

# SEG2105 – Introduction to Software Engineering

## Android Project: Tutron App

Group 7,

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David

Haitam

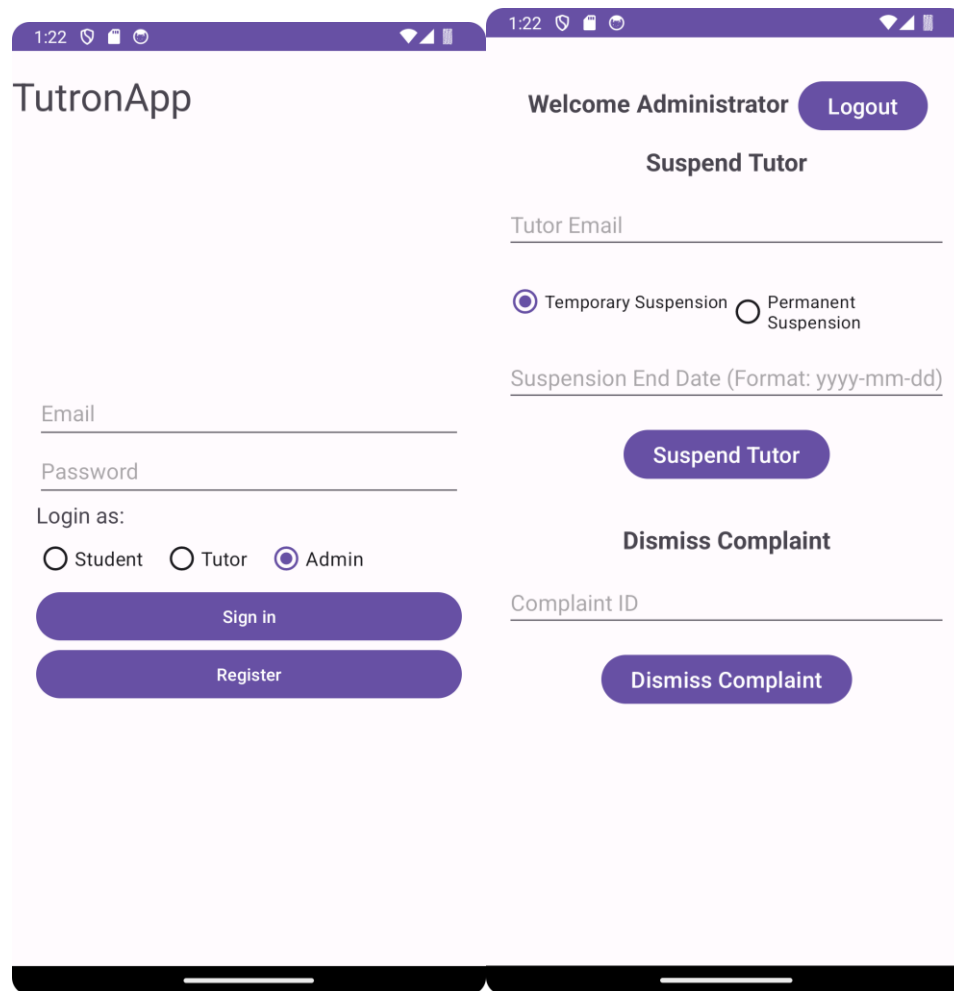
In this report, we present the progress and challenges encountered during the development of our Android app project. The project, called the Tutron App, aimed to create a tutoring platform that connects tutors with students seeking educational assistance. Throughout the development process, our team faced several obstacles, including technical difficulties and personal commitments, which impacted on our ability to complete the project as planned. This report outlines the contributions of team members for each deliverable, provides an updated UML class diagram, presents screenshots of the app, and reflects on the lessons learned from the experience.

