SEG 2105: Android Project
HAMS

SEG2105A – Intro to Software Engineering
Fall 2023

University of Ottawa

Project Group 10
Abdul, Omar 300228700
Beiram, Hadi
Jabi, Tarek 300058308
Khan, Yusuf 300293842
Taimah, Anas 300228842

Introduction

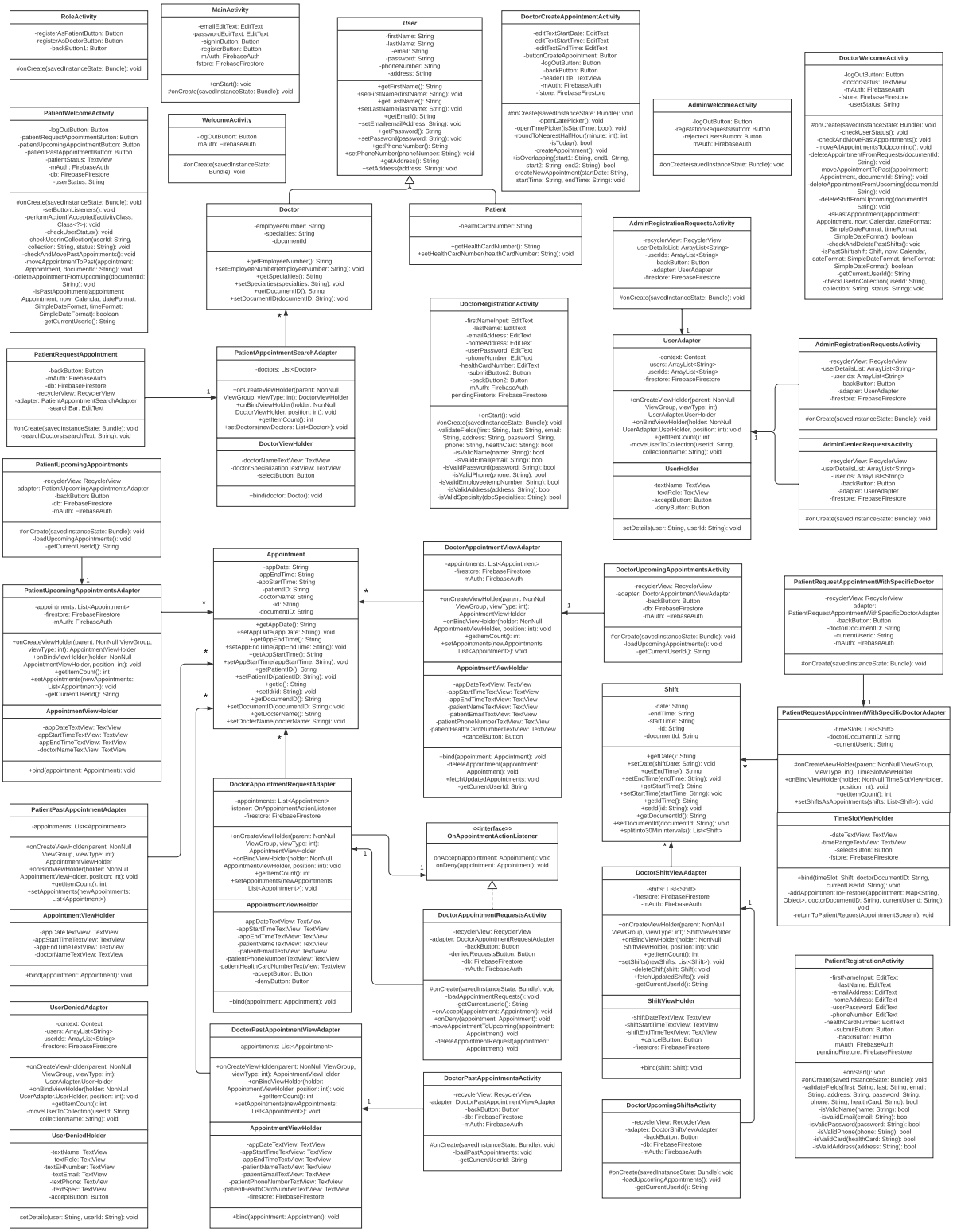
In this project, our group will be creating the Healthcare Appointment Management System (HAMS) for a health clinic. It is a mobile application geared towards simplifying healthcare appointment scheduling and administration. The system has three primary user roles: Patients, Doctors, and Administrators.

