SEG 2105

Hussein Al Osman

Final Report

Group 9 Members

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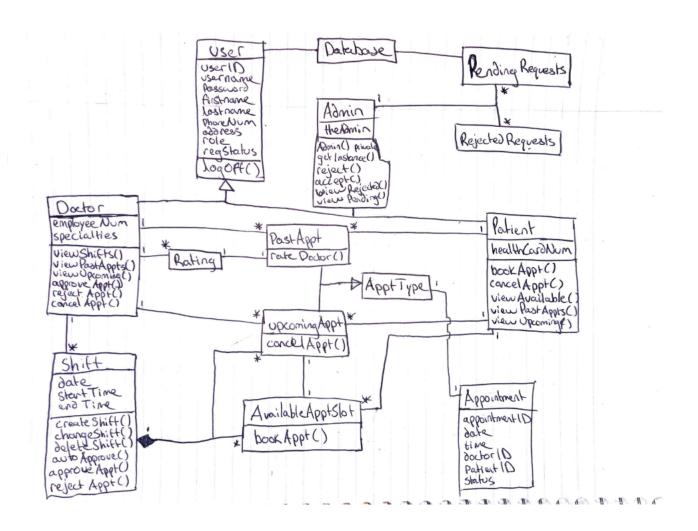
December 4th 2023

Introduction

The project involves the creation of a healthcare appointment management system for a clinic. The app incorporates the usage of three unique types of users that are represented by the administrator, the doctor and the patient. The patient's role is to observe available time slots for appointments and to book them. They are also capable of canceling any of the selected appointments. On the other hand, the doctor has the function to manage the given schedules and to handle appointment requests from patients by approving or rejecting them. The administrator is granted the ability to manage registration requests from doctors and patients by also approving or rejecting them. Overall, the app represents a health care system that relies on an organized set of interactions between the doctors, the patients, and the administrator.

The report will cover the UML diagram for the app in question, cover all team members' contributions to the project, screenshots of the app in use and finally crucial lessons learnt throughout the semester.

Updated UML Class Diagram



Any method that is repeated in a class would be calling a method from the

Contributions of Team Members

Deliverable 1

TASK	% Weight	Who did it
The team created in GitHub classroom contains all members of the group.	10	Everyone
Each member of the group has made at least one commit to the repository.	20	Everyone
The UML Class diagram of your domain model is valid.	5	Kasper
The APK is submitted.	5	Bill
A user can create a Patient or Doctor account.	15	Everyone
The Administrator, Doctor, or Patient user can see the "welcome screen" after successful authentication. The welcome screen specifies the user role. (put into manifest)	15	Everyone
The user can log off.	10	Serena
All fields are validated. There are appropriate error messages for incorrect inputs. (-1 for each field in which the user input is not validated)	20	Everyone
Optional – The group uses a DB (e.g., Firebase, SQLITE, or another similar technology).	5 bonus	Everyone

Deliverable 2

TASK	% Weight	Who did it
The updated UML Class diagram of your domain model is valid.	10	Kasper
The APK is submitted.	5	Bill
When a Patient or Doctor registers, their account information is stored in the DB (along with an indicator of whether their account registration has been approved, rejected, or not processed yet).	15	Bill
The Administrator can view the list of registration requests.	5	Serena
The Administrator can view the information associated with each request (the information the user entered during registration).	5	Everyone
The Administrator can approve or reject a registration request	5	Everyone
If approved, the registration request disappears from the list of registration requests	7.5	Everyone
If rejected, the registration request is added to the list of rejected registration requests.	7.5	Everyone
The Administrator can view the list of previously rejected registration requests.	7.5	Everyone
The Administrator can approve a previously rejected request.	7.5	Everyone
The registration requests are stored in the DB	10	Bill
When a Patient or Doctor attempt to login, they are either directed to the welcome page, notified that their registration request was rejected, or informed that their registration request has not been processed yet.	15	Bill, Ayman
Optional – When a user registration request is approved or rejected, they receive an e-mail and notification on their phone	5 bonus	Everyone

