Mini Project Report on

QuizUp - A Quiz Application

Submitted in partial fulfillment of the requirement for the award of the degree of

BACHELOR OF TECHNOLOGY IN

AI & DS

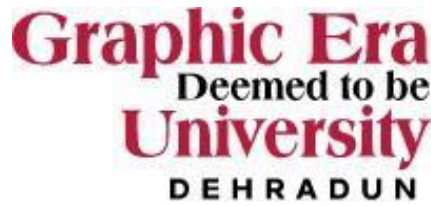Submitted by:

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Under the Mentorship of
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CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in the project report entitled **"QuizUp - A Quiz Application"** in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering of the Graphic Era (Deemed to be University), Dehradun shall be carried out by the under the mentorship of **Ms. Tanusha Mittal, Assistant Professor**, Department of Computer Science and Engineering, Graphic Era (Deemed to be University), Dehradun.

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signature

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CHAPTER 1

Introduction

1.1 Project Aim and Objective

The primary objective of our quiz application is to create a platform that offers an entertaining and educational experience for users. By including informative questions, we aim to give an enjoyable learning environment for our users, including students and professionals. Our goal is to encourage knowledge enhancement, promote critical thinking, and foster a sense of healthy competition among participants.

1.2 Introduction to Quiz Application

nowadays the interactive way of learning is getting popular. Quizzes, in particular, offer an entertaining and educational way to test knowledge, promote learning, and foster social interaction. The objective of our mini project is to develop a quiz application that gives an enjoyable experience for users.

Quizzes have gained immense popularity due to their ability to engage users and enhance their knowledge on various subjects. Traditional learning methods can often be mundane and fail to captivate learners effectively. since the demand for these learning platforms is increasing. Our quiz application aims to fill this gap by providing an engaging and educational tool that can be accessed anytime, anywhere.

1.2.2 Introduction to java
java is a flexible and robust programming language and it played a major role in development of this Quiz Application. Its rich set of features, platform independence, and extensive libraries make it a

preferred choice for building a wide range of applications, including mobile apps like our quiz application.

Java's versatility, platform independence, object-oriented model, extensive libraries, and robustness were instrumental in the successful development of our quiz application

1.3 Purpose Scope and Applicability

1.3.1 Purpose: This quiz application provides a user-friendly, interactive way for learning and self assessment of the programming related questions so that users can gain knowledge in a fun way.

1.3.2 Scope: The scope of this Quiz application is to gain and share knowledge among students,professionals, etc.
This application can be used by professionals and by users anywhere and at any time for learning.

1.3.3 Applicability: Anyone can use this application, whether he or she is a working professional or a student who is trying to gain more knowledge.

1.4 Limitations.
- there will be no interaction(visual) of teachers and student
- more updates will be required to add the different new quiz categories.
- the accuracy of the questions and answers is based on the data feeded by the admin

Literature Survey

Quiz applications have gained significant popularity as effective tools for interactive and gamified learning. According to them, quiz-based learning platforms are perceived as engaging and motivating, providing an enjoyable learning experience. Moreover, Liang and Li (2019) found that incorporating quizzes into educational settings can improve students' knowledge retention and information recall. There are some quiz applications available nowadays :-

- **Educational Quiz Apps:** These applications focus on providing quizzes for educational purposes. They cover various subjects such as mathematics, etc. Educational quiz apps often include explanations for correct answers, helping users learn as they progress.

- **Test Preparation Apps:** Test preparation quiz apps are for helping students prepare for tests, competitive exams, or certification exams. They offer mock tests and practice questions to assess and improve test-taking skills.

- **Trivia Quiz Apps**: Trivia quiz apps offer a wide range of general knowledge questions, covering diverse topics like pop culture, sports, movies, geography, and current events. They are designed for entertainment and challenge the user's knowledge of subjects.

- **Language Learning Apps:** These apps combine quizzes with language learning, allowing users to test their vocabulary, grammar, and language proficiency. Language learning quiz apps often adapt the difficulty level based on the user's progress.

