

PrashnaSetu

Think. Compete. Conquer.



Table of Contents

Serial No.	Title	Page No.
01	Introduction	02-05
02	Admin Dashboard	06-16
03	User Management	17-18
04	Student Performance	19-21
05	Monitor	22-22
06	Contact & Support	23-23



Introduction

PrashnaSetu is a **modern quiz management system** designed for educational institutions, blending traditional assessments with modern digital evaluation. Built using **JavaFX**, it offers secure, scalable, and user-friendly solutions for educators and students.

Purpose and Primary Features

Purpose:

- · Facilitate secure quiz administration
- Enable real-time monitoring for academic integrity
- Streamline quiz creation/management
- Generate robust performance analytics
- Support hierarchical user management (Admin, Instructor, Proctor, Student)

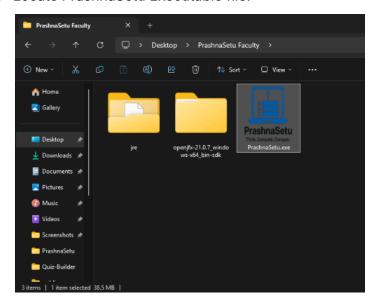
Key Features:

- Multi-role access control (RBAC)
- Advanced quiz engine: supports images, mathematical expressions
- Real-time proctoring/monitoring
- Detailed analytics and export capabilities
- Secured authentication
- Academic integrity tools: time limits, randomization, etc.

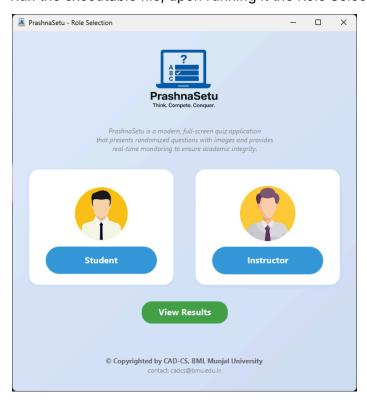


Starting the Application

- 1. Extract the distributed zip
- 2. Locate PrashnaSetu Executable file:

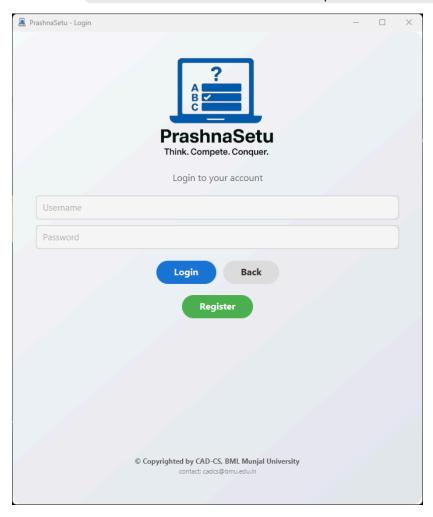


3. Run the executable file, upon running it the Role Selection screen will appear:



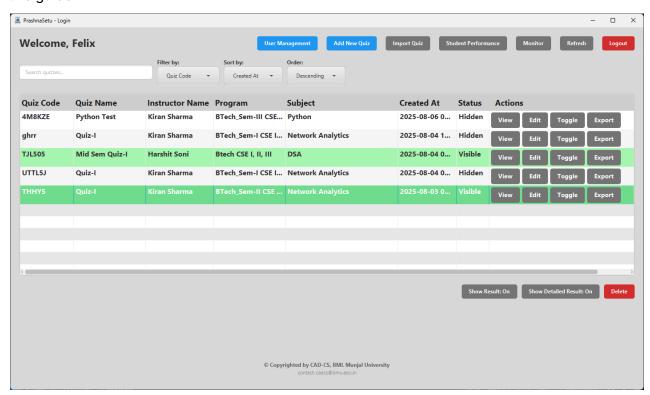


- 4. On the Role Selection Screen, select Instructor. This will redirect you to the Login Screen.
- 5. Log in using the Username and Password assigned during initial setup. If you've forgotten your credentials, contact the *Center for Advanced Data and Computational Science* at Center for Advanced Data and Computational Science BMU for assistance.



