

Project Deliverable 4

Tutron App Final Report

Faculty of the Engineering
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Introduction

Over the past two months, our team was able to develop an application from start to finish. This project allowed us to practice software development principles to create an android application using Android Studio. We were also able to apply different practices in software development learned in the lab and in the class lectures to later develop an Ottawa based application called Tutron App. The app connects students with tutors for one-on-one tutoring sessions, and it has three user roles: tutors, students, and administrators.

In the Tutron App, student can effortlessly, create accounts, browse and connect with tutors offering multiple lessons as well as securely purchase their lessons using valid credit cards. Furthermore, the app enables the student to voice and make complaints if any issue were to arise. Each complaint is monitored by the administrator and an appropriate action is taken. In contrast, tutors can list all lessons they offer and have the flexibility of accepting or declining a student's request.

This report will display all the application views in form of screenshots as well as show the contribution of each team member for each deliverable as well as the lessons learned.

UML Class Diagram

TUTRON UML DIAGRAM_Deliverable4_Group6

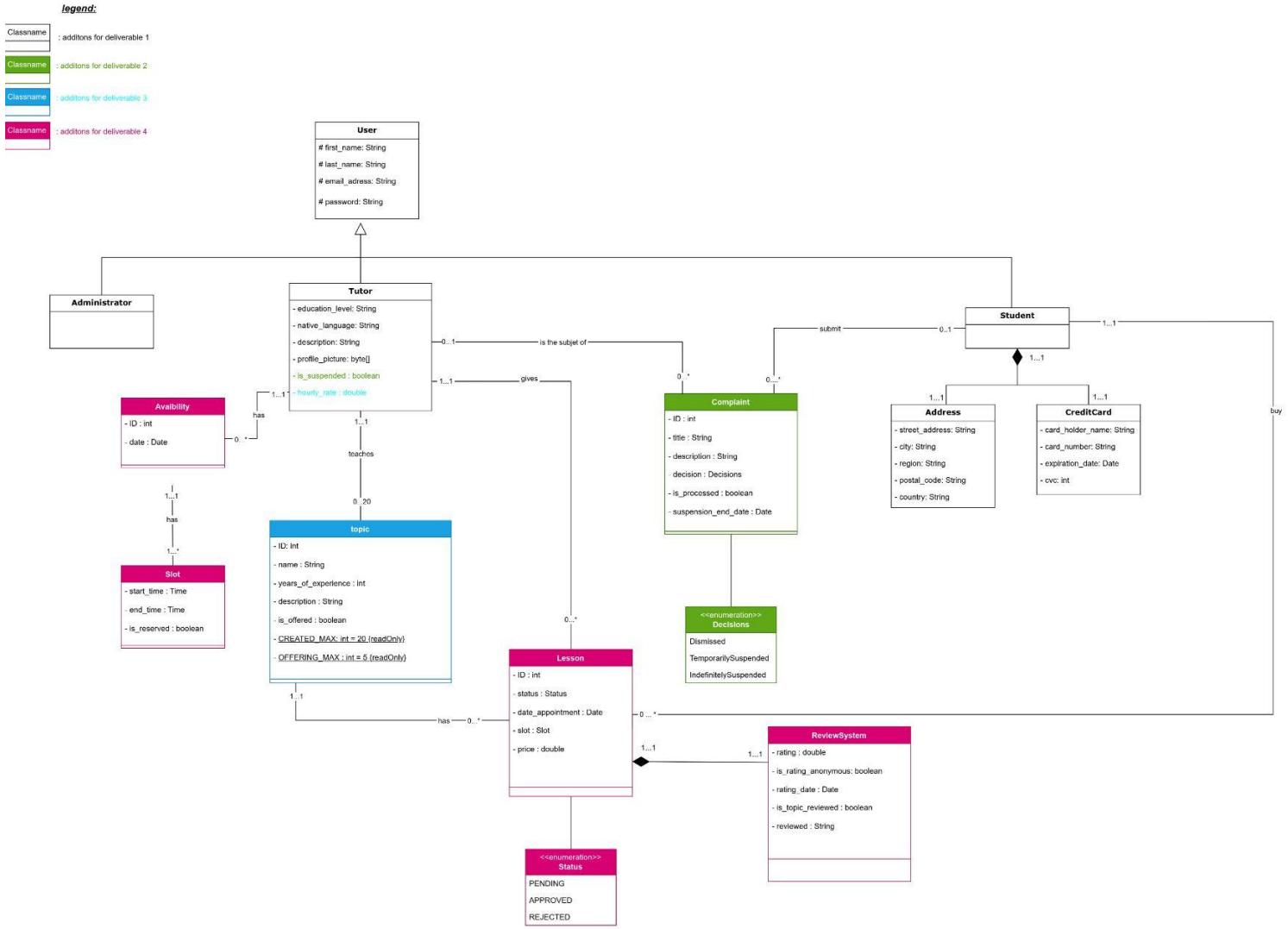


Figure 1: UML class diagram

Team members contributions

Team Members	Deliverable 1	Deliverable 2	Deliverable 3	Deliverable 4
Raphaelle Jean-Baptiste	Student page, welcome page specifying user role	Front-end designs	Unit tests	Unit tests and Final report
Lucy Amos	General sign up page, tutor page and java activities for deliverable	Front-end designs and java implementation	Front-end designs and java implementation	Front-end designs and java implementation + integration
Dris-Bella Ishimwe	General welcome page to sign up or login, login page	Unit tests	Final report and presentation documents	Final report and presentation documents
Sonia Wang Dané	Back end, UML diagram	Back end, UML diagram	Back end, UML diagram	Back end, UML diagram