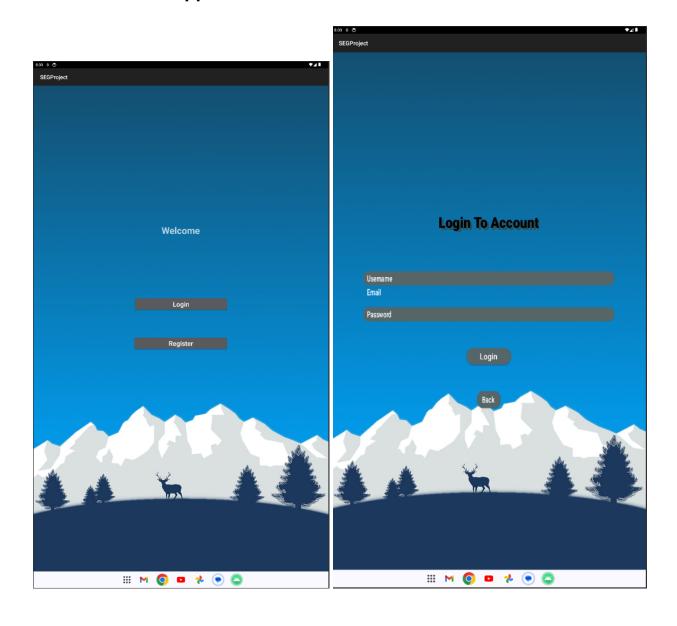
Deliverable 3

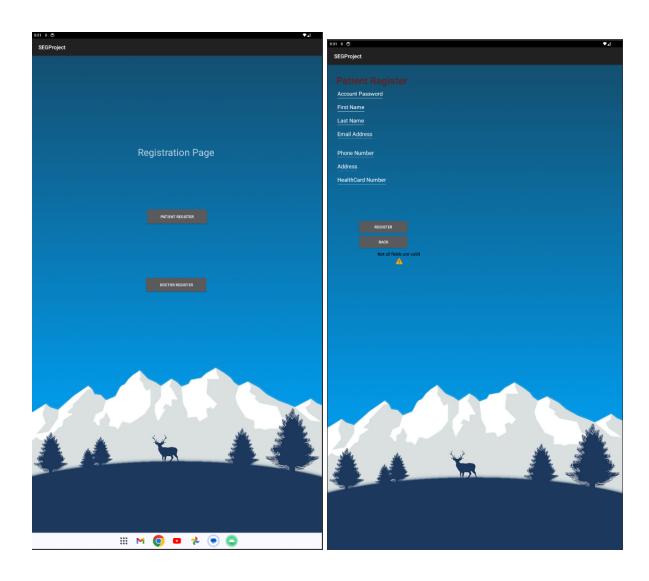
TASK	% Weight	Who did it
The updated UML Class diagram of your domain model is valid.	15	Kasper
APK Submit	5	Bill
The Doctor can view a list of upcoming appointments	5	Everyone
The Doctor can view the information of a Patient that requested an appointment	10	Bill
The Doctor can approve or reject an appointment request.	10	Everyone
The Doctor can cancel a previously approved appointment.	10	Everyone
The Doctor may enable a setting so that all appointment requests are automatically approved by the system without further action on their part.	10	Everyone
The Doctor can view a list of past appointments.	5	Everyone
The Doctor can add a new shift by specifying the date, start-time, and end-time of the shift. All fields must be validated. Hence, the Doctor cannot enter a date that has already passed or a shift that conflicts with another one they had previously added.	10	Bill
The Doctor can view the list of upcoming shifts they are working.	10	Bill
The Doctor can delete an existing shift.	10	Everyone

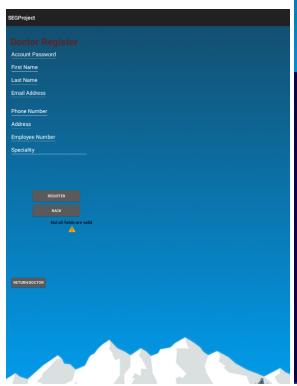
Deliverable 4

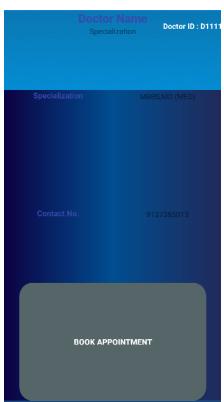
TASK	% Weight	Who did it
The updated UML Class diagram of your domain model is valid.	10	Kasper
The APK is submitted.	5	Bill
The 4 Unit test cases (simple local tests) are implemented.	10	Everyone
The final report is submitted	30	Everyone
The application supports the requirements of Deliverables 1, 2, and 3	20	Everyone
The Patient can view a list of upcoming appointments. 5 The Patient can cancel an upcoming appointment. Cancellations only possible if the appointment is not starting in the next 60 mins.	5	Bill
The Patient can view their past appointments.	5	Bill
The Patient can rate a Doctor with whom they previously had an appointment.	5	Everyone
The Patient can search for appointments by specifying a medical specialty and selecting a time slot from the available ones. An appointment is a 30-minute time slot.	5	Bill
Once booked, the appointment appears in the Patient's list of upcoming appointments.	5	Everyone
A booked time slot is not listed when Patients look for appointments.	5	Bill
The Doctor cannot delete a shift if it is associated with one or more Patient appointments.	5	Everyone
Optional – Rather than searching for appointments by specifying a medical specialty, the Patient can opt to search for a Doctor by name (i.e., first name, last name, or both). If the search yields only one Doctor, then that Doctor's available time slots are displayed.		Everyone

