist in the museum is introduced in the project to make user know what mush fun he will have inside our museum. The project gives feature to user making him can book a ticket to visit museum, know the different events organized by the museum and book a ticket to that event. A feature also given by the project is that the user can pay for his ticket by using his credit card or cash. Finally, hoping the application being useful, covering every error would the user face and giving him different features needed.

#	Line number (from-to)	Function name	Description
1. In Login class	45-74	sign in Button	This function receives these Parameters: Two JTextField for username and password, one JLabel for error message and two JFrame for current page and next one. This function takes information of account from GUI, verifies them using database, displays what kind of error happens in case of wrong information added and gives user 3 attempts to handle this error. This function is used in action of clicking the sign in button in GUI. This function return void.
2. In LoginPage class	76-84	signUpButton	This Function receives these parameters: two JFrame for the current page and the next one. It closes the current page and open the next one. It returns void.
3. In SignUpPage class	43-63	checkPassword	This Function receives these parameters: Two JTextField for the password and repeatpassword, one JLabel for error message. This function takes password of account from GUI and checks if there is an error and display it. It returns Boolean
4. In SignUpPage class	64-67	getGender	This Function receives this parameter: comboBoxModel of type string for genderComboBox. It takes it from GUI and converts it to sting. This Function returns Boolean.
5. In SignUpPage class	68-79	insertDataOfNewAccount	This Function receives these parameters: Five JTextField for the name, national ID, phone number, email and age. And JPasswordField for the password and two JComboBox of type string for Gender and Status. It takes these information from GUI, adds them in the database. It returns Boolean.
6. 6- In SignUpPage class	89-99	toNextPage	This Function receives these parameters: two JFrame for the current page and the next one, and boolean variable for the dataInserted. It closes the current page and open the next one. It returns void.
7. In Explore Page Class	25-33	signOutButtom	This function receives two JFrame, one for the explore page and the other for sign in page. This function moves us to sign in page, closes current page and returns void
8. In Explore Page Class	34-42	eventsButtom	This function receives two JFrame, one for the explore page and the other for events page. This function moves us to event page, closes current page and returns void
9. In Explore Page Class	43-51	bookButtom	This function receives two JFrame, one for the explore page and the other for book page. This function moves us to book page, closes current page and returns void

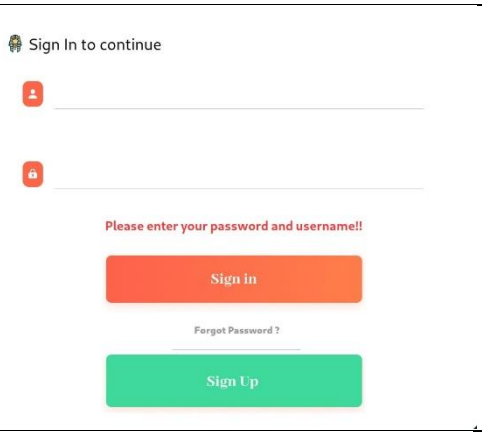
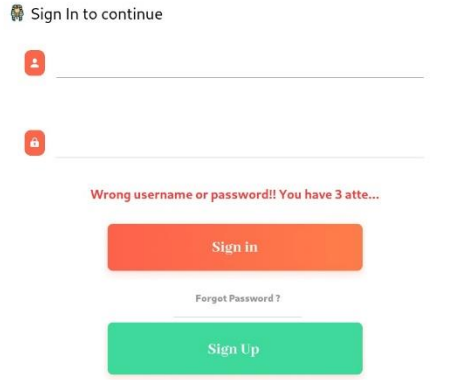
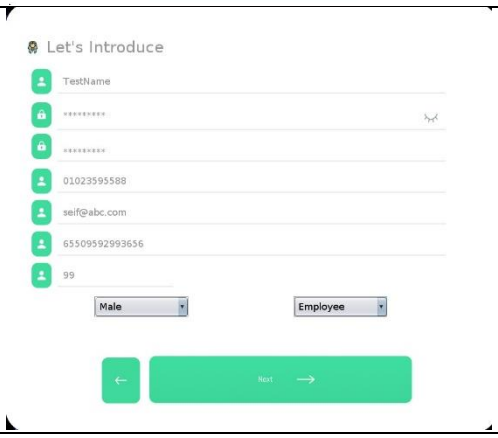
10. In Explore Page Class	52-60	miniSatusPanel	This function receives two JFrame, one for the explore page and the other for category page. This function moves us to category page, closes current page and returns void
11. In Explore Page Class	61-69	historicPaintingsPanel	This function receives two JFrame, one for the explore page and the other for category page. This function moves us to category page, closes current page and returns void
12. In Explore Page Class	70-80	monumentsPanel	This function receives two JFrame, one for the explore page and the other for category page. This function moves us to category page, closes current page and returns void
13. In Events Page class	40-63	CreateAllEvents	This Function receives one parameter which is JPanel for the eventPanel in the GUI. It takes all event IDs from database in an arraylist. And it takes all the event datails from the database according to ID. Then add the datails to the panel in the GUI. It returns void.
14. In Event Details Page Class	35-57	showEventDetails	This function receives array of JLabels to display details of each event in GUI using these JLabels by getting these details from database using event ID given from pervious page in GUI. This function returns void
15. In Event Details Page Class	63-71	bookEventTicketButtom	This function takes two JFrame, one of the current page and the other for the next page. This function moves us to book an event ticket page, closes the current page and returns void.
16. In Art Piece Page class	35-50	setOneMonument	This function receives monument ID and JPanel, gets information of monument from database using ID, display monument's information in GUI and returns void
17. In Art Piece Page class	51-62	setAllMonuments	This function receives JPanel to display all monuments in GUI. This function calls setOneMonument function inside it and gives it all IDs of monuments and returns void.
18. In ArtPiece Object class in GUI	56-63	MouseClicked	This function disposes the current page and opens the next one. It receives title and URL and brief it takes from database
19. In Details in GUI	21-29	Details	This function receives the title, URL and name it takes from database and show them in GUI.
20. In Booking Page class	49-74	confirmButtom	This Function receives these parameters: Four JTextField for the fullname, national ID, phone number, date of visit and two JFrame for the current page and the next one and one JLabel for error message. This function takes all information from GUI. It displays what kind of error happens in case of empty text. It adds information in the database then closes the current page and opens the next one. It returns void.
21. In Booking Page class	75-98	confirmEventTicketButtom	This Function receives these parameters: Three JTextField for the fullname, national ID and phone number and receives JLabel for the error message and two JFrame for current page and next one. This function takes all information from GUI. It displays