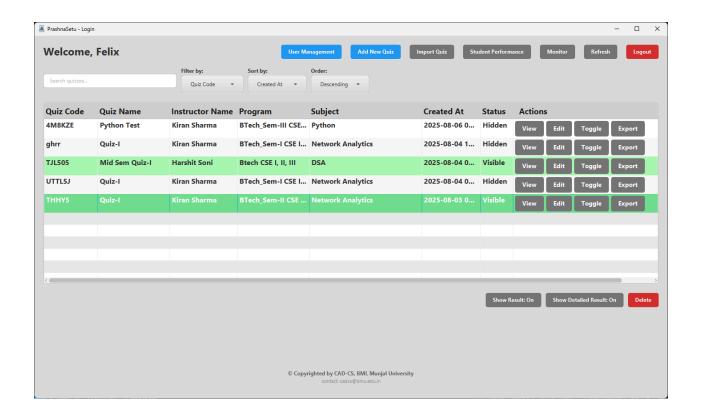


6. **Upon successful login, you'll be directed to the Admin Dashboard.** For detailed information on its features and functionalities, refer to the *Admin Dashboard* section of this guide.





Admin Dashboard



The Admin Dashboard displays all available quizzes in a tabular format.

Various general and quiz-specific functions can be accessed from the Admin Dashboard.

- General functions include: User Management, Import Quiz, Refresh, and Logout.
- Quiz-specific functions include: View Quiz, Edit Quiz, Toggle Visibility, Export Quiz, Show
 Result, Show Detailed Result, Delete, Monitor, and Student Performance.



General Functions

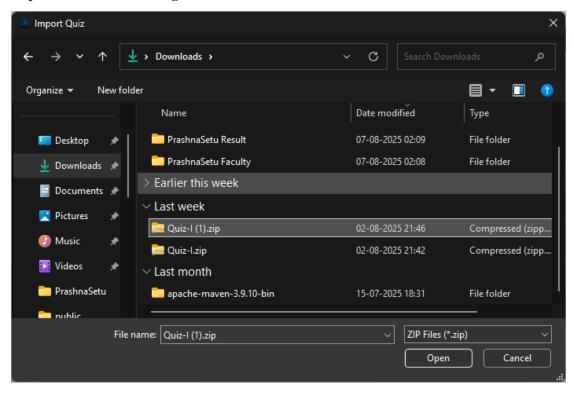
- Refresh
 - Updates the quiz table with the latest data from the database.



- Import Quiz
 - The zips generated from the PrashnaSetu website can be imported using this function.

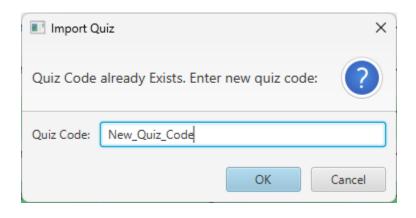


- Step 1: Click the Import Quiz button.
- Step 2: Locate the ZIP file generated from the website.





 Step 3: If a quiz with the same Quiz Code already exists, you'll be prompted to enter a new code. Otherwise, the quiz will be imported successfully, and the table will refresh to reflect the changes.





- User Management
 - For details on managing users, refer to the User Management section of this manual.



- Logout
 - By clicking the Logout button users can securely log out of their current session.

Logout

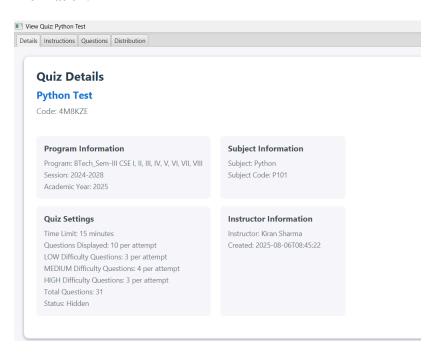


Quiz Specific Functions

- View Quiz
 - By using the **View Quiz** button, users can quickly view quiz details divided into four sections for easy access:



■ **Details:** Displays program information (course, batch, section, and semester the quiz is intended for), subject information, quiz settings (time limit, total number of questions, difficulty-wise distribution per attempt), and instructor information.