The diagram illustrates the structure of the Java Collections Framework. It features several key classes and interfaces:




- Interfaces:**
  - Collection:** The root interface for all collection classes.
  - List:** An ordered collection interface.
  - Set:** An unordered collection interface.
  - Map:** An interface for mapping keys to values.
  - Queue:** An interface for first-in, first-out collections.
  - SortedSet:** A Set interface that maintains elements in sorted order.
  - SortedMap:** A Map interface that maintains keys in sorted order.
- Concrete Classes:**
  - ArrayList, LinkedList, Vector, Stack:** Implementations of the List interface.
  - HashSet, TreeSet:** Implementations of the Set interface.
  - HashMap, TreeMap:** Implementations of the Map interface.
  - PriorityQueue:** An implementation of the Queue interface.
- Associations:**
  - ArrayList, LinkedList, Vector, Stack:** All implement the List interface.
  - HashSet, TreeSet:** All implement the Set interface.
  - HashMap, TreeMap:** All implement the Map interface.
  - PriorityQueue:** Implements the Queue interface.
  - SortedSet, SortedMap:** These are abstract interfaces that are implemented by concrete classes like TreeSet and TreeMap.

Team Member	Deliverable 1	Deliverable 2	Deliverable 3	Deliverable 4
Rikki	80%	10%	50%	80%
David	10%	80%	50%	20%
Haitam	10%	10%	-	-

## Screenshots of the App



1:25



## Welcome Tutor!

Account ID: 5

Email: tutor@m.com

First name: tutor

Last name: tutor

Education Level: university

Native Language: english




Description: hello

Edit Profile

View Topics

Log Out

1:34



First Name

Last Name

Email

Password

Confirm Password

☒ Student

☐ Tutor

Address

Card Number

Create Account

1:23

tutor

tutor

tutor@m.com

.....

.....

☐ Student ☒ Tutor

university

english

hello

Create Account

1:26

Education Level:

university2

Native Language:

english2

Description:

hello2

Save Changes

hello2 | hello 2nd | hello 21st

q w e r t y u i o p

a s d f g h j k l

z x c v b n m

?123 , .