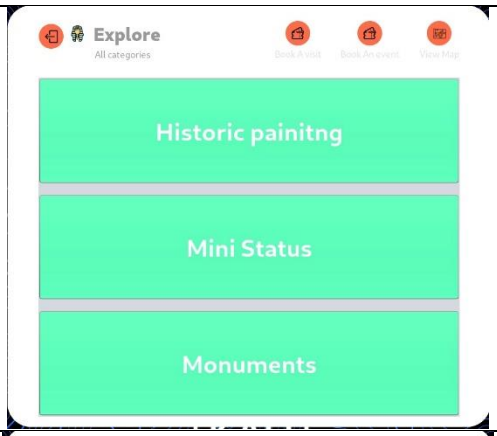
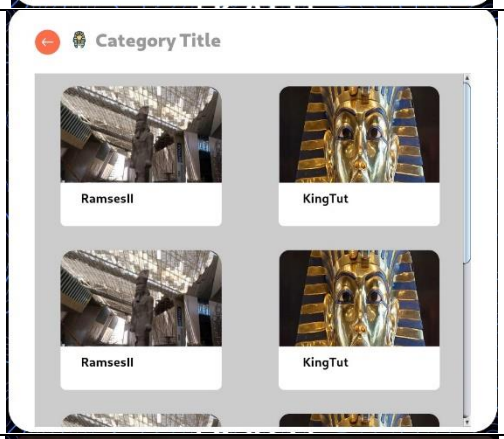
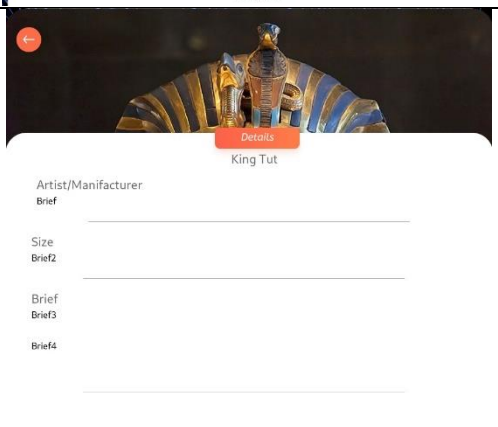
			what kind of error happens in case of empty text. It closes the current page and opens the next one. It returns void.
22. In Select Payment Page class	18-30	SelectPayment	This function receives two JRadioButton for cash and credit card payment and returns Boolean indicate whether the user select cash or credit.
23. In Select Payment Page class	32-45	continueButton	This function receives 3 JFrame for credit page, cash page and current page and receives a Boolean which is the return of the selectPayment method. This function moves us to the page related to the selected payment method and return void.
24. In Credit Card Payment Page class	50-56	questionMarkIconMouseEntered	This function receives JLabel for msg to appear when user hover on question mark icon and returns void.
25. In Credit Card Payment Page class	56-59	questionMarkIconMouseExited	This function receives JLabel for msg to appear when user's mouse exit from question mark icon and returns void.
26. In Credit Card Payment Page class	60-83	noEmptyCell	This function receives three JTextField for credit card number, Cvv and name of user, two combox for month and year and JLabel for error msg. This function collect information of credit card and user and returns Boolean indicate whether there is an empty cell or not.
27. In Credit Card Payment Page class	84-95	payNowButton	This function receives two JFrames for current page and next one and a Boolean which is the return of noEmptyCell Method. If noEmptyCell return true, it will take us to next page. This function return void.
28. In all pages		backButton	This function receives two JFrames of pervious and current page, moves us to pervious one and returns void.
29. In all pages		instance	Singletons: is a design pattern which restricts a class to instantiate its multiple objects. It is nothing but a way of defining a class. Class is defined in such a way that only one instance of the class is created in the complete execution of a program or project. It is used where only a single instance of a class is required to control the action throughout the execution. A singleton class shouldn't have multiple instances in any case and at any cost. Singleton classes are used for logging, driver objects, caching and thread pool, database connections.