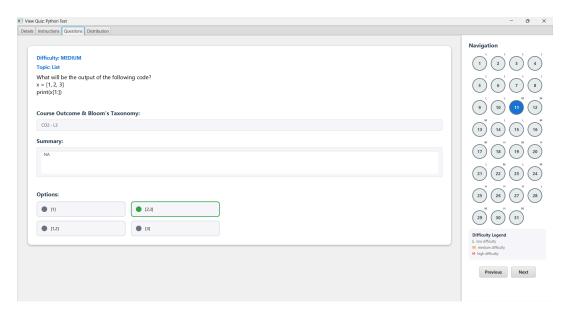


■ **Instructions:** Displays the instructions for the quiz.

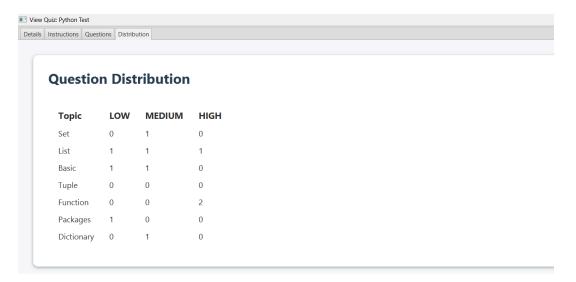




■ **Questions:** Displays all questions that are part of the quiz. (*Note: The total number of questions may be higher than the number shown to students, as a shuffled subpool is served per attempt.)*



■ **Question Distribution:** Displays the number of questions served to the student, categorized by difficulty and topic.





Edit Quiz

By using the **Edit Quiz** button, users can modify quiz details, update or add instructions and questions, and adjust question distribution. Like **View Quiz**, this section is organized into four parts for easy access:



■ **Details:** Allows editing of program information (course, batch, section, and semester the quiz is intended for), subject information, quiz settings (time limit, total number of questions and difficulty-wise distribution per attempt).



■ **Instructions:** Enables updating or adding instructions for the quiz.

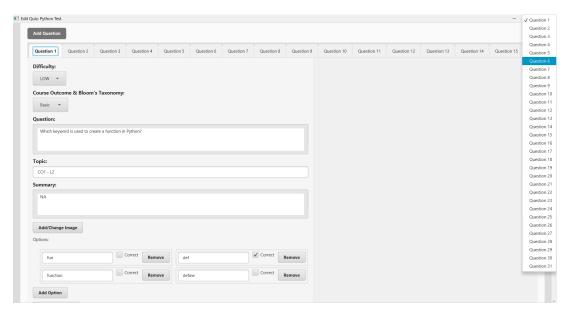




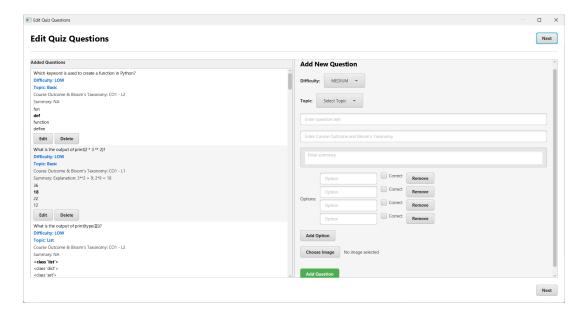
■ **Questions:** Lets users edit existing questions or add new ones.

The **Questions** section contains two windows: one for editing existing questions, and another that can be accessed by clicking the **Add Question** button to add more questions.

Editing Questions:

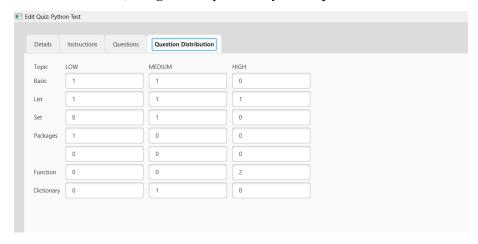


Adding Questions:





■ **Question Distribution:** Allows modification of the number of questions served to students, categorized by difficulty and topic.



• Toggle Visibility

- Allows toggling the quiz status between
 Visible and Hidden.
- Status: Visible The quiz is accessible to students and can be attempted, to be done during scheduled quiz timings.



 Status: Hidden The quiz is not visible/available to students. This is to be used for record-keeping, future scheduling, or administrative review.

Export Quiz

 Allows the quiz to be exported as a ZIP file for record-keeping, backup, and future reference.





Delete

 Permanently deletes the selected quiz along with all associated data—including questions, instructions, student performance records, results, and monitoring logs—from the database.