For patients, the app allows users to log in and view available/past appointment slots, search for appointments by specialty or doctor, book or cancel appointments, and provide feedback by rating their interactions with doctors.

For doctors, the app allows them to login and provides a platform to efficiently manage schedules and appointment requests. Doctors can view upcoming appointments, can view patient information for their appointment requests and accept/reject them, can cancel upcoming appointments and can view/add/delete work shifts.

For administrators, the app allows them to login and approve/deny registration requests submitted by both doctors and patients, and they can view previously denied requests to accept them.

UML Class Diagram



Team Member Contributions

Group Member	DELIVERABLE			
	1	2	3	4
Anas	- Added validation functions for the registration - Set up majority of firebase and connected to android app	- Lots of firebase changes including authentication features - Added admin requests pages - General fixes	- Java and UI fixes - Added functionality for upcoming appointments	- Created test cases - Helped with patient features
Hadi	- Java file changes	- Helped on UML	- Helped bug fix	
Omar	- Created java and UI files for all 3 roles - Java code cleanup and UI changes	- Added some firebase functionality - Based the sign in depending on role - Added functionality to accept/reject buttons - General fixes	- UI fixes - Added doctor features (create and view shifts, accept and reject appointments)	- Added patient features - Added/fixed doctor features
Tarek	- Created the UML diagram - Java cleanup and added comments	- Multiple UML class diagram updates	- Updated UML class diagram - Helped with doctor features	- Updated UML class diagram
Yusuf	- Created README and android project - Java file updates - Added buttons and logos to UI - Helped set up firebase - Bug fixes - Released v01	- Created recycler view to display all the requests - Fixed registration screen - Added the ability to view denied requests - General fixes - Released v02	- Bug fixes - Doctor feature fixes - Released v03	- Helped with doctor feature fixes - Created final report for the group - Released v04

Lessons Learned

We have learned many lessons as a group since the start of this project. Managing workloads and having proper communication between team members was the first step. Learning to use git was a difficult step since early on we had a few faults in the code due to improper pushing and pulling.

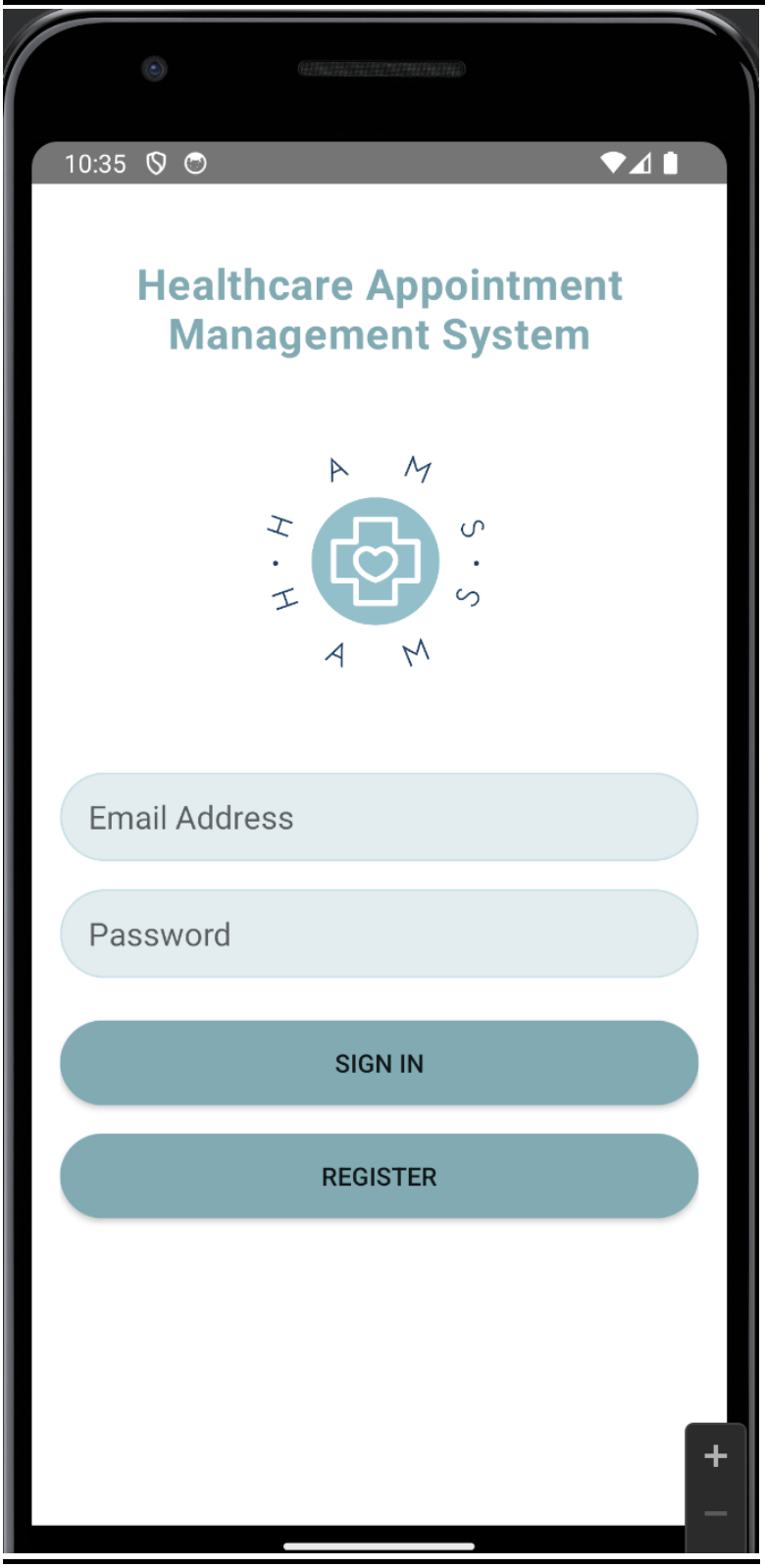
Another important lesson learned is having a proper user interface that attracts a user and doesn't make them want to leave. Having simple colours that are easy on the eye was our goal, so we used a combination of white, baby blue and grey.

