

SidzQuizApp

Technical Specification

The Package Quiz

Classes and Functions

- **Main**
 - Void Main()
- **QuestionBank** extends **Questions**
 - List<Questions> QuestionPool
 - String filenameQB - file path of the XML File
 - XStream xStream
 - createQuestionPool()
 - Enters new questions to the QuestionPool
 - searchQuestions()
 - Searches the Question Pool for Questions given under a 'Topic'
 - displayAllQuestions()
 - Displays all the Questions from the QuestionPool
 - updateQuestions()
 - Updates a specific question with new inputs
 - deleteQuestions()
 - Deletes Questions from the QuestionPool
 - readFromFileQB()
 - Reads from the XML File
 - writeToFileQB()
 - Writes to the XML File
- **Questions**
 - boolean MCQ
 - String Question
 - String Topic
 - List<String> Options
 - String Response
 - String CheckResponse
 - float Mark
 - Int TotalQuestions
 - String difficulty
 - getQuestion()
 - Prompts questions from the user
 - evaluateQuestion()

Evaluates given questions. Both MCQ as well as Open Question Evaluation has been included.

MCQ - single as well as multiple entries along with variable mark distribution based on the number of entries as well as number of correct entries based on fractional distribution.

Open Questions - Key word mapping to the actual answers from the users and fractional mark distribution based on correct key word presence has been included.

- displayQuestion()
Displays the Questions along with the options

- **Quiz extends Questions**

String Title
List Topics
List Questions
String difficulty
float Score
String filenameQ
String filenameTxt
Quiz Q

- createQuiz()
Initiates a quiz ; Asks for Title, Topics, Difficulty and Selects questions from the QuestionPool according to the Topics and Difficulty Level.
- selectQuestions()
Selects Questions from the QuestionPool based on Topic and Difficulty. CreateQuiz() utilizes selectQuestions to pick up the Questions.
- runQuiz()
This method is used to run the Quiz. It displays the questions as well as evaluates the questions and calculates the total score for the quiz.
- writeToFileTxtnPDF()
This method is used for printing the final Quiz results to a text document. The location of the document is at
SidzQuizApp/target/classes/files/QuizResult.txt
- writeToFileQ()
Writes the Quiz object to the XML Document
- readFromFileQ()
Reads the Quiz object from the XML Document

- **User extends UserBase**

String Name
String Id
String Password
Boolean Type

String filenameUB

- takeQuiz()
Runs the quiz
- knowStudentorAdmin()
Checks if the User is Student or Admin
- getStudentDetail()
Gets Student Credentials
- getAdminDetail()
Gets Admin Credentials
- checkAdmin()
Checks whether a user is Student or Admin
*Presently Admin credentials has been hardcoded.
Name: Admin, Id: AAA, Password: ValidateAdmin

- **UserBase**

UserBase UB

List userList

String filenameUB

- checkUser()
Checks whether the User is in the UserBase
- addUser()
Adds an User to the UserBase
- writeToFileUB()
Writes UserBase Object to the XML Document
- readFromFileUB()
Reads from the XML Document into the UserBase Object

**While creating the skeleton of the App I have included the User and UserBase classes and functionalities, but proper functioning hasn't been integrated presently. Admin credentials has been hardcoded.

XML File Store Path - SidzQuizApp/target/classes/files