## Welcome Tutor!

Log Out

Account ID: 5

Email: tutor@m.com

First name: tutor

Last name: tutor


Education Level: university2

Native Language: english2

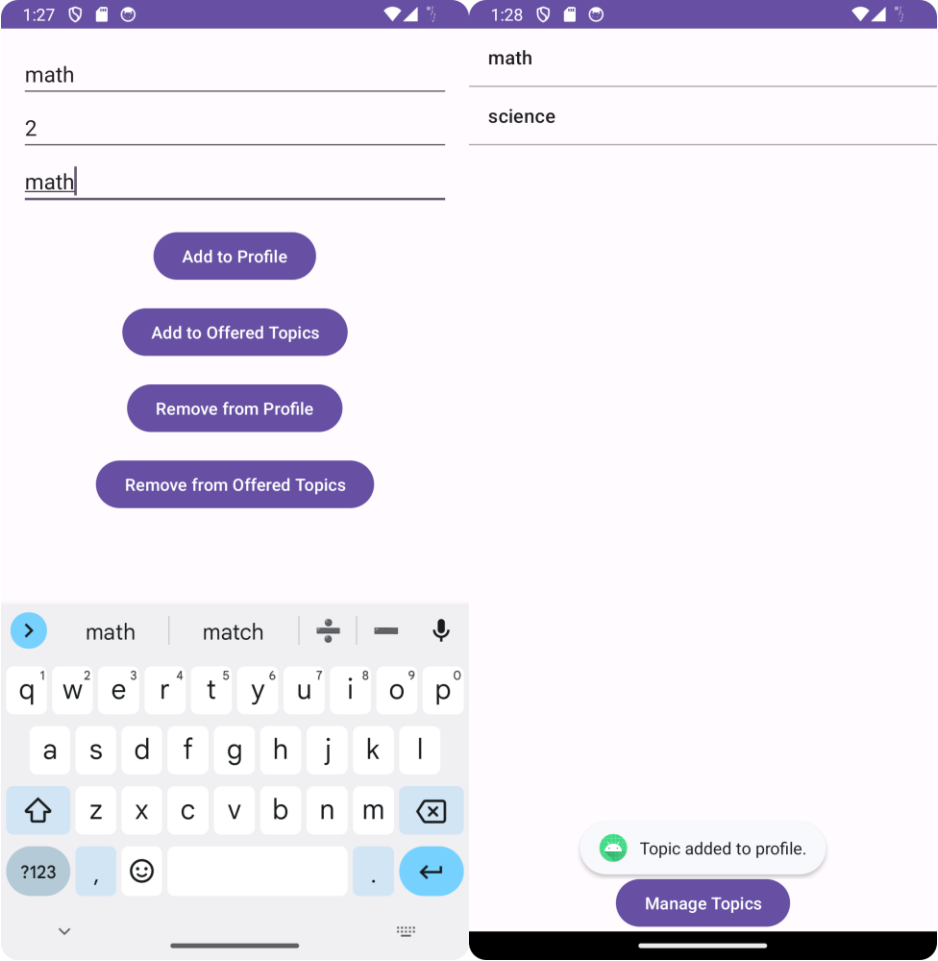
Description: hello2

Edit Profile




View Topics

 No courses added yet.

Manage Topics



1:30



Welcome Administrator

Logout

Suspend Tutor

tutor@m.com

☒ Temporary Suspension

☐ Permanent Suspension

2023-09-08

Suspend Tutor




Dismiss Complaint

Complaint ID

1234567890

→

1:30



Welcome Administrator

Logout

Suspend Tutor

Tutor Email

☐ Temporary Suspension

☐ Permanent Suspension

Suspension End Date (Format: yyyy-mm-dd)