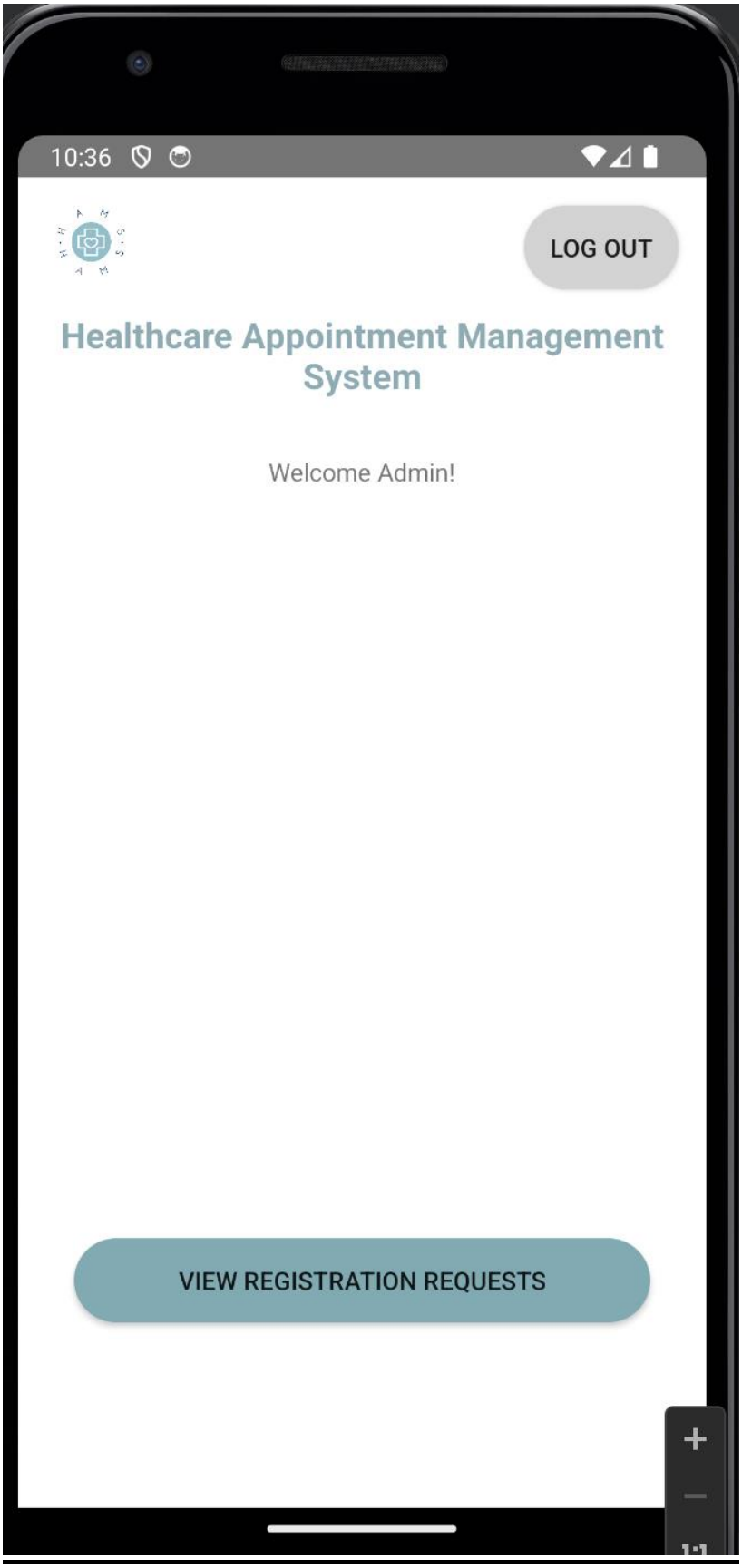
Learning how to connect and properly use the firebase database had a huge impact on the app which turned it from being a normal computer program that is just executed into being a full-on professional application that can store actual data.

