Introduction:

Our project Brain Bite is an online quiz application. Its first frame is Login i.e. for Admin or User. User cannot login without userid and password. So he/she first of all do Sign up. Then the Sign Up frame is open. User fill its detailed information. After fill the form click on the Submit button for submitting the form or click on the Cancel button for not submitting. After clicking the Submit button the Password Field Frame is opened and the user id is assigned to the user. Userid is automatically assigned to the user. Then the user entered its password in the password field and then again entered the password in the confirm password field . If the password field data and the confirm password field data is not matched then a dialog box is shown Password and Confirm Password field is not matched. If it is matched then press the OK button. After Pressing the OK buton the userid and password is stored in the database. After this user is back on the Login frame. In the login frame first field is userid in this field user entered its own userid number which is unique among all the existing users. Then the second field is Password field , in this field user entered its password. And the next field is Type this is a combo box which has two values first is User and the second is Admin. If logger is User then he/she selects the User value else if he/she is Admin then selects the Admin value. Then the logger click on the login button. Behind the login button an event is occur in this entered userid and password is matched in the database to verify the user is correct or not. If the user is not existed then he/she cannot access this application and the dialog box is shown i.e. Invalid User if logger is user, or if logger is Admin then shown i.e. Invalid Admin. The Demo button is shown on the frame. If the user is new one and does not know how the quiz is and which type of questions are added to it then he/she choose this option to play this and identify the quiz application. In this option at least five or six questions are added user can play this and see the result at the end of last question. The user can choose this option without login.

If the userid and password of User Login is matched in the database then the second Home frame is opened in which there is menu bar on the top of the frame. And one of the Category combo box is placed below. Category Combo box has three values first is GK , second is Sports and the last one is Technical. The user can select one value at a time from the category. If he/she selects GK value then the GK question frame is opened. This is an question frame which is labelled with questions and its four options. User selects only one option among all. Then he/she click on the Next button. Behind the Next button an event is occurred in which the selected option is matched with the correct one from the database. If it is matched then the two marks for correct answer is added to the user score. If it is not matched the one mark is deducted from the user score. And the previous question is replaced with the next question to the frame. Also if the next one is correct the two marks are added and the previous question is replaced with the next one and so on. At the end of the last question the Next button is replaced with the Finish button. After clicking the finish button the Result of session is shown to the user. In the result dialog box it shows the total number of questions, number of correct questions and also shows the total score of the user. And add this score to the database for future use. Then the user come back to the Home frame and selects any one category from the category combo box. If again he/she selects the Sports option from the Category combo box. Then the Sports question frame will open. This frame is labelled with only Sports questions and its four options. User selects only one option among all. Then he/she click on the Next button. Behind the Next button an event is occurred in which the selected option is matched with the correct one from the database. If it is matched then the two marks for correct answer is added to the user score. If it is not matched the one mark is deducted from the user score. And the previous question is replaced with the next question to the frame. Also if the next one is correct the two marks are added and the previous question is replaced with the next one and so on. At the end of the last question the Next button is replaced with the Finish button. After clicking the finish button the Result of session is shown to the user. In the result dialog box it shows the total number of questions, number of correct questions and also shows the total score of the user. And add this score to the database for future use. Then again the user come back to the Home frame. If he/she selects the Technical option from the Category combo box. Then the technical question frame will open. This frame is labelled with only technical questions and its four options. User selects only one option among all. Then he/she click on the Next button. Behind the Next button an event is occurred in which the selected option is matched with the correct one from the database. If it is matched then the two marks for correct answer is added to the user score. If it is not matched the one mark Is deducted from the user score. And the previous question is replaced with the next question to the frame. Also if the next one is correct the two marks are added and the previous question is replaced with the next one and so on. At the end of the last question the Next button is replaced with the Finish button. After clicking the finish button the Result of session is shown to the user. In the result dialog box it shows the total number of questions, number of correct questions and also shows the total score of the user. And add this score to the database for future use. The score of user is stored according to its category. If the user played the GK quiz then the score of this category is stored in GK field in the database of the user. If the user played the SPORTS quiz then the score of this category is stored in SPORTS field in the database of the user. And if the user played the TECHNICAL quiz then the score of this category is stored in TECHNICAL field in the database of the user. The working of the second menu i.e. Setting is used by user to view the report of him/her in the application, he/she can update his password and also view his own general information. The third menu i.e. About us shows the information about Brain Bite application and information about developers.