Table 1: Table with each team member contribution throughout the project

Tutron App pages

Welcome Pages

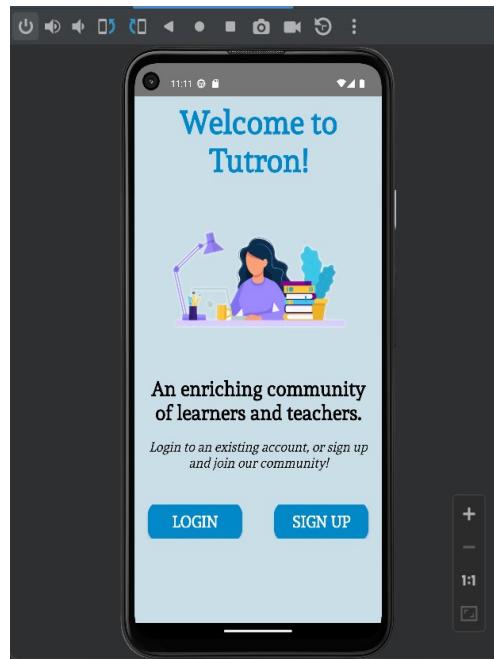


Figure 2: Landing Page

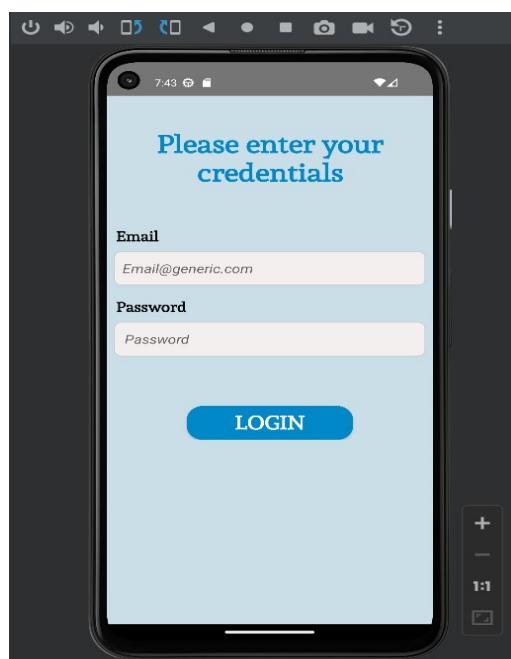


Figure 3: Login Page

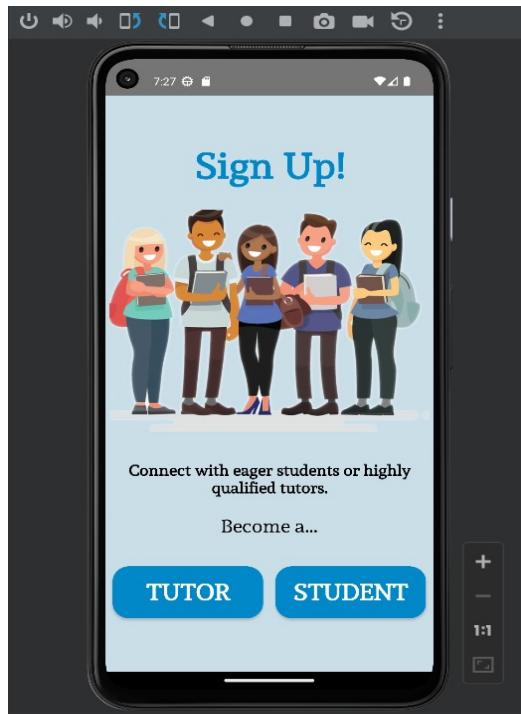


Figure 4 : Sign Up Page

Student Flow

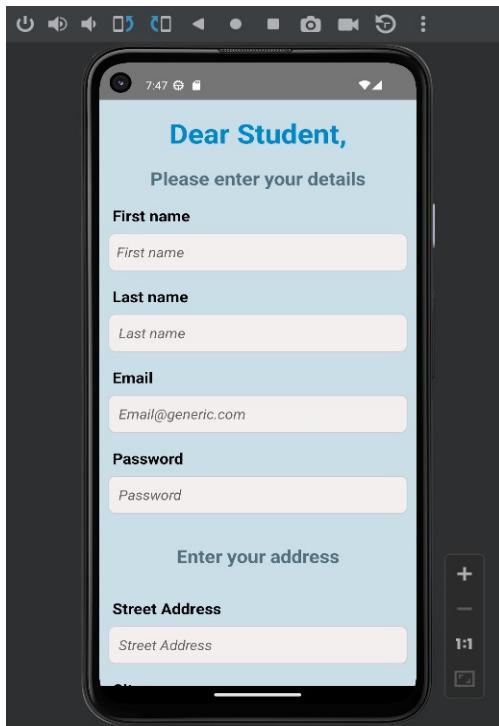


Figure 5a: Student Sign Up Page

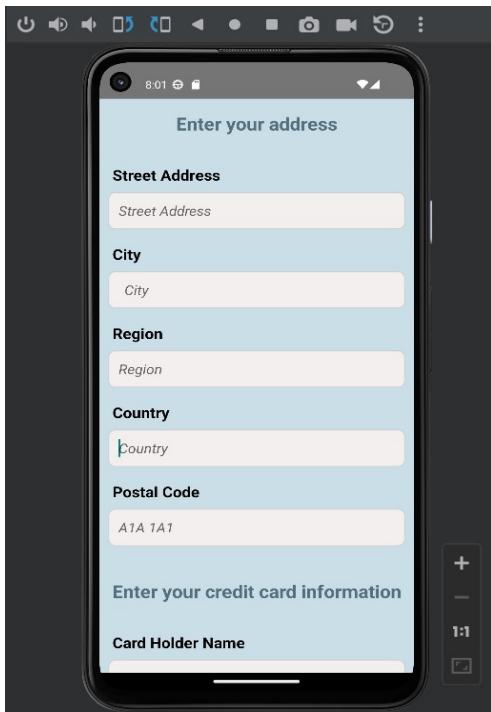


Figure 5b: Student Sign Up Page (continuation)

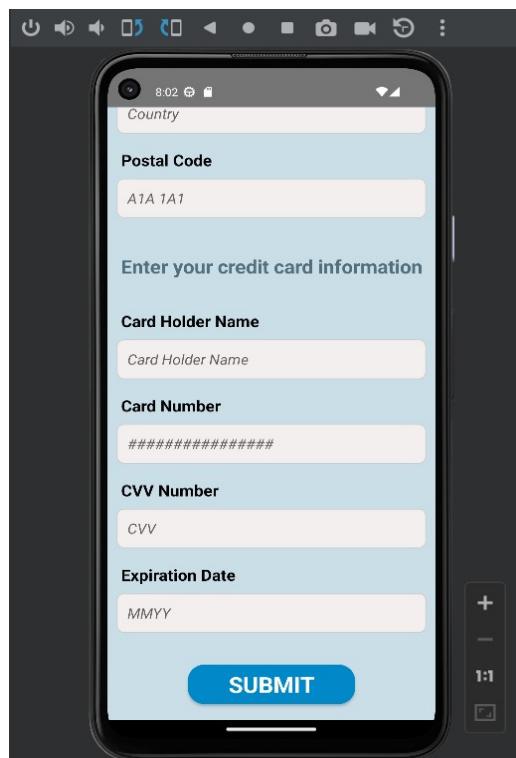


Figure 5c: Student Sign Up Page (continuation)

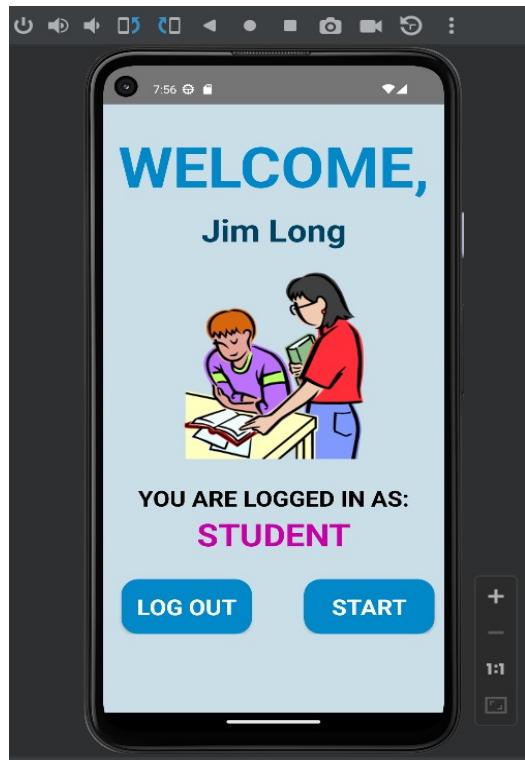


Figure 6: Student Welcome Page (when logged in)