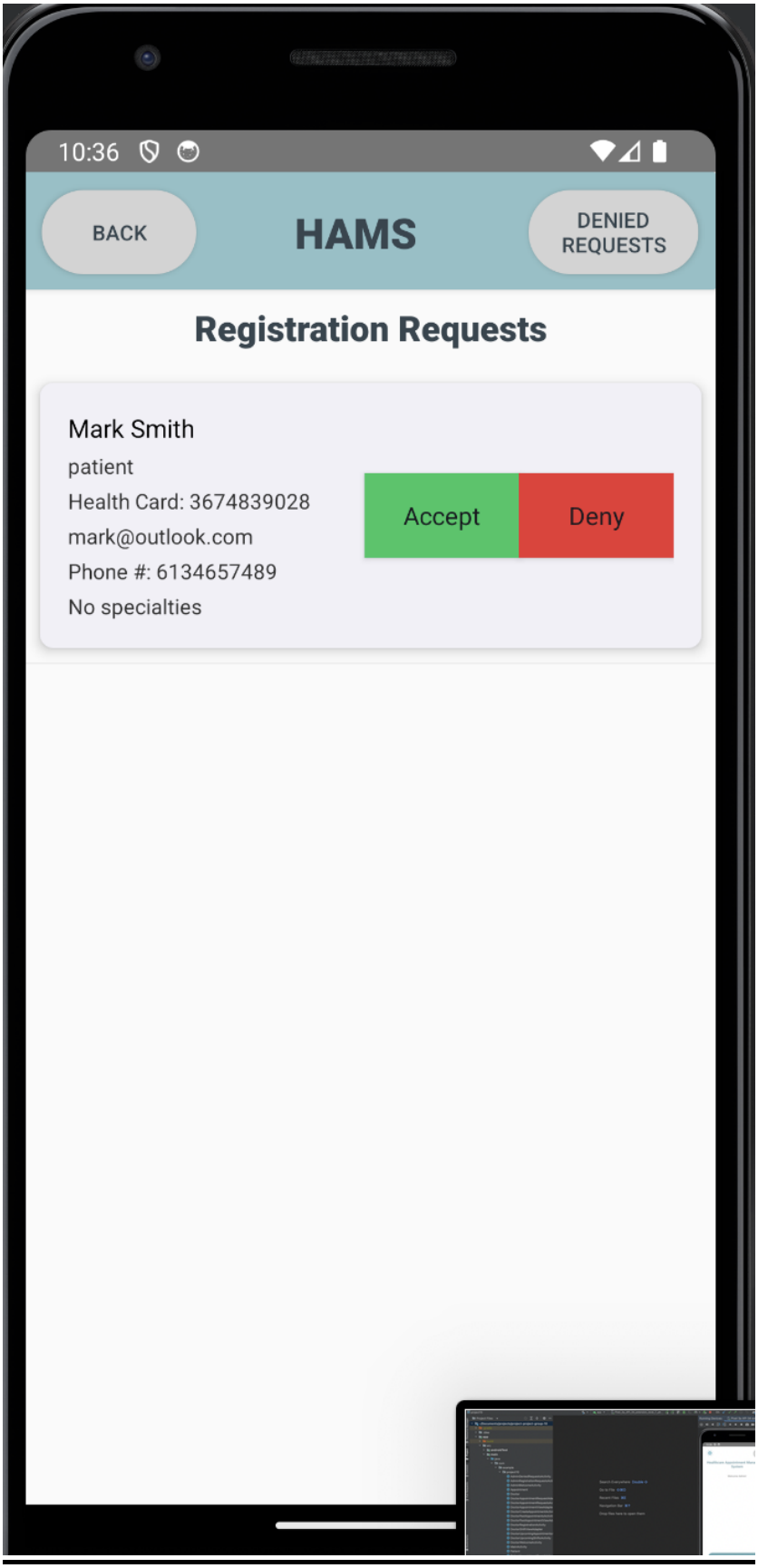
Lastly, making sure to properly test the application became a lesson to all of us whenever making changes. Bugs are easy to appear that can cause issues and even crash the application. Learning how to properly test allowed us to get rid of most of the bugs and make the application run smoothly.