Note: This action cannot be undone.



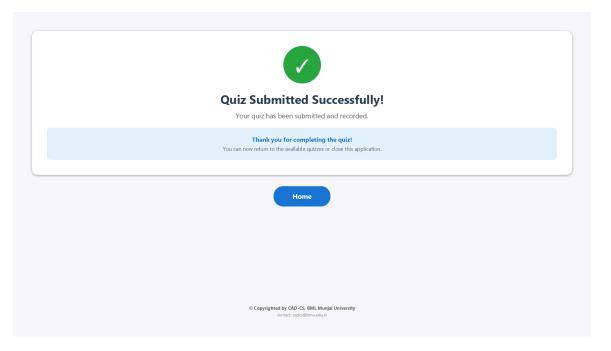
• Show Result On/Off & Show Detailed Result On/Off

 These two buttons work in coordination and determine what is displayed to the student upon quiz submission.

Show Result: On Show Detailed Result: On

Show Result: Off

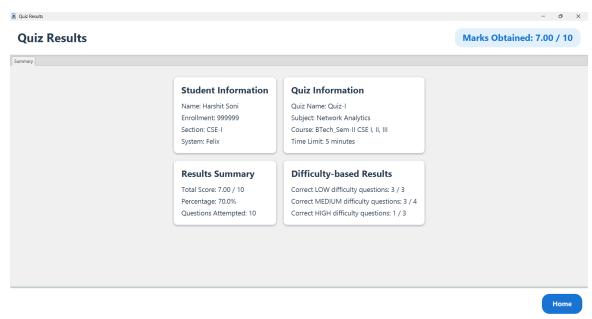
The student will not be shown the marks obtained and will simply see a submission confirmation screen. Can be used when marks are to be released at a later time.





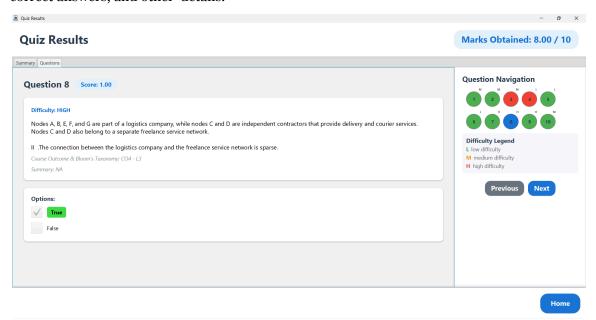
o Show Result: On & Show Detailed Result: Off

The student will be shown the total marks obtained, percentage, and difficulty-wise marks breakdown.



Show Result: On & Show Detailed Result: On

The student will be shown the total marks obtained, percentage, difficulty-wise marks breakdown, along with the questions they were served, the options they selected, the correct answers, and other details.





• Monitor

 For details on monitoring quizzes, refer to the Monitor section of this manual.



• Student Performance

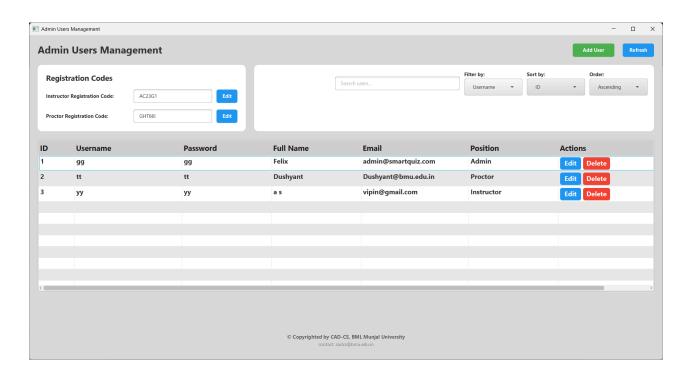
For details on Student
 Performance and Results refer to
 the Student Performance section
 of this manual.





User Management

The **User Management** screen can be accessed by clicking the **User Management** button on the Admin Dashboard. Once clicked, the following screen will appear:



Administrative Tools

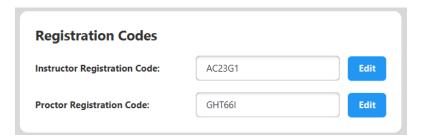
- On this screen, the admin can view all registered users along with their username, password, email, and position.
- Clicking the **Refresh** button updates the user data from the database.
- If a user forgets their credentials, the admin can either provide the existing credentials or update them by clicking the **Edit** button in the **Actions** column of the table.
- The admin can also remove users by clicking the **Delete** button in the **Actions** column.