Suspend Tutor

Dismiss Complaint

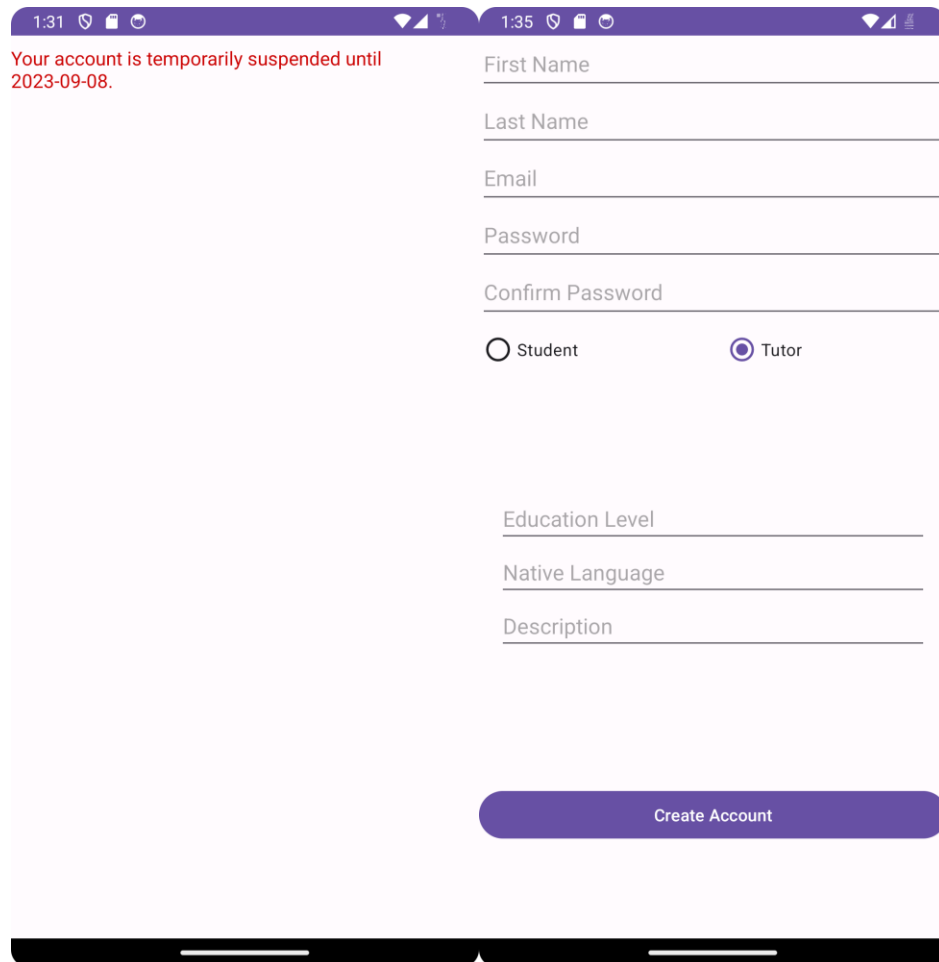
Complaint ID

1234567890

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Tutor Suspended Successfully





The image displays two screenshots of the TutronApp mobile interface. The left screenshot shows the login screen with the following elements: a status bar at the top with the time 1:33, signal strength, and battery level; a login form with fields for 'student' (username), 'stu@m.com' (email), and two password fields (both masked with dots); radio buttons for 'Student' (selected) and 'Tutor'; and a 'Create Account' button at the bottom. The right screenshot shows the 'Welcome Student!' screen with the following elements: a status bar at the top with the time 1:34, signal strength, and battery level; a 'Log Out' button in the top right corner; and account details: 'Account ID: 3', 'Email: stu@m.com', 'First name: student', and 'Last name: student'.

### Lessons Learned

During the development of TutronApp, our team encountered various challenges and gained valuable insights:

1. **Effective Communication is Key:** Our project faced communication challenges due to personal commitments and unforeseen circumstances. It highlighted the importance of open and regular communication among team members to share progress, discuss issues, and adapt to changing situations.
2. **Adaptability in Team Dynamics:** The project emphasized the need for adaptability in team dynamics. Balancing work, personal commitments, and emergencies requires flexibility and understanding among team members.
3. **Balancing Full-Time Jobs and Project Work:** Balancing full-time jobs with the project posed time constraints and required careful time management. Planning and setting realistic milestones would have helped us manage our time effectively.
4. **Dealing with Family Emergencies:** Rikki faced family emergencies, including the passing of a grandmother. During such times, empathy and support from team members were essential, and we adapted our schedules to accommodate the situation.

5. **Contingency Planning:** In future projects, we will develop comprehensive contingency plans to address potential issues, such as technical difficulties or unavailability of team members.
6. **Collaborative Version Control:** Utilizing Git for version control allowed us to work collaboratively, manage code changes, and resolve conflicts efficiently.
7. **Adaptability in Software Development:** Adapting to unforeseen challenges is a vital skill in software development. We learned to be flexible and devise alternative solutions when faced with technical or team-related issues.
8. **Importance of Team Dynamics:** Effective teamwork is not just about individual contributions; it involves understanding each other's strengths, supporting one another, and fostering a positive team environment.
9. **Learning from Feedback:** Regular feedback sessions within the team helped us identify areas for improvement and fostered a culture of continuous learning.
10. **Real-World Constraints:** Developing a project with real-world constraints, such as limited resources and time, provided valuable experience in balancing functionality and scope.

In conclusion, while we encountered obstacles that prevented us from fully completing the project, the experience provided valuable insights and learning opportunities for the entire team. We acknowledge the efforts invested by each team member and the impact of personal commitments on project progress. Moving forward, we will apply the lessons learned from this project to improve our future collaboration and project management.

We extend our appreciation to our team members for their dedication and perseverance. Despite the outcome, we value the experience gained from this project and remain motivated to continue our journey as aspiring developers.