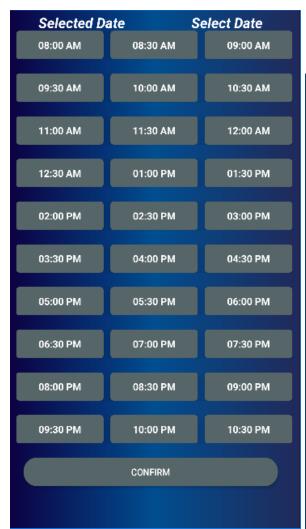
Screenshots of App

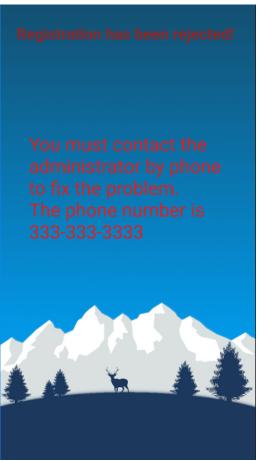


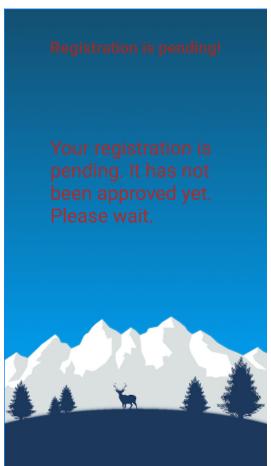




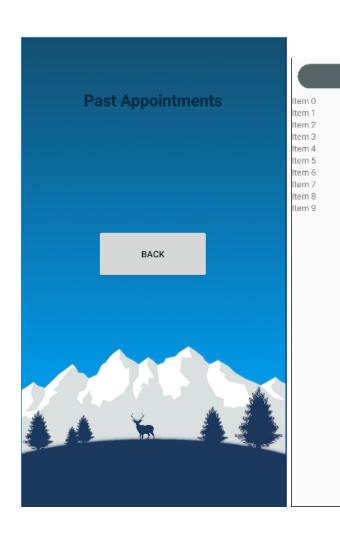




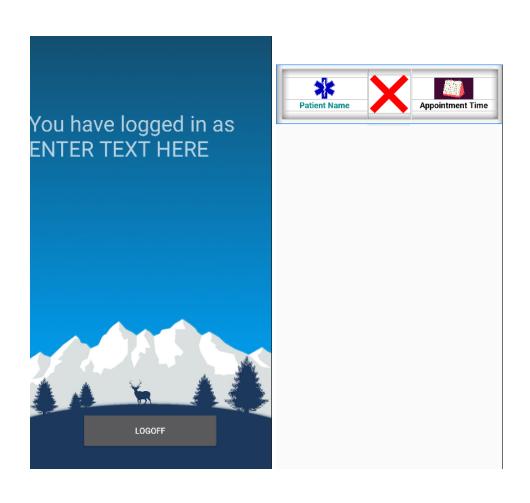








Select Date



Lessons Learned

Throughout the course of our group project this semester, several valuable lessons emerged that significantly contributed to our collective learning experience. One prominent takeaway was the realization of the critical importance of effective communication. We found that a lack of consistent and open communication hindered our progress, leading to misunderstandings and delays. In addition, our group tended to lean towards independent work rather than collaborative efforts, which posed challenges during the integration of various components. To address this, we recognize that improved communication and increased collaboration would have had a very positive impact.

Procrastination emerged as a common pitfall that exacerbated our workload and strained our ability to meet deliverable deadlines. We acknowledge the need for improved time management and adherence to deadlines, emphasizing the benefits of setting realistic milestones. Another crucial aspect we identified was the absence of a designated group leader, contributing to confusion and a lack of clear task delegation. Going forward, we understand the importance of appointing a leader or establishing a leadership rotation to provide direction and maintain focus.

Technical challenges also surfaced as a significant obstacle, compounded by our tendency to leave tasks until the last minute. This approach limited our ability to seek guidance from teaching assistants or address issues proactively. To mitigate such challenges in the future, we recommend a more proactive approach, including regular check-ins with teaching assistants, early problem-solving, and leveraging online resources for support.

In summary, our project taught us that effective communication, collaborative work, time management, leadership, and proactive problem-solving are integral components of successful

group projects. By implementing these lessons, we aim to enhance our future projects and foster a more positive and productive team dynamic.