Methodology

The development of the quiz application followed a structured and iterative approach, The methodology can be broken down into the following key stages:

- **Requirements Gathering and Analysis:** conducted initial brainstorming sessions to identify the core features and objectives of the quiz application. Requirements were gathered through existing quiz applications.

- **Technology Selection:** After evaluating various technology options, Java for Quiz App development was chosen as the primary programming language. Visual Studio Code was selected as the Integrated Development Environment (IDE).

- **User Interface (UI) Design:** The UI design was developed and Wireframes were created to visualize the app's layout, navigation, and interactive elements. The design aimed to provide a seamless and enjoyable user experience.

- **Functionality Implementation:** Key functionalities, such as user registration, scoring, and result display, were implemented in line with the defined requirements. Java classes were developed to handle user interactions and data manipulation.

- **Testing:** Thorough testing was carried out to identify and fix any bugs or issues. The application underwent usability testing to ensure it was user-friendly and bug-free.

- **Operation:** The QuizUp application was made available for users to run on their devices. Ongoing monitoring and maintenance were conducted to provide a smooth user experience.
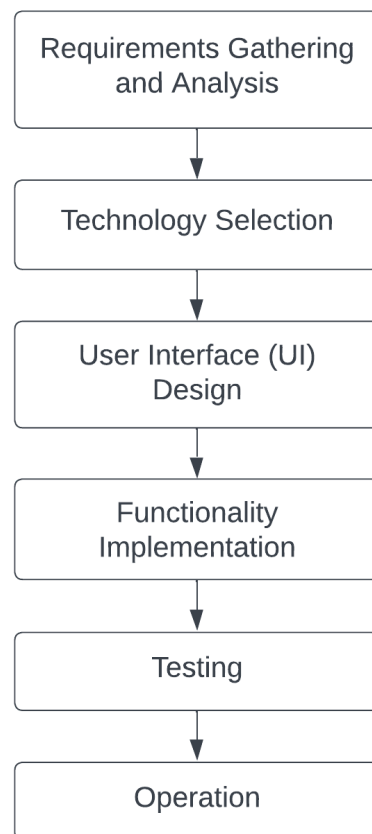

Project design waterfall model

Data Flow of Quiz application:

1. when we start the quiz app, First user will be asked their name
   a. users can go to the rules section.
   b. the user can press the back button and exit the quiz.
2. when user presses the rules button the rulebox will open and all the rules will be displayed in front of the user
3. User then will be given two choices
   a. user can start the quiz by pressing start button
   b. or the user can press the back button and go again to the login page.
4. when user will start the quiz and for each question user will have 4 options to select the correct answer
   a. user can select a option and press the next button or
   b. the user can press the next button without selecting any of the following options.
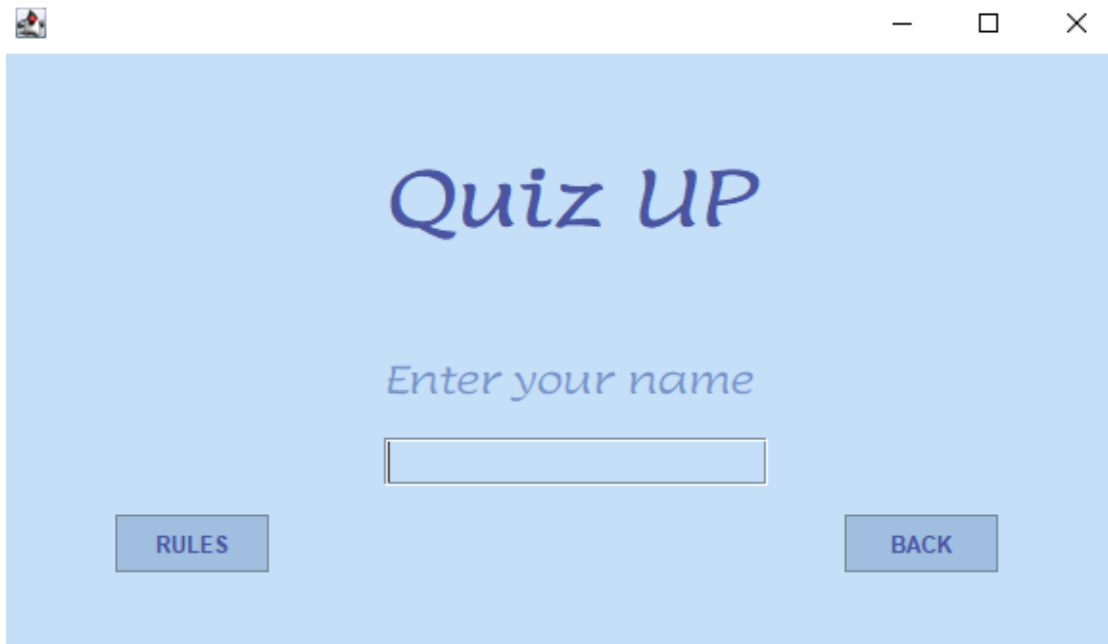5. After completing all the questions the user can press the results button to see his result of the quiz.
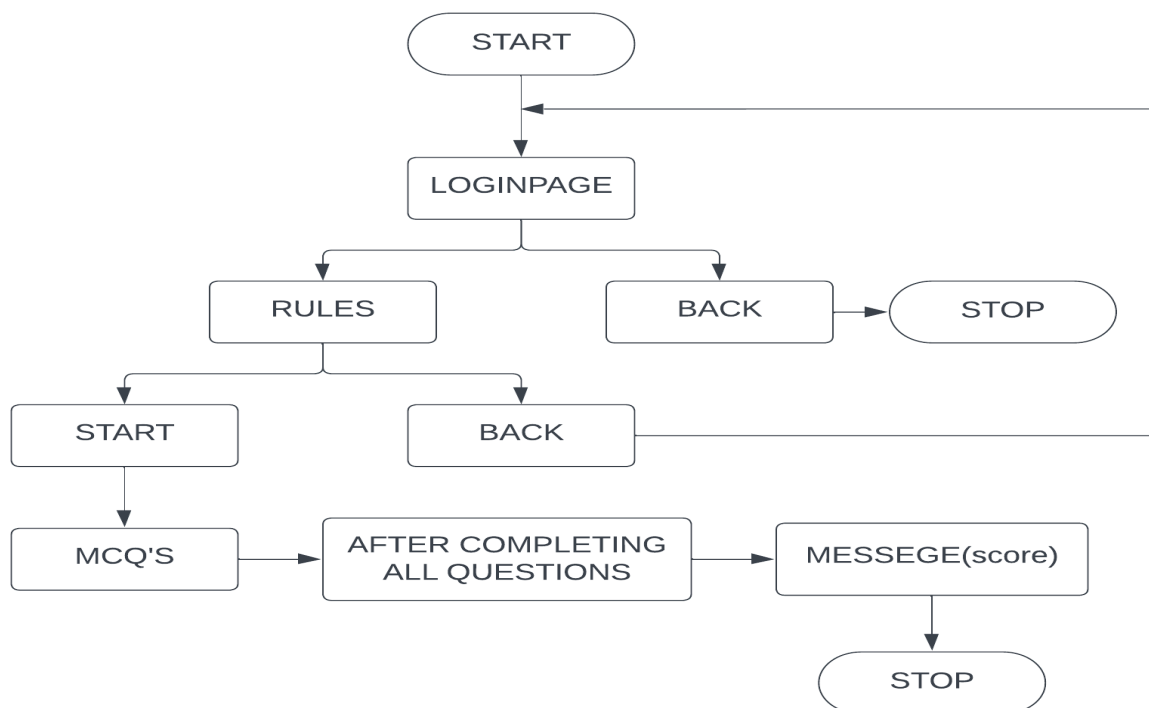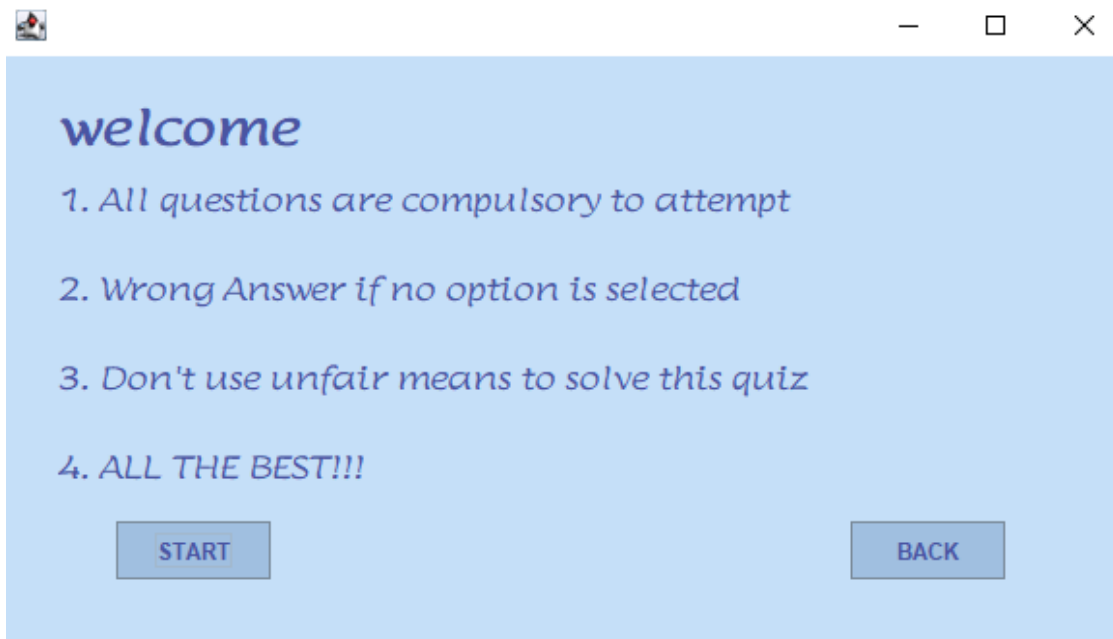
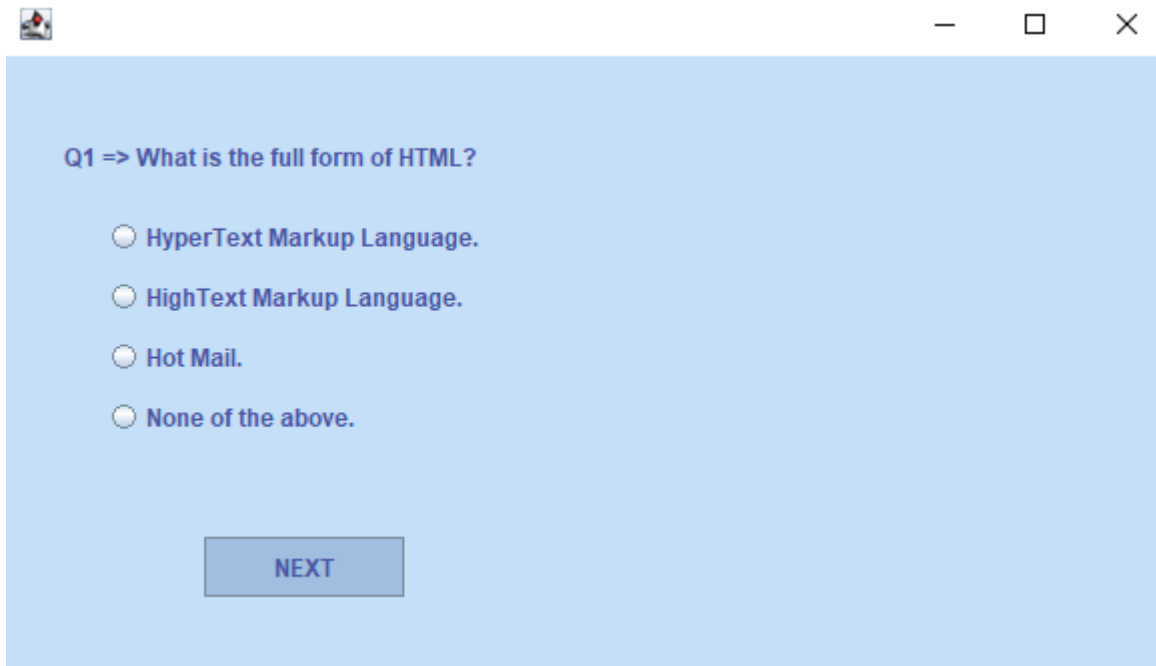Flow diagram for QUIZ App

