DBMS Project

Classroom Desktop App

Final Report and SQL Queries

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The app had the functionality of Google Classroom. It is a JAVA Desktop app made using JavaFX. A simple frontend and incomplete SQL was provided which had to be improvised upon to make. The app includes **logging in both as faculty and students** but no such specification was made initially.

Functionality Added :

- **General**
    - UI improvements
    - Fixes to the storing signed-in behaviour
    - Different signup pages for student and faculty due to different details required
    - Checking on login the type of user and loading the required profile
- **Faculty**
    - Add Courses
    - Add Assignments
    - View assignment submissions
    - Add announcements
- **Students**
    - Select course after viewing course details
    - View assignments posted in a course
    - Submit assignments
    - VIew announcements in a course

SQL Queries :

Login

- To check if user is already logged in

```
SELECT  *  FROM classroomdbms.currentuser WHERE id = 'PFEHFE31U8SBHV'
SELECT  *  FROM classroomdbms.facultydetails WHERE emailId = ?
SELECT  *  FROM classroomdbms.studentdetails WHERE emailId = ?
```

- Student Login. (get student, replace current user, fetch details for profile page):

```
SELECT  *  FROM classroomdbms.studentdetails WHERE emailId = ? AND password = ?
REPLACE INTO classroomdbms.currentuser (id, emailId, type)  VALUES (?,?,?)
SELECT  *  FROM classroomdbms.studentcoursedetails WHERE emailId = ?
```

- Faculty Login. (get faculty, replace current user, fetch details for profile page)

```
SELECT  *  FROM classroomdbms.facultydetails WHERE emailId = ? AND password = ?
REPLACE INTO classroomdbms.currentuser (id, emailId, type)  VALUES (?,?,?)
SELECT  *  FROM classroomdbms.classroomdetails WHERE faculty_emailId = ?
```

Student signup

- To register a student

```
INSERT INTO classroomdbms.studentdetails (firstName, lastName, emailId, password,
dob, phoneNumber, gender, college)  VALUES (?,?,?,?,?,?,?,?)
```

- Replace the current user

```
REPLACE INTO classroomdbms.currentuser (id, emailId, type)  VALUES (?,?,?)
```

- Get the student details on profile page

```
SELECT  *  FROM classroomdbms.studentcoursedetails WHERE emailId = ?
```

Faculty Signup

- **To register faculty**

```
INSERT INTO classroomdbms.facultydetails (firstName, lastName, emailId, password,
designation, phoneNumber)  VALUES (?,?,?,?,?,?)
```

- **To replace current user**

```
REPLACE INTO classroomdbms.currentuser (id, emailId, type)  VALUES (?,?,?)
```

- **Get the faculty details for profile page**

```
SELECT  *  FROM classroomdbms.classroomdetails WHERE faculty_emailId = ?
```

Log out

- **Delete current user entry with the specific user ID**

```
DELETE FROM `classroomdbms`.`currentuser` WHERE `id`='"+userID+"';
```

Faculty

- **Edit Profile**

```
UPDATE classroomdbms.facultydetails SET firstName = ? , lastName = ? , designation = ? ,
phoneNumber = ?  WHERE emailId = ?
```

- **Update Password**

```
UPDATE classroomdbms.facultydetails SET password = ?  WHERE emailId = ? AND
password = ?
```

- **Delete profile (delete faculty, delete current user)**

```
DELETE FROM `classroomdbms`.`facultydetails` WHERE `emailID`='"+emailId+"'
DELETE FROM `classroomdbms`.`currentuser` WHERE `emailID`='"+emailId+"'
```

- Add a new course

INSERT INTO classroomdbms.classroomdetails (courseId, faculty_emailId, course_name, lecture_timing, tutorial_timing, marks_distribution, attendance_rule, grading_rule, lecture_hall, literature_link) VALUES (?,?,?,?,?,?,?,?,?,?)

- Add assignment for a course

INSERT INTO classroomdbms.assignments (courseId, faculty_emailId, timestamp, deadline, assignment_details, attachment_type, attachment_url) VALUES (?,?,?,?,?,?,?)

- Add announcement for a course

INSERT INTO classroomdbms.announcements (courseId, faculty_emailId, timestamp, message, attachment_type, attachment_url) VALUES (?,?,?,?,?,?)

- View all assignments for a course

SELECT * FROM classroomdbms.assignments WHERE courseId = ? AND faculty_emailId = ?

- View all announcements for a course

SELECT * FROM classroomdbms.announcements WHERE courseId = ? AND faculty_emailId = ?

- View submission for an assignment

SELECT * FROM classroomdbms.studentsubmissiondetails WHERE assignmentId = ?

Student

- Edit profile

UPDATE classroomdbms.studentdetails SET firstName = ? , lastName = ? , phoneNumber = ? , college = ? WHERE emailId = ?

- Delete profile (delete student, delete current user)

```
"DELETE FROM `classroomdbms`.`studentdetails` WHERE `emailID`='"+emailId+"'
"DELETE FROM `classroomdbms`.`currentuser` WHERE `emailID`='"+emailId+"'
```

- Show selectable course (show only those that have not been already selected)

```
SELECT * FROM classroomdbms.classroomdetails WHERE courseId not in (select courseId from classroomdbms.studentcoursedetails where emailId = ?)
```

- Select a course

```
INSERT INTO classroomdbms.studentcoursedetails (emailId, courseId)  VALUES (?,?)
```

- Show classroom details

```
SELECT  *  FROM classroomdbms.classroomdetails WHERE courseId = ?
```

- Select all assignments for this course

```
SELECT  *  FROM classroomdbms.assignments WHERE courseId = ? AND faculty_emailId = ?
```

- Select all announcements for this course

```
SELECT  *  FROM classroomdbms.announcements WHERE courseId = ? AND faculty_emailId = ?
```

- Submit an assignment

```
INSERT INTO classroomdbms.studentsubmissiondetails (emailId, assignmentId, timestamp, submission)  VALUES (?,?,?,?)
```

- Search a student

```
SELECT  *  FROM classroomdbms.studentdetails WHERE (firstName LIKE '%%' OR lastName LIKE '%%' OR emailId LIKE '%%' OR phoneNumber LIKE '%%' OR college LIKE '%%') ORDER BY TRIM(firstName) asc, TRIM(lastName) asc
```

Speak out

- Add a message

INSERT INTO classroomdbms.speakouts (timestamp, emailId, message) VALUES (?,?,?)

- Search messages

SELECT * FROM classroomdbms.speakouts WHERE (message LIKE '%abc%' OR emailId LIKE '%abc%') ORDER BY timestamp asc