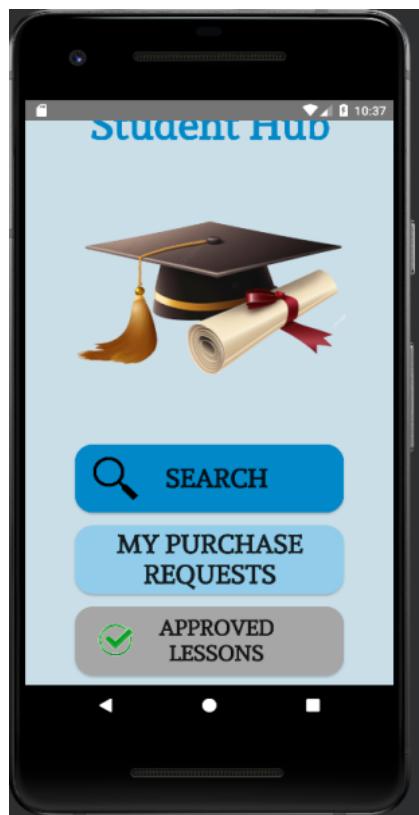


Figure 7: Student account-Home Page

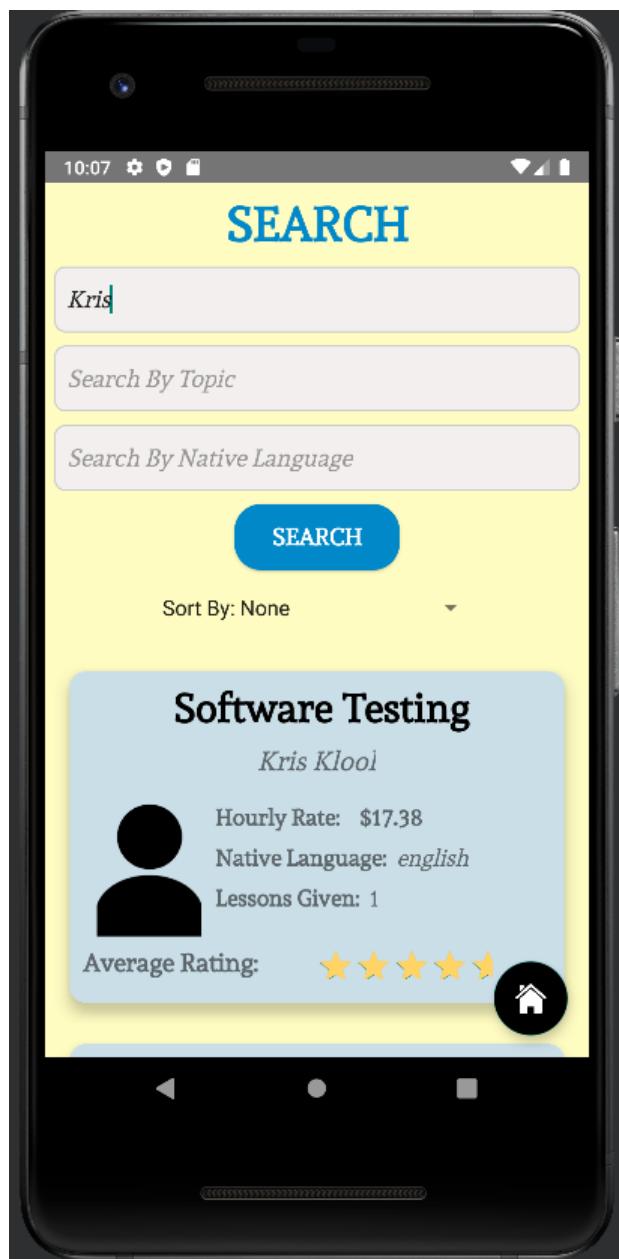


Figure 8: Student account-Search Page

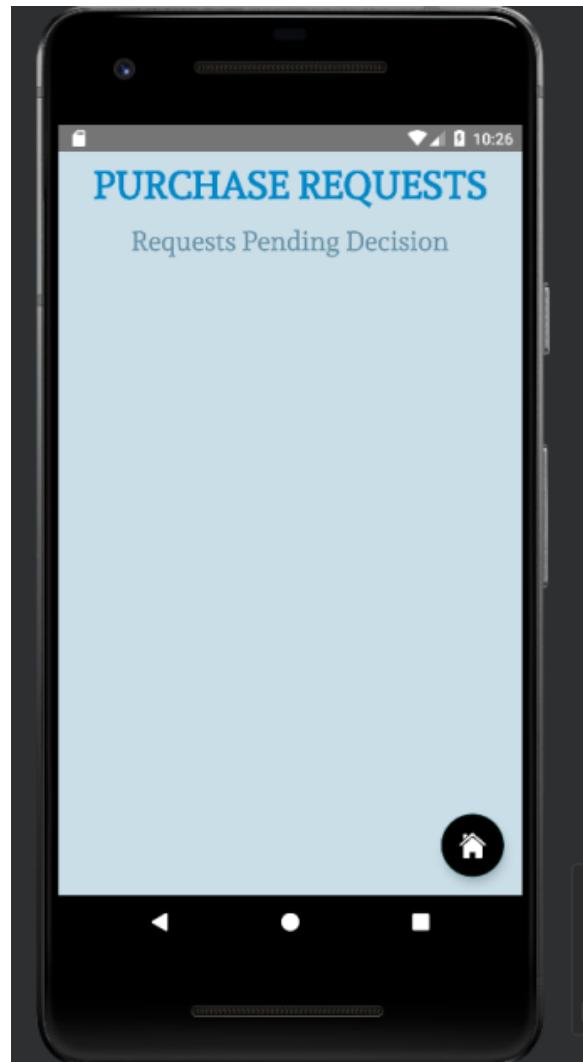


Figure 9: Student account-purchase request Page

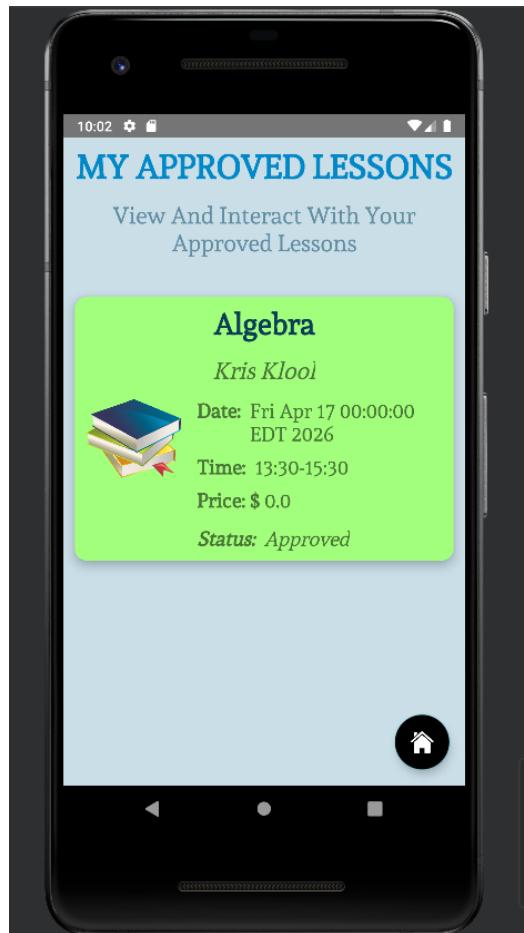