CHAPTER 4

Result and Discussion

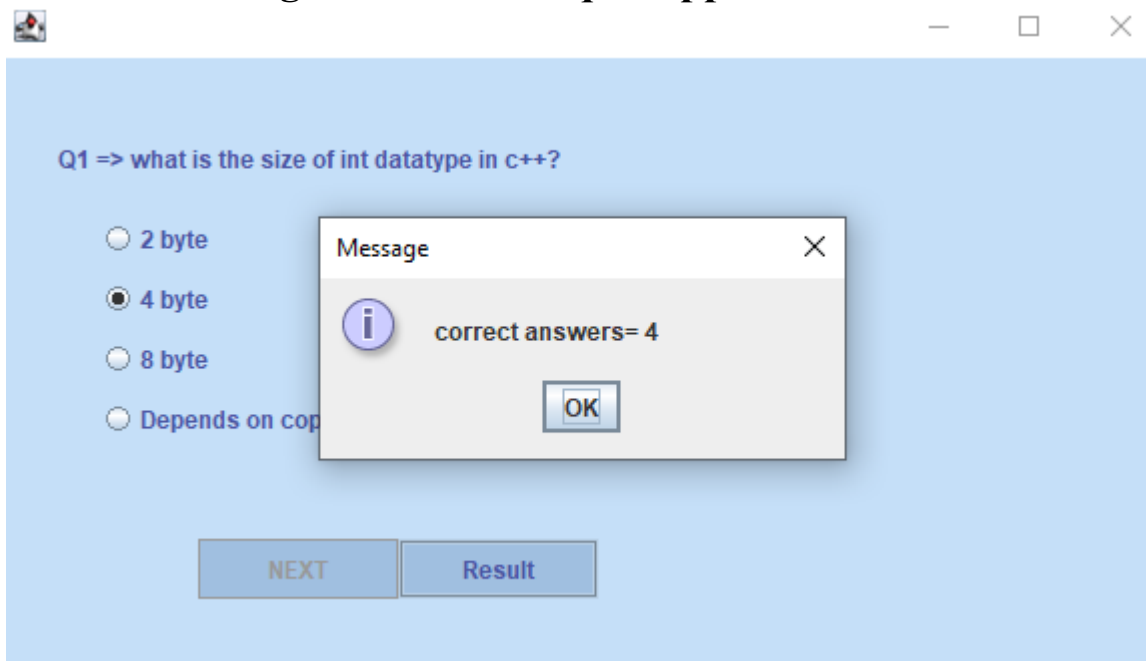**How the home screen of the quiz app looks:**

How the rules screen of the quiz app looks:

How the Question screen of the quiz app looks:

Q1 => What is the full form of HTML?

○ HyperText Markup Language.

○ HighText Markup Language.

○ Hot Mail.

○ None of the above.

[NEXT]

How the Message screen of the quiz app looks:

Q1 => what is the size of int datatype in c++?

○ 2 byte

⦿ 4 byte

○ 8 byte

○ Depends on cop

Message ✕

(i) correct answers= 4

[OK]

[NEXT] [Result]

CHAPTER 5
<u>Conclusion and Future Work</u>

The development of the quiz app has been a huge success as the main goal of creating an interactive and engaging platform that allows users to test their knowledge, promote learning, and enjoy challenging quizzes has been achieved. Through systematic methodology and rigorous testing, we have successfully created a user-friendly and feature-rich quiz app suitable for a wide audience.

In addition to this, I am interested in making this quiz application available for androids and will make this application online.

Furthermore while working on this project my interest java applications has increased an I am eager to continue exploring this field by creating similar projects like this one

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