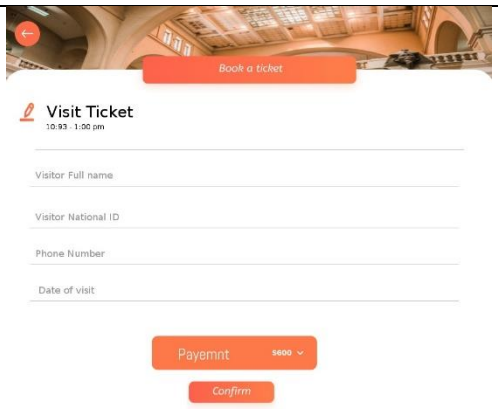
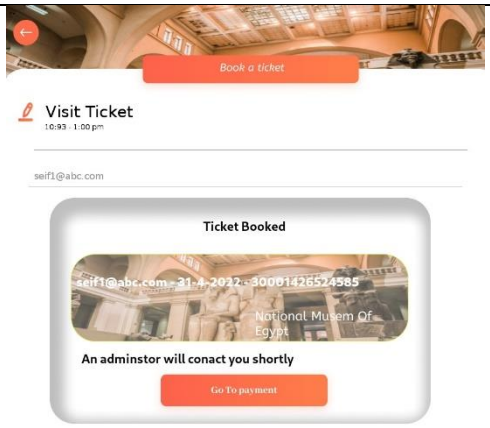
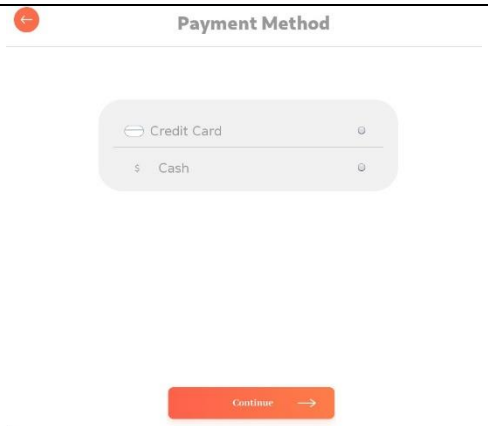
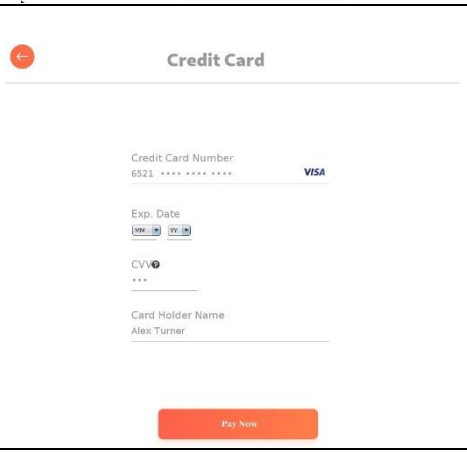
2. CODE INFORMATION:

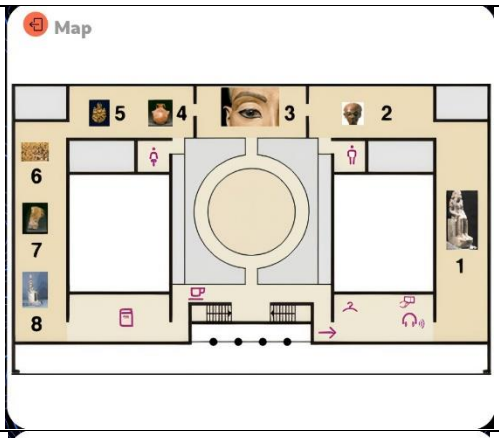
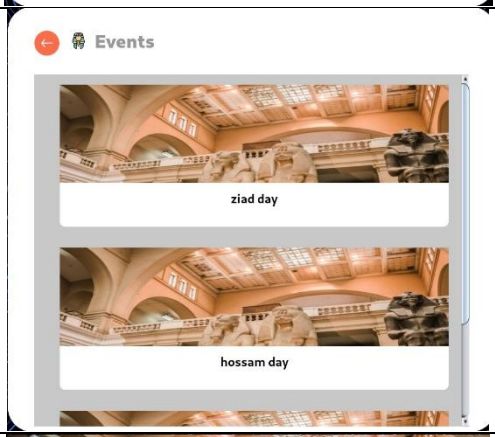
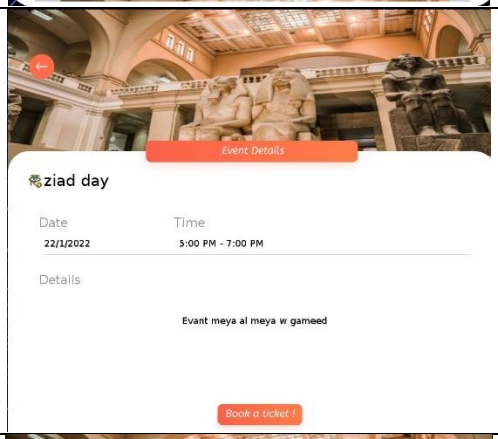
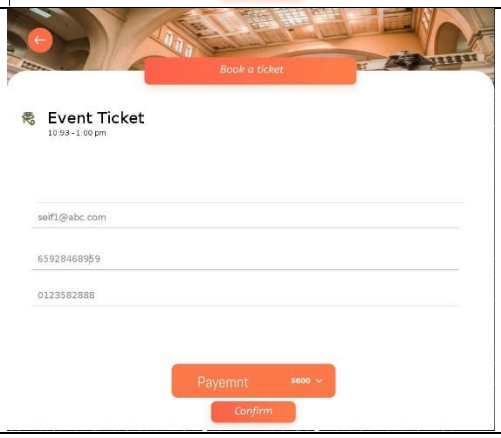
There is not any group of lines in our project. It is only a group of classes containing methods used in building our application.

3. SNAPSHOTS:

#	Description	Screenshot
1.	Input: Username and password of user. Error Message: A message appears if the user leaves two text fields empty. Output: This page will take user to explore page in case of right username and password.	
2.	Input: Username and password of user. Error Message: A message appears if the user writes a wrong username or password that doesn't exist in database. Output: This page will take user to explore page in case of right username and password.	
3.	Input: Information of the new account that will be created. Error Message: A message appears if the user leaves any of these text fields empty or enters different password in text field of repeat password. Output: This page will take user to sign in page in case of right information is added.	

4.	Input: Click of user in any of the available buttons" Sign Out, Events, Book Event, Book Ticket, Historic Paintings, Mini Status, Monuments". Output: This page will take user to the next page which depends on the button clicked.	
5.	Input: Click of user in any of the available panels which displays different art pieces. Output: This page will take user to the next page which depends on the panel clicked to display image and details of the required art piece.	
6.	Input: Click of user on the details button. Output: This page will display details of art piece on clicking on details button.	
7.	Input: Click of user on booking button. Output: This page will take user to booking page on clicking on booking button.	

8.	Input: Information of visitor who is booking ticket Error Message: If any of the text field is left empty, a error message will appear in page asking user to enter all information needed. Output: This page will take user to next one, if user clicks on confirm button in case of right information added.	
9.	Input: Email of user who is booking ticket in text field. Error Message: Message will appear if user clicks on go to payment button and doesn't enter an email. Output: This page will take user to next one, if user clicks on go to payment button in case of email added.	
10.	Input: User selects either credit card or cash method to pay using two radio buttons. Output: This page will take user to next one, if user selects credit card, he will be moved to that page.	
11.	Input: Information of user's credit card. Error Message: A message will be displayed in case of empty text field. Output: This page will take user to next page, if user clicks on pay now button in case of right information.	

12.	Input: No input is needed from user. Output: Map of museum.	
13.	Input: Click of user in any of the available panels which displays different events. Output: This page will take user to the next page which depends on the panel clicked to display image and details of the required event.	
14.	Input: Click of user on booking button. Output: This page will take user to booking page on clicking on booking button.	
15.	Input: Information of visitor who is booking ticket Error Message: If any of the text field is left empty, a error message will appear in page asking user to enter all information needed. Output: This page will take user to next one, if user clicks on confirm button in case of right information added.