• The admin can register new users as well using one of the following two methods

Registration Codes

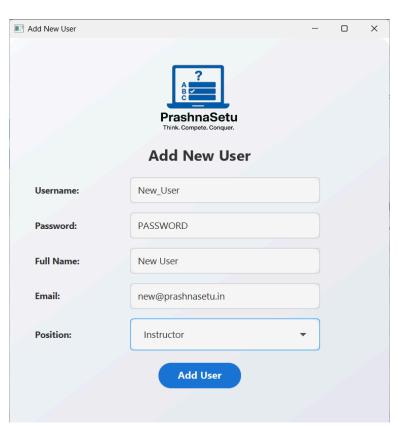
- Provide users with Instructor/Proctor registration codes to allow them to self-register as an Instructor or Proctor.
- These codes are
 6-character
 alphanumeric and can be
 modified by clicking the
 Edit button next to them.



Add User

■ By clicking the **add user** button and filling the form screen that appears afterwards, admin can manually register new users.

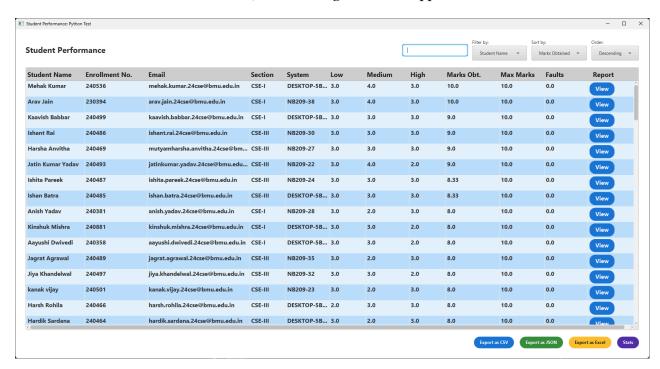






Student Performance

The **Student Performance** screen can be accessed by clicking the **Student Performance** button on the Admin Dashboard. Once clicked, the following screen will appear:



The table displays the following details for each student: Name, Enrollment Number, Email Address, Section, System Name, number of correct answers by Low/Medium/High Difficulty, Marks Obtained, Maximum Marks, and Fullscreen Faults.

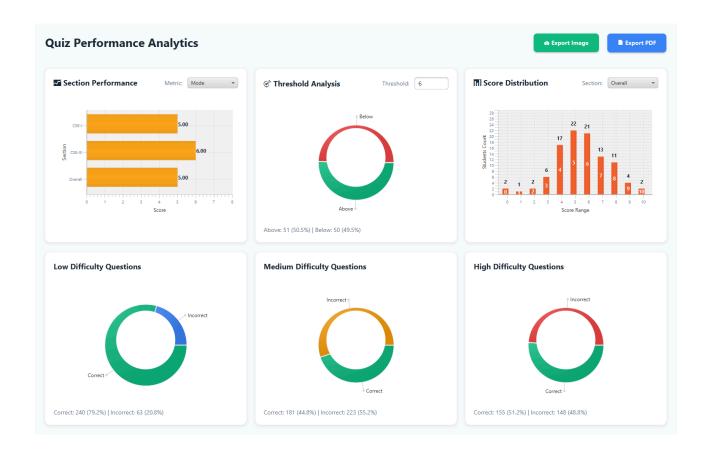


This table can be exported in **CSV**, **JSON**, or **Excel** format.





By clicking the **Stats** button located at the bottom-left of the screen, you can access **analytics based on student performance data**. These insights help visualize trends, identify strengths and weaknesses, and support data-driven decision-making.