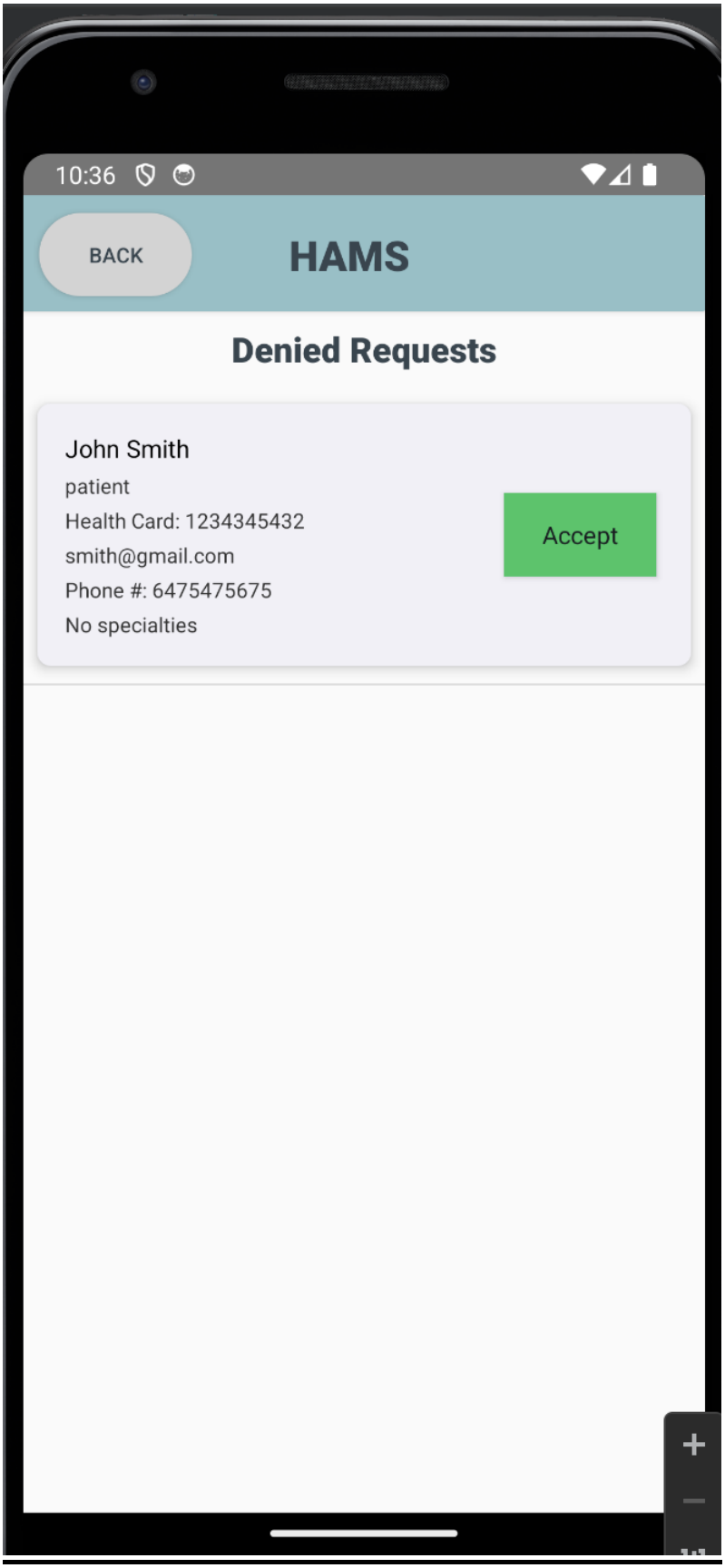
Submitting each deliverable taught us about application versions and how tags can be used for different releases. This is an essential element when working in real life jobs.