IF Admin want to access this application. He/She can logged by the Login frame. In this fame, Admin entered its admin id in the user id field, entered the password in the password field and selects the Admin type from the Type combo box. Then click on the Login button. Behind the login button an event is occurred i.e. it match the entered user id field and entered password field with the existing admin id and password fields from the AdminLogin table from the database. If it is matched then the admin go to the Admin Panel frame. In this frame admin view its rights. Because admin is the only person who can manage this application. This frame consists of labels and some buttons. The Hello Admin label is shown on the top and three consecutive buttons first is Questions, second is Users and the third one is Admin. When the admin clicks the Question button then an event is occurred on the mouse click and the new Question queries frame will opened. This question queries frame also a collection of some labels, one combo box and some buttons the first label is Question Point!!! Then the combo box is placed it is used to selects the category to performs queries like ADD, VIEW, UPDATE and DELETE on selected category. If the admin select the GK option from the combo box then click on ADD button, the new Add question frame is opened to add the new GK question. In this frame first field is Question the admin can entered the question into this field, the second field is option A the admin can enters the first option in this field, the third field is option B the admin can enters the second option in this field, the fourth field is option C field the admin can enters the third option in this field, the fifth field is option D the admin can enters the fourth option in this field and the last one is correct answer field in which the admin can enters the correct option in this field. The Submit button is placed at last. When the admin enters the values in the frame then he/she click on the Submit button. When the admin click on Submit button then the entered field’s data is stored into the GKQ table into the database. If admin wants to view the GK questions then he/she click on the VIEW button in question queries frame. In this frame admin views all the questions of GK category. If admin clicks on the UPDATE button in the question queries frame then a new frame is opened to update the selected question. In this frame first of all admin selects the question, enters the new value to the selected question and then click on the UPDATE button to update the question. If the admin wants to delete a question then admin click on the DELETE button in the question queries frame, after clicking a delete frame is opened firstly admin enters the qid i.e. question id to the Enter question id field then click on the DELETE button to delete the question. If the user selects the Sports category then click on ADD button in the question queries frame to add new sports question in the sports question database. The new Add question frame is opened to add the new Sports question. In this frame first field is Question the admin can entered the question into this field, the second field is option A the admin can enters the first option in this field, the third field is option B the admin can enters the second option in this field, the fourth field is option C field the admin can enters the third option in this field, the fifth field is option D the admin can enters the fourth option in this field and the last one is correct answer field in which the admin can enters the correct option in this field. The Submit button is placed at last. When the admin enters the values in the frame then he/she click on the Submit button. When the admin click on Submit button then the entered field’s data is stored into the SPORTSQ table into the database. If admin wants to view the SPORTS questions then he/she click on the VIEW button in question queries frame. In this frame admin views all the questions of SPORTS category. If admin clicks on the UPDATE button in the question queries frame then a new frame is opened to update the selected question. In this frame first of all admin selects the question, enters the new value to the selected question and then click on the UPDATE button to update the question. If the admin wants to delete a question then admin click on the DELETE button in the question queries frame, after clicking a delete frame is opened firstly admin enters the qid i.e. question id to the Enter question id field then click on the DELETE button to delete the question. If the admin selects the TECHNICAL category from the question queries frame then clicks the ADD button to add the new TECHNICAL questions then the new ADD TECHNICAL question frame is opened . In this frame first field is Question the admin can entered the question into this field, the second field is option A the admin can enters the first option in this field, the third field is option B the admin can enters the second option in this field, the fourth field is option C field the admin can enters the third option in this field, the fifth field is option D the admin can enters the fourth option in this field and the last one is correct answer field in which the admin can enters the correct option in this field. The Submit button is placed at last. When the admin enters the values in the frame then he/she click on the Submit button. When the admin click on Submit button then the entered field’s data is stored into the TECHNICALQ table into the database. If admin wants to view the TECHNICAL questions then he/she click on the VIEW button in question queries frame. In this frame admin views all the questions of TECHNICAL category. If admin clicks on the UPDATE button in the question queries frame then a new frame is opened to update the selected question. In this frame first of all admin selects the question, enters the new value to the selected question and then click on the UPDATE button to update the question. If the admin wants to delete a question then admin click on the DELETE button in the question queries frame, after clicking a delete frame is opened firstly admin enters the qid i.e. question id to the Enter question id field then click on the DELETE button to delete the question.

If the admin clicks on the Users button in the Admin Panel then the admin view all the users of the application. The admin can delete those users who cannot accessed his account from two months. The admin can deactivate the account of these users. Admin button in the Admin Panel if admin click on this then the new Admin Queries frame will open. This frame consists of four consecutive buttons. When the admin clicks on the ADD panel then the Add Admin frame will open. In this frame the first field is Admin id the new admin can enters the admin id , enters the Password and enters the password again in Confirm Password field. Then click on the OK button if the password field data and the confirm password data is not match then a dialog box is shown i.e. Mismatch data between the password and the confirm password field. If the Password and the Confirm Password field is matched then the entered data in fields are stored in the Admin Login table in tdahe database. If admin wants to view all the existing admins then he/she clicks on the VIEW button in the Admin queries frame. When the admin clicks on the UPDATE button then the update panel is open to update the password of the existing admin. If the admin click on the Delete button in the admin queries then delete panel will be opened to delete the existing admin. In this admin queries frame admin can ADD , DELETE , UPDATE , VIEW by the existing admin.

The front end tool of this application uses the JAVA Programming Language it’s uses the SWING technology to create its GUI. Swing includes the components like JRadioButton , JTextField , JTextArea , JTable , JComboBox , JCheckBox , JPanel and JFrame etc. This application uses the Oracle 10g as a back end tool. To make the connectivity between the front end and the back end tool uses the OJDBC driver , it uses the TYPE-1 JDBC-ODBC BRIDGE DRIVER. A Type1 driver translates JDBC to ODBC (Open Database Connectivity) and relies on an ODBC driver to communicate with the database. When the client makes database calls, the JDBC-ODBC bridge driver translate them into corresponding ODBC calls and ODBC driver translates the ODBC calls to database specific calls. Each client application that is making the JDBC calls must have both ODBC and JDBC installed. This type of driver is suitable for accessing data in data sources for which no pure JDBC driver exists.