Figure 10: Student account-approved lessons Page

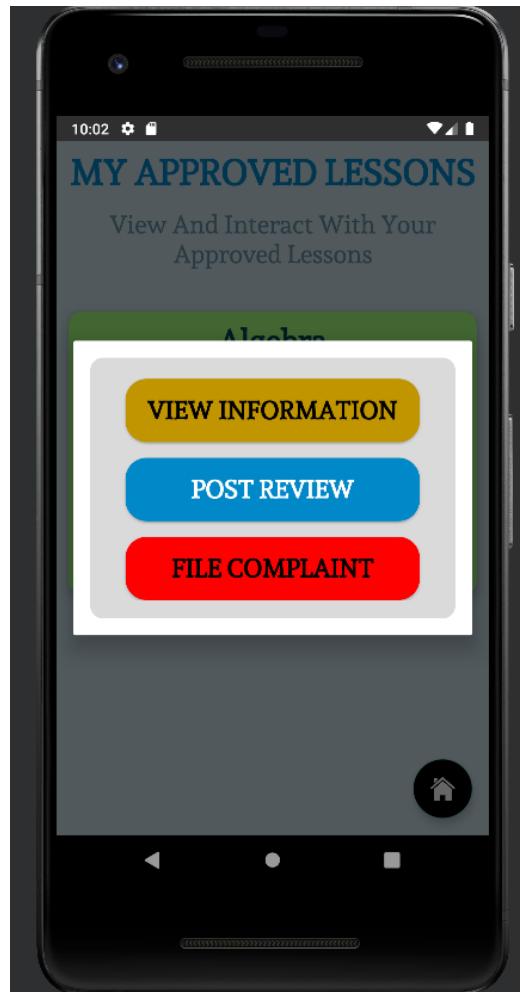


Figure 11: Student Do Next



Figure 12a: Student About Tutor Page

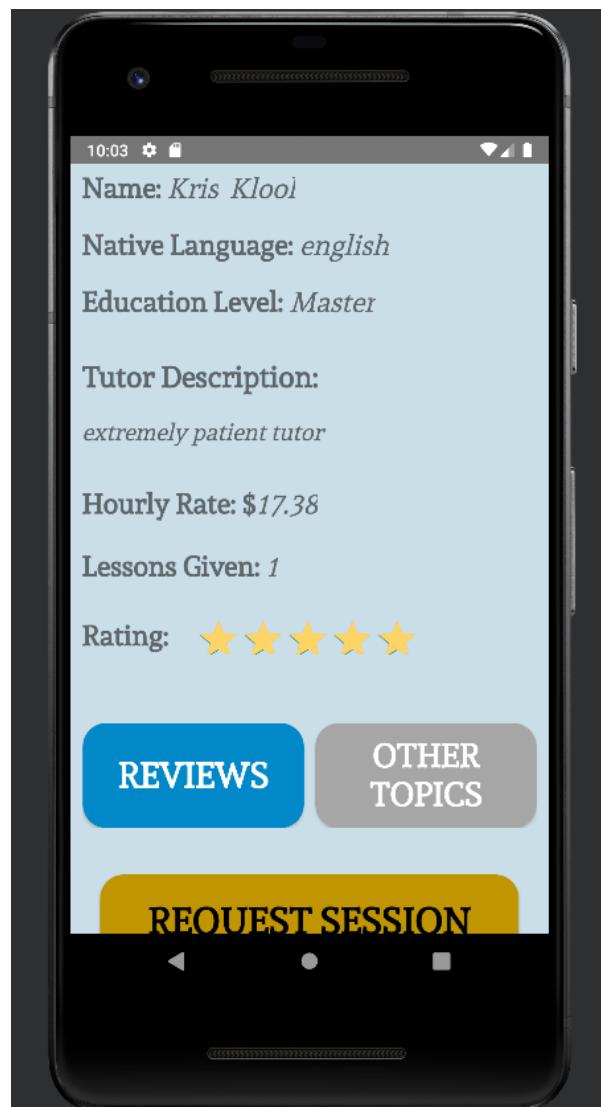


Figure 12b: Student About Tutor Page (cont.)

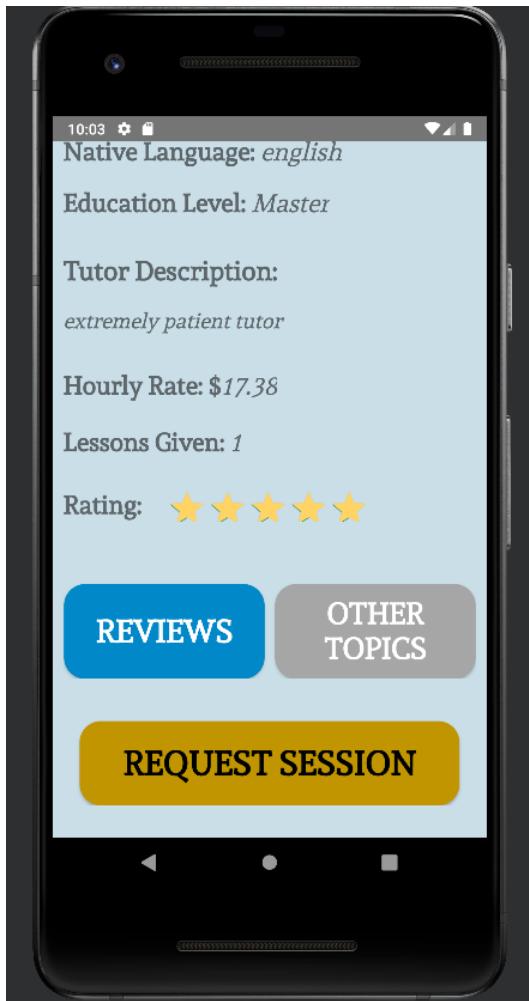


Figure 12c: Student About Tutor Page (cont.)

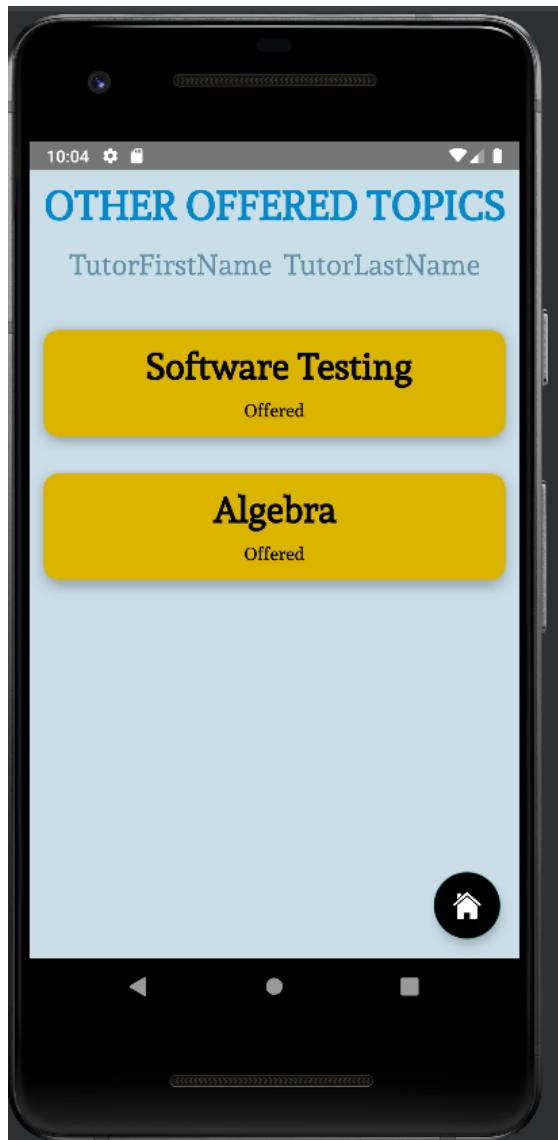


Figure 13: Student See Tutor Other Offered Topics

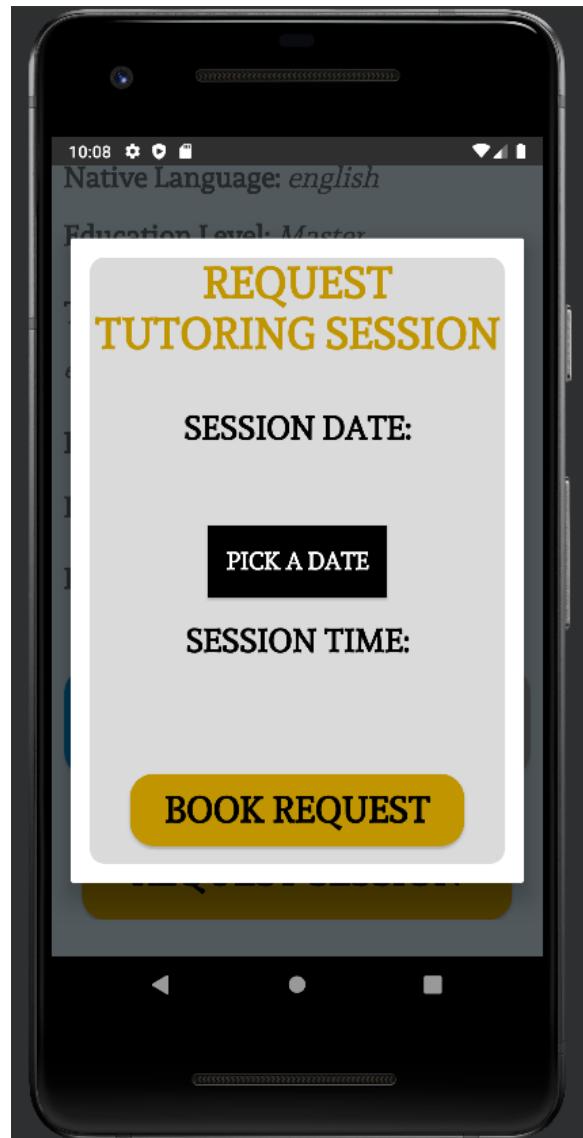


Figure 14: Student Book Tutor Request

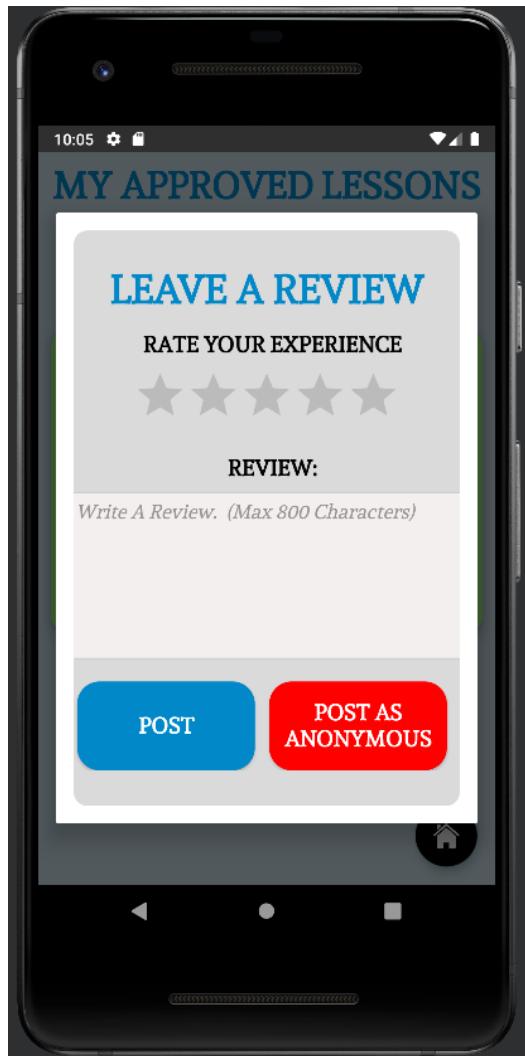


Figure 15: Student Make a Review

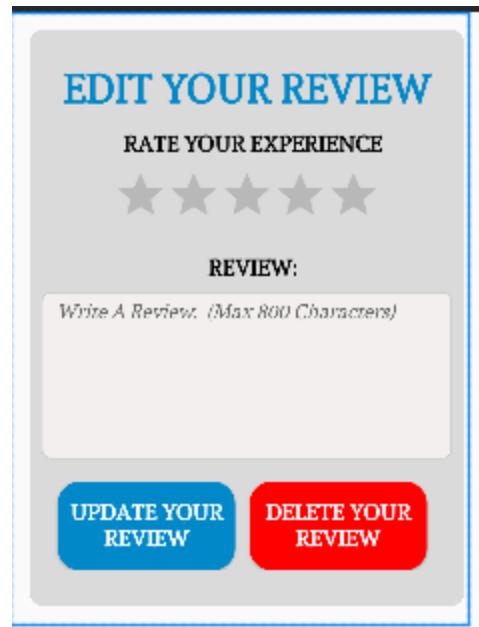


Figure 16: Student Edit a Review

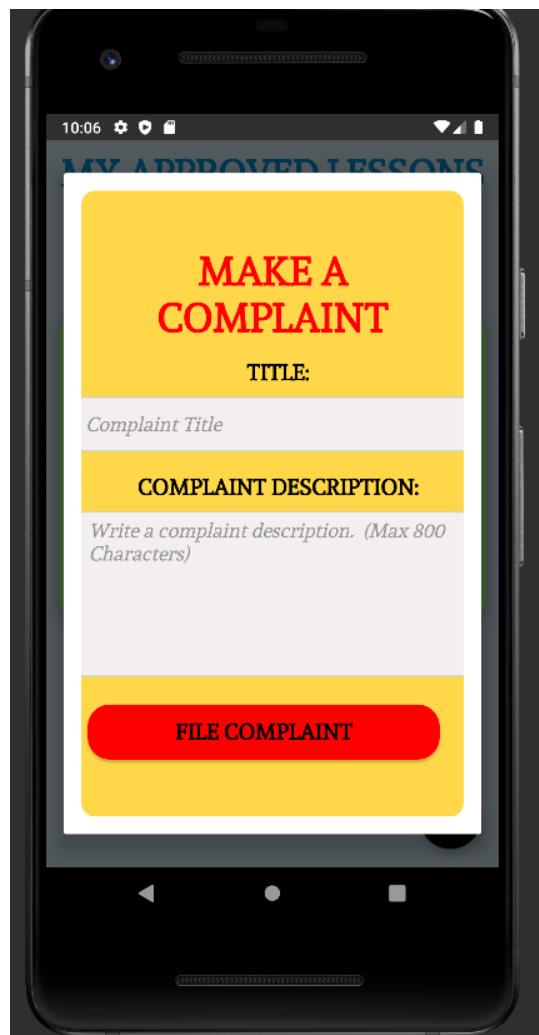


Figure 17: Student File a Complaint



Figure 18: Student account-Review for tutor Page

Tutor Flow

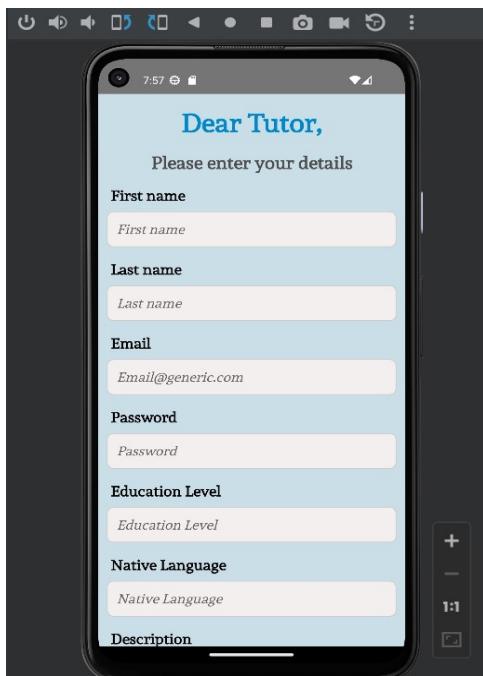


Figure 19a: Tutor Sign Up Page

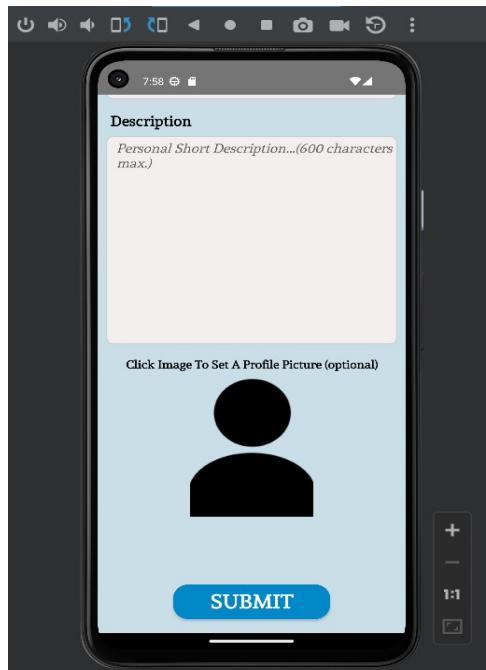


Figure 19b: Tutor Sign Up Page (continuation)

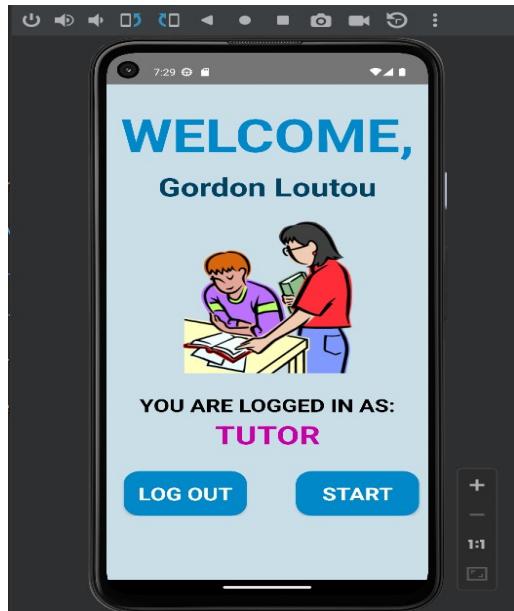


Figure 20: Tutor Welcome Page (when logged in)

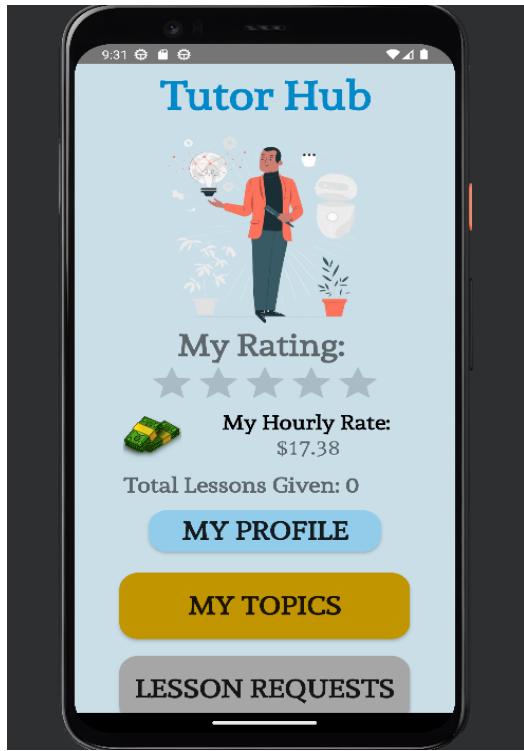


Figure 21a: Tutor account-Home Page

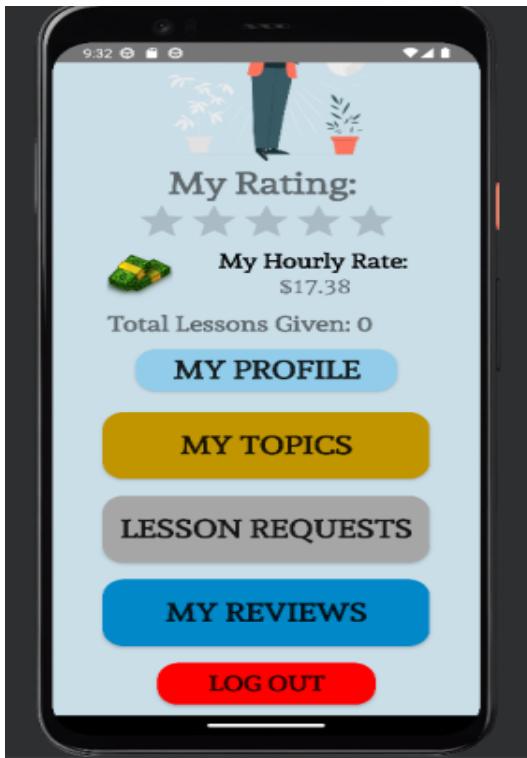


Figure 21b: Tutor account-Home Page (continuation)

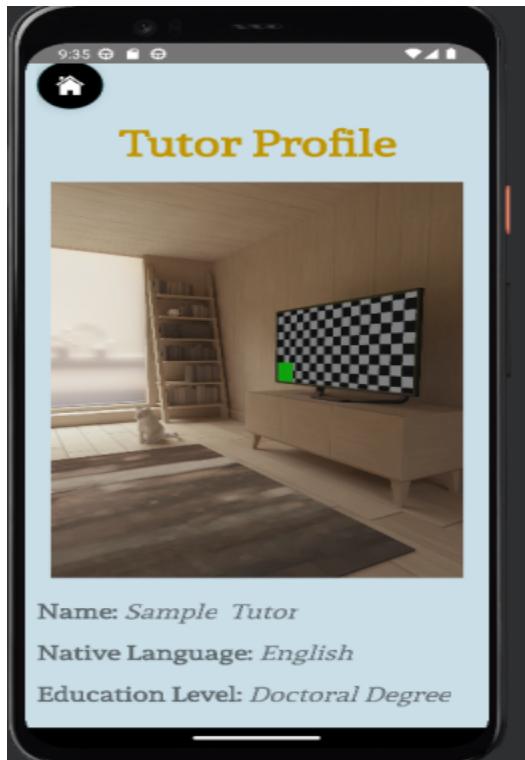


Figure 22a: Tutor account- Profile Page

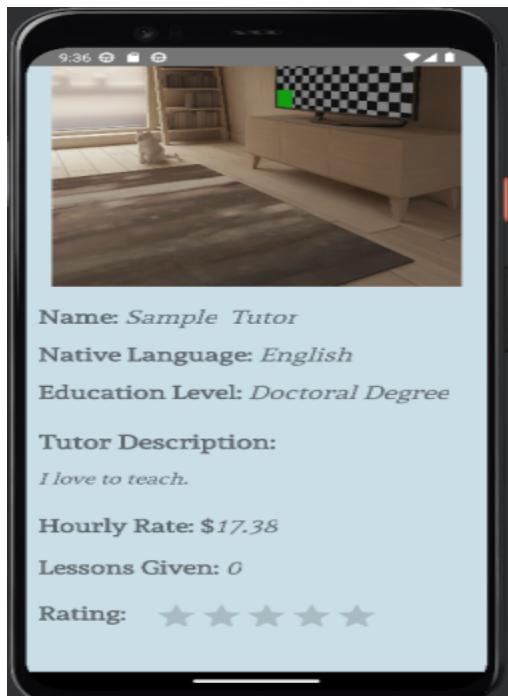


Figure 22b: Tutor account- topics list Page (continuation)