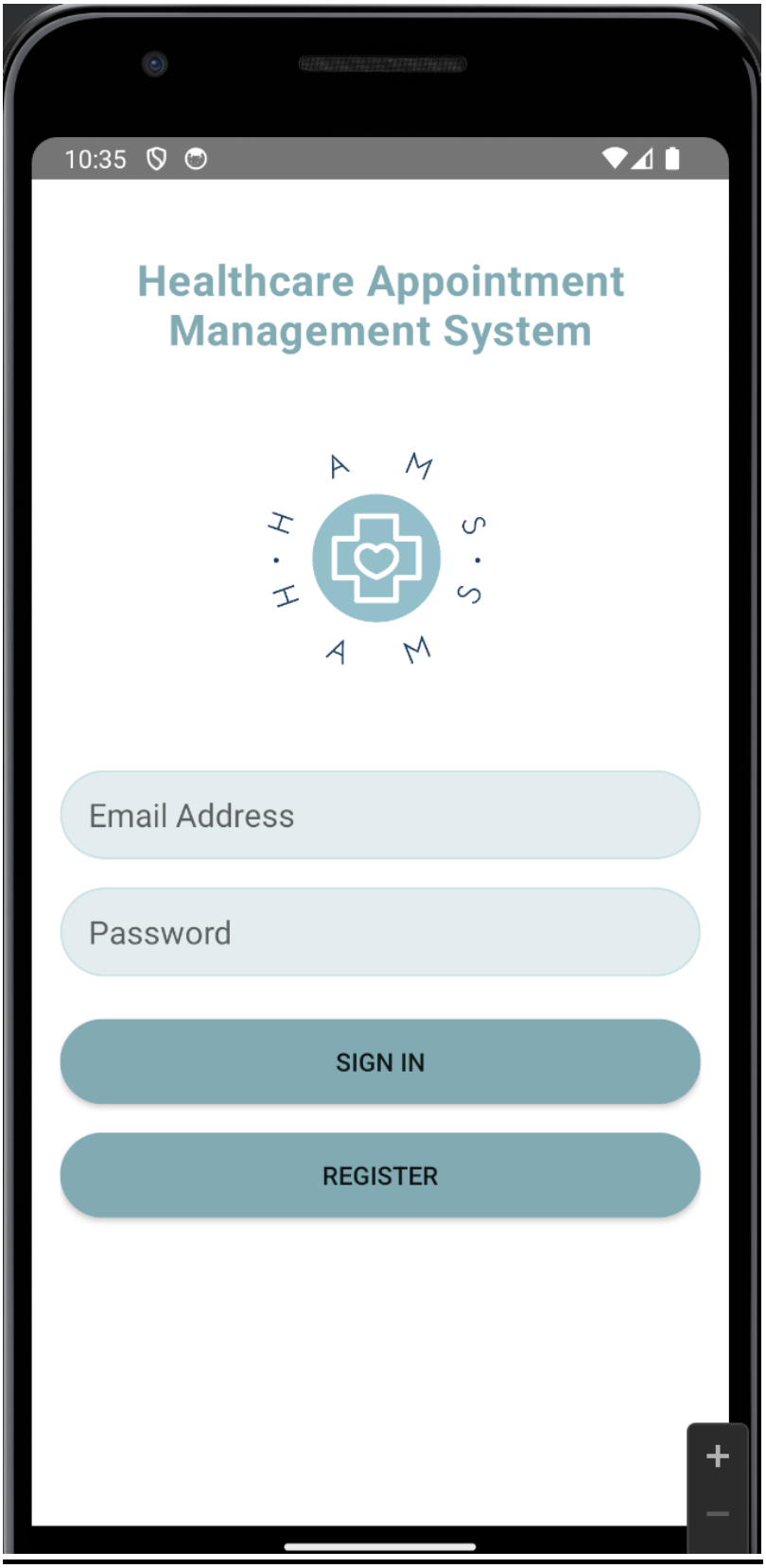
App Screenshots - Example Run-through

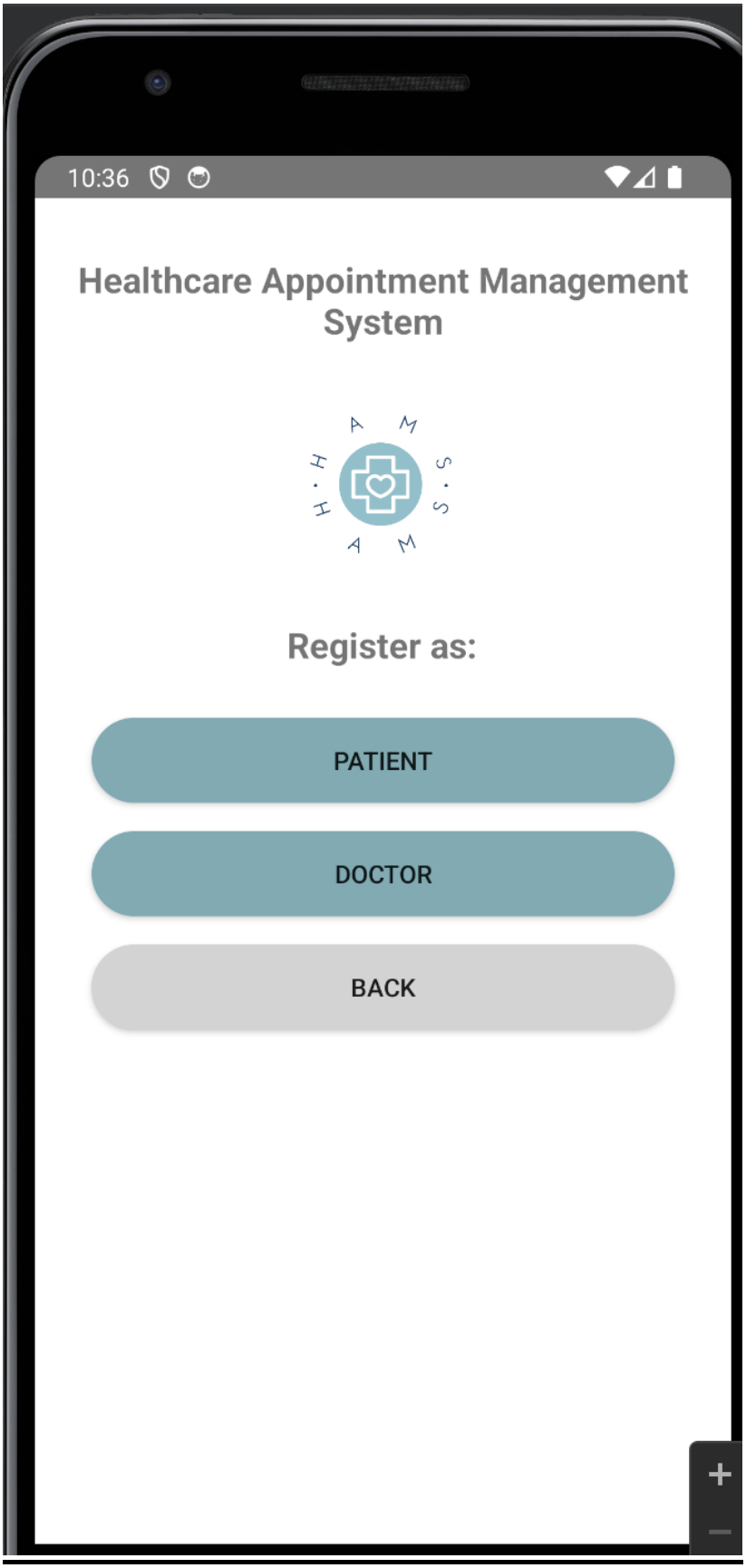


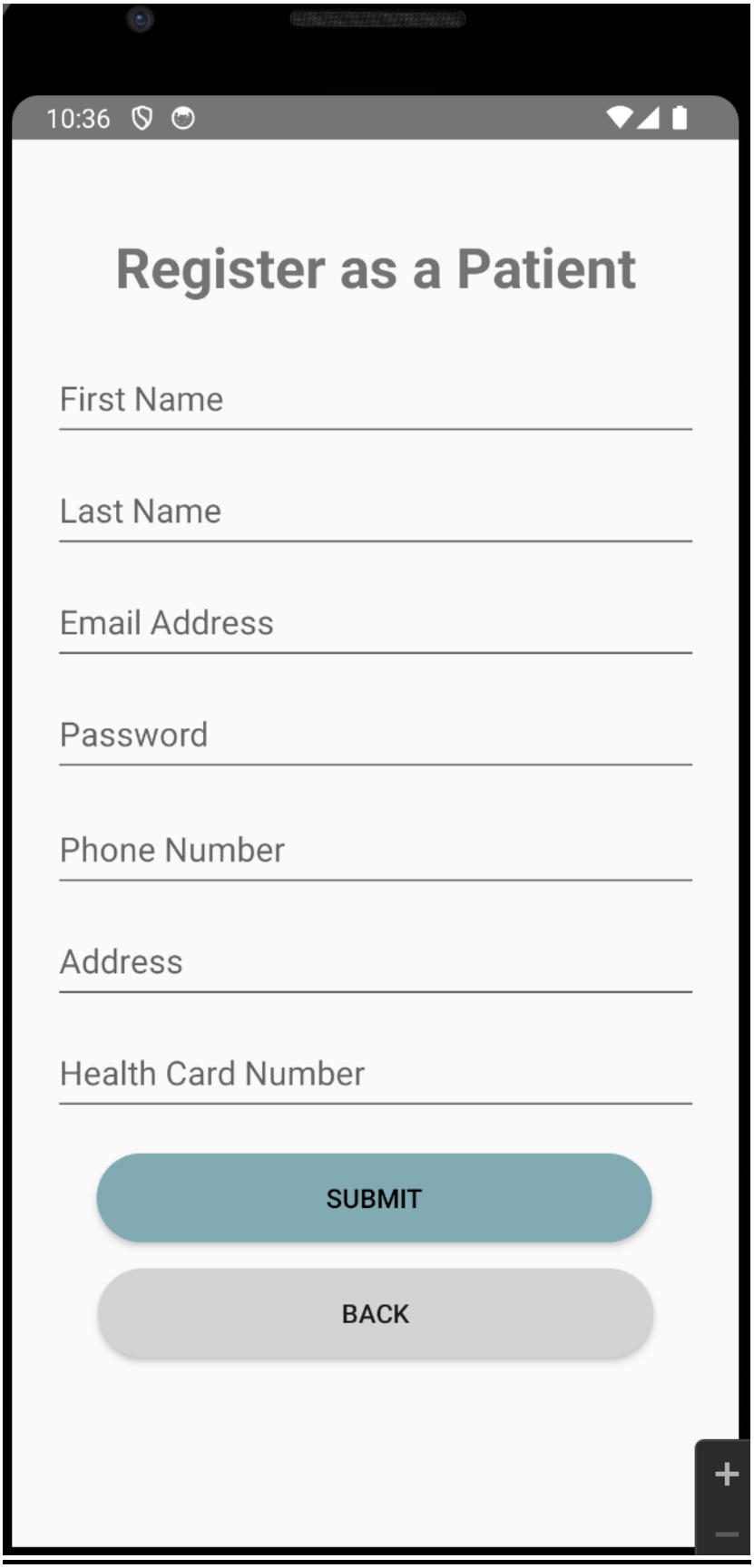

10:36
LOG OUT
Healthcare Appointment Management System
Welcome Admin!
VIEW REGISTRATION REQUESTS