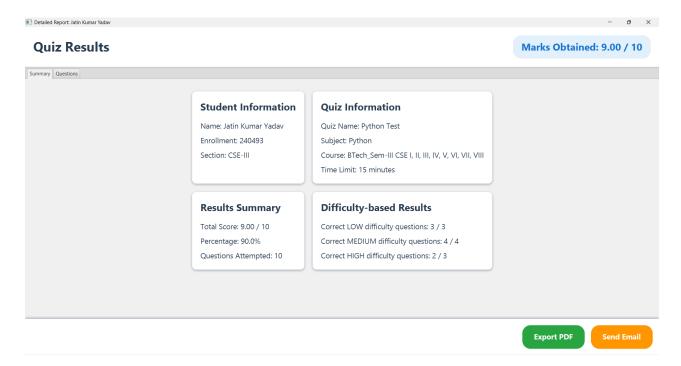


The analytics can be exported as an **image** or **PDF** using the **Export Image** or **Export PDF** buttons.

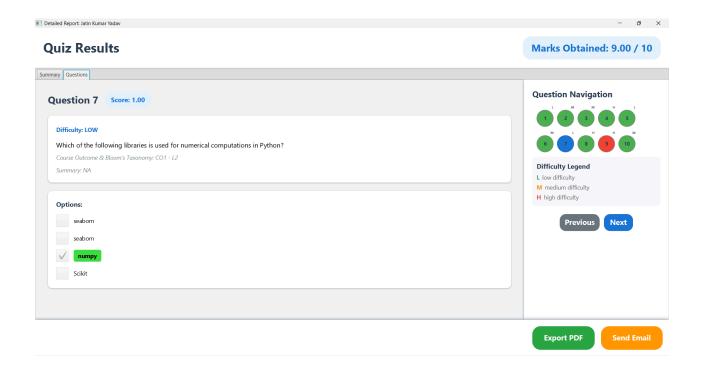




Detailed individual student results can be viewed by clicking the **View** button in the **Report** column.



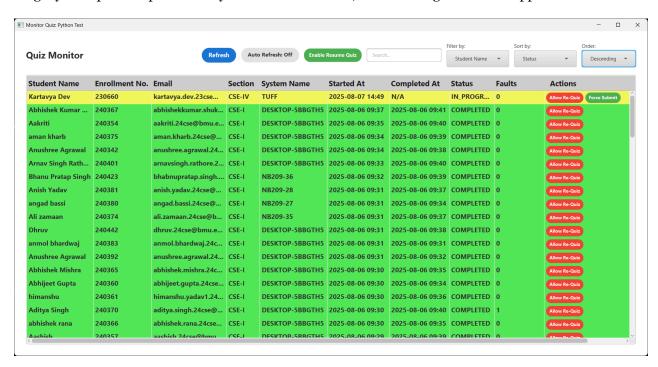
The report can be saved as a **PDF** by clicking the **Export PDF** button.





Monitor

The **Monitor** screen can be accessed by clicking the **Monitor** button on the Admin Dashboard. The **Monitor** screen allows to **actively supervise students during live quizzes**, ensuring academic integrity and quick response to any issues. Once clicked, the following screen will appear:



- The table displays the following details for each student: Name, Enrollment Number, Email Address, Section, System Name, Started At, Completed At, Status and Fullscreen Faults.
- The table automatically refreshes every 5 seconds. This can be turned off by toggling **Auto Refresh** to **Off**. The table can also be manually refreshed using the **Refresh** button.
- If a student is caught cheating or using unfair means, their quiz can be forcefully terminated by clicking the **Force Submit** button in the **Actions** column. The marks will be calculated based on the options selected up to that point.
- In case of unforeseen circumstances such as a system crash or server failure, the **Resume Quiz** button can be toggled to **Enable**, allowing students to resume the quiz from the last saved point. (Student responses and remaining time are synced every 5 seconds or whenever an option is selected.)
- If a student is to be allowed a fresh reattempt, this can be done by clicking the **Allow Re-Quiz** button in the **Actions** column.



Contact & Support

If you encounter any issues while using PrashnaSetu or need assistance with setup, monitoring, or troubleshooting, please reach out through the following channels:

Primary Contact: Center for Advanced Data and Computational Science BMU

• Email: cadcs@bmu.edu.in

• **Department:** CAD-CS, BML Munjal University

• Secondary Contact: Harshit Soni

• Email: harshit.soni.23cse@bmu.edu.in

Document Version: 1.0 **Last Updated:** July 2025

This document is proprietary to CAD-CS, BML Munjal University. Unauthorized distribution or reproduction is prohibited.

*