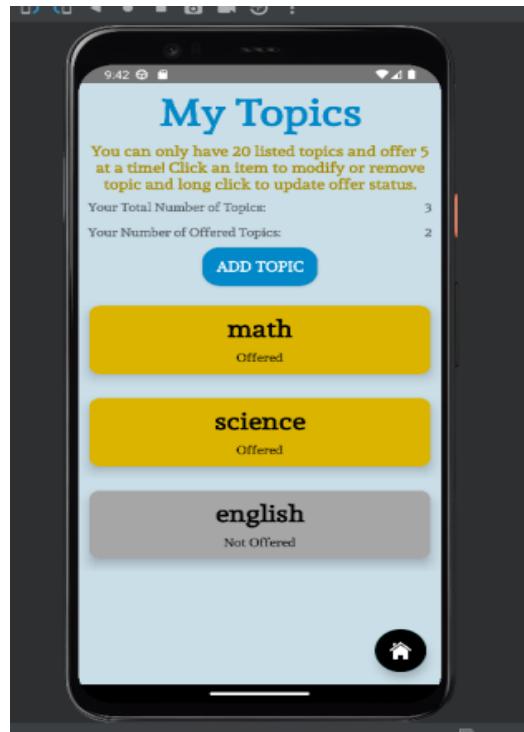


Figure 23: Tutor account- topics list Page

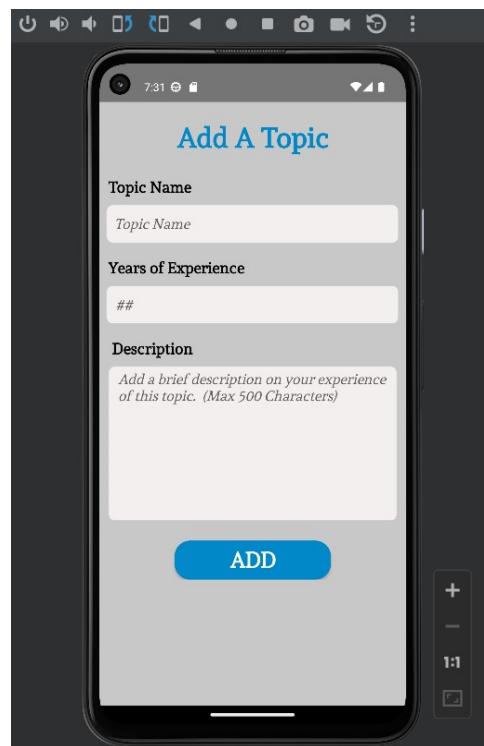


Figure 24: Tutor account- topic adding Page

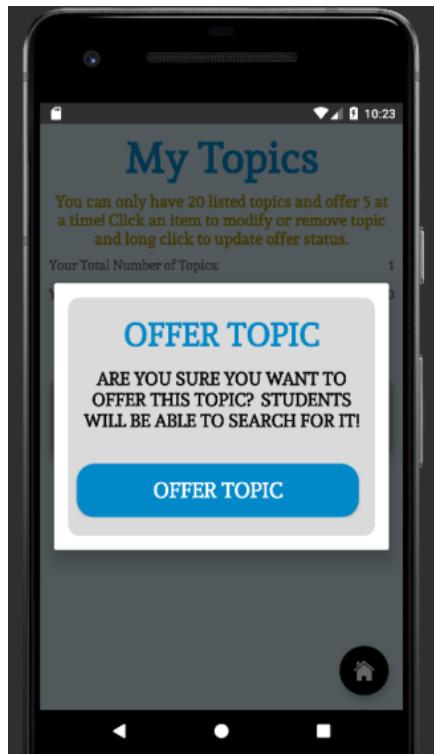


Figure 25: Tutor account- topic confirmation screen



Figure 26: Tutor account- stop offering topic confirmation screen

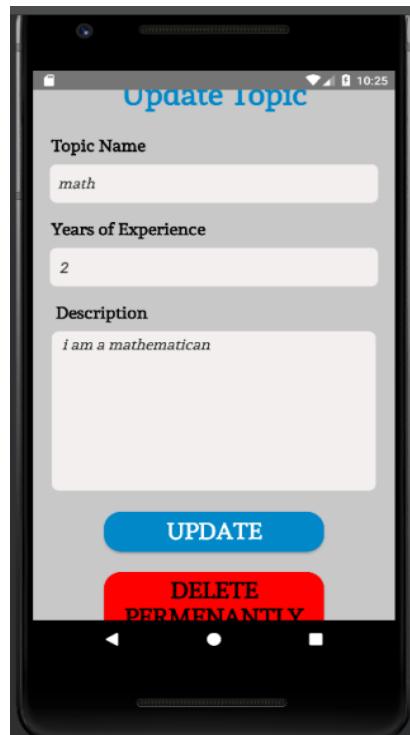


Figure 27: Tutor account- topic update Page

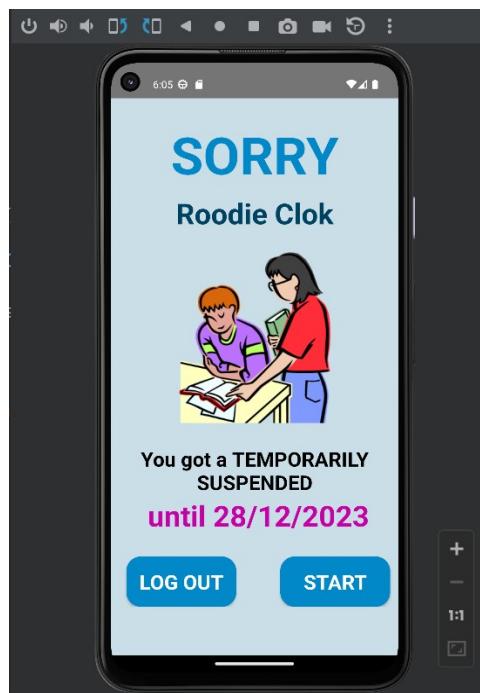


Figure 28: Tutor with a temporary suspension account Page

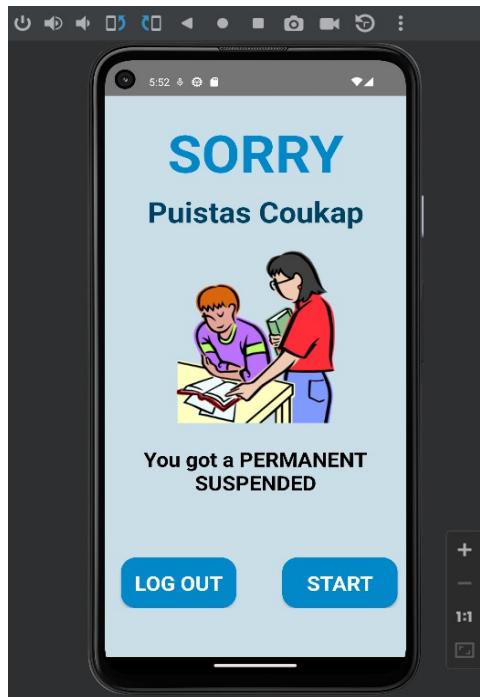


Figure 29: Tutor with a permanent suspension account Page

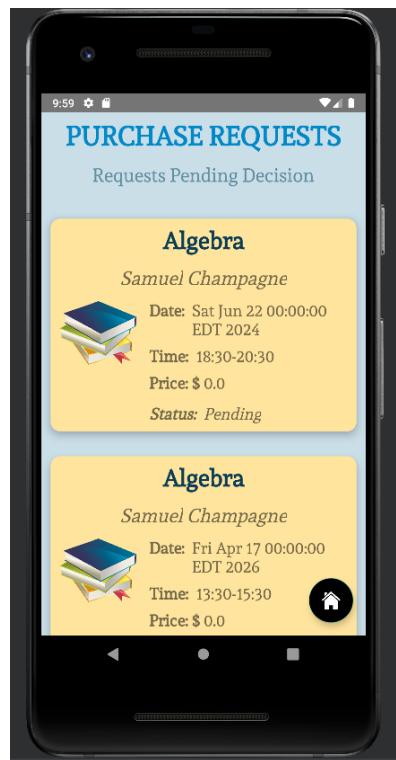


Figure 30: Tutor lesson requests page

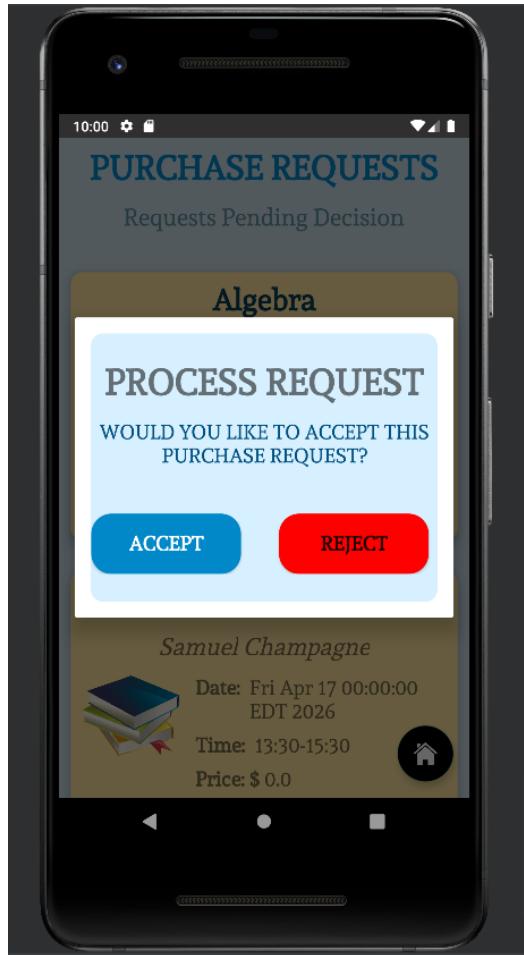


Figure 31: Tutor accept/reject lesson requests

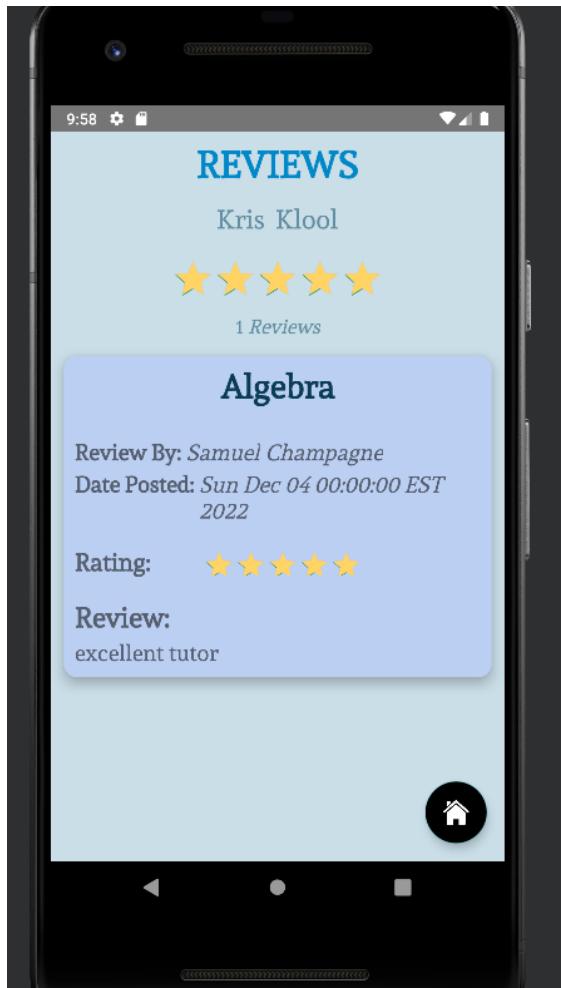


Figure 32: Tutor reviews page

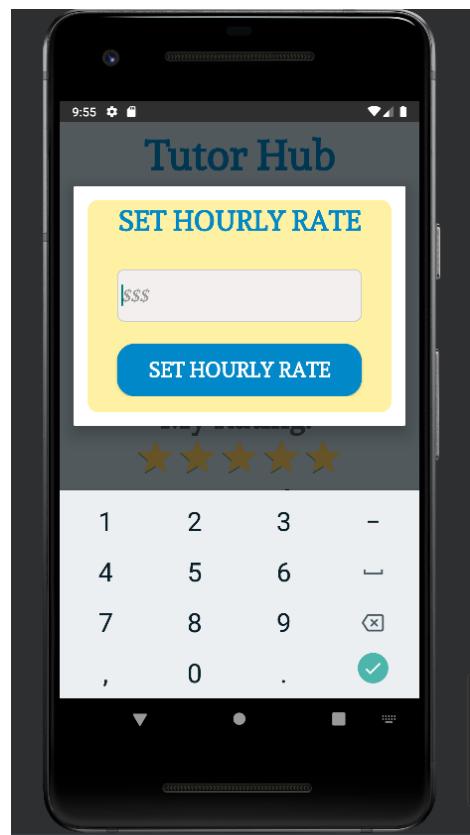


Figure 33: Tutor set hourly rate

Administrator Pages

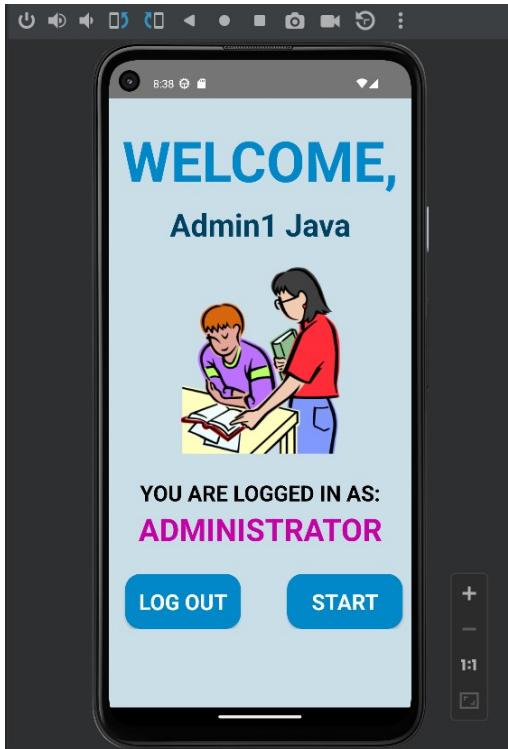


Figure 34: Admin Welcome Page (when logged in)

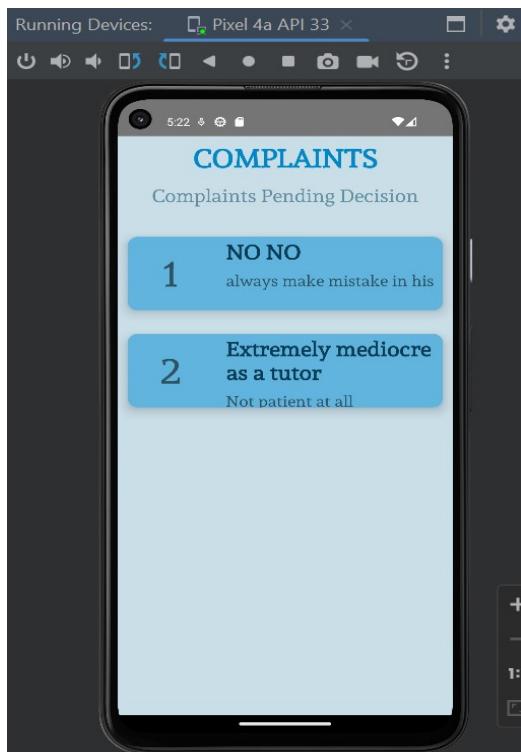


Figure 35: Admin complaints' view list Page

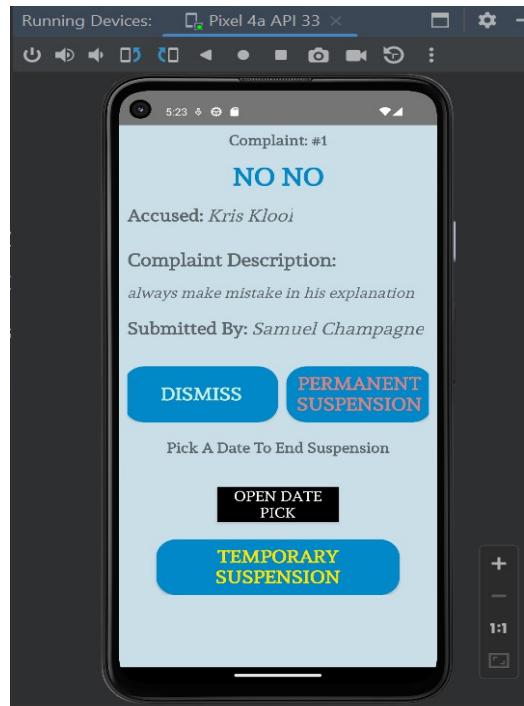


Figure 36: Admin complaints' actions Page

Lessons Learned

Developing this application has taught us a variety of lesson, that can be applied in life, school as well as work. Developing any application is a dynamic, process with continual progression and hurdles.

One of the fundamental lessons we learned was the power of communication and coordination. Collaboration and teamwork are essential components for successful application development. Working on the Tutron project taught us the power of communication coordination, and division of responsibilities. By communicating our personal deadline for our individual parts, we were able to efficiently coordinate the project's deliverables. In addition, we learned that, by using each team member's strengths, we fostered a better and more efficient development process.

Moreover, we learned to embrace hurdle and develop an adaptable system. Android development often include a lot of unforeseen hurdles. Our team had to learn to be more adaptable and include buffer days, to account to unforeseen challenges and bugs. We learned to adjust and be resilient despite the various adversity we went through.

While developing, not only did we improve our own individual technical skills in software engineering but also soft skill including effective project management, problem-solving, and teamwork.

Conclusion

Our android application, Tutron, helps connect students with local tutors. It supports three type of users: tutors, students, and administrators. Students can find tutors, request lessons, and leave reviews, while tutors can manage requests and their profiles. On the other hand, administrators ensure app functionality. Each user has their own particular features but overall this application bridges the gap between tutors and students in Ottawa, providing a user-friendly platform for seamless connection and scheduling of one-on-one tutoring sessions.

This project was very educational and helped us gain more knowledge regarding developing real android mobile apps, while implementing software engineering principles. We were able to familiarize ourselves with time management and how to improve codes while working as a team. We are proud of the functionally and features we implemented in this application and we look forward to furthering refining and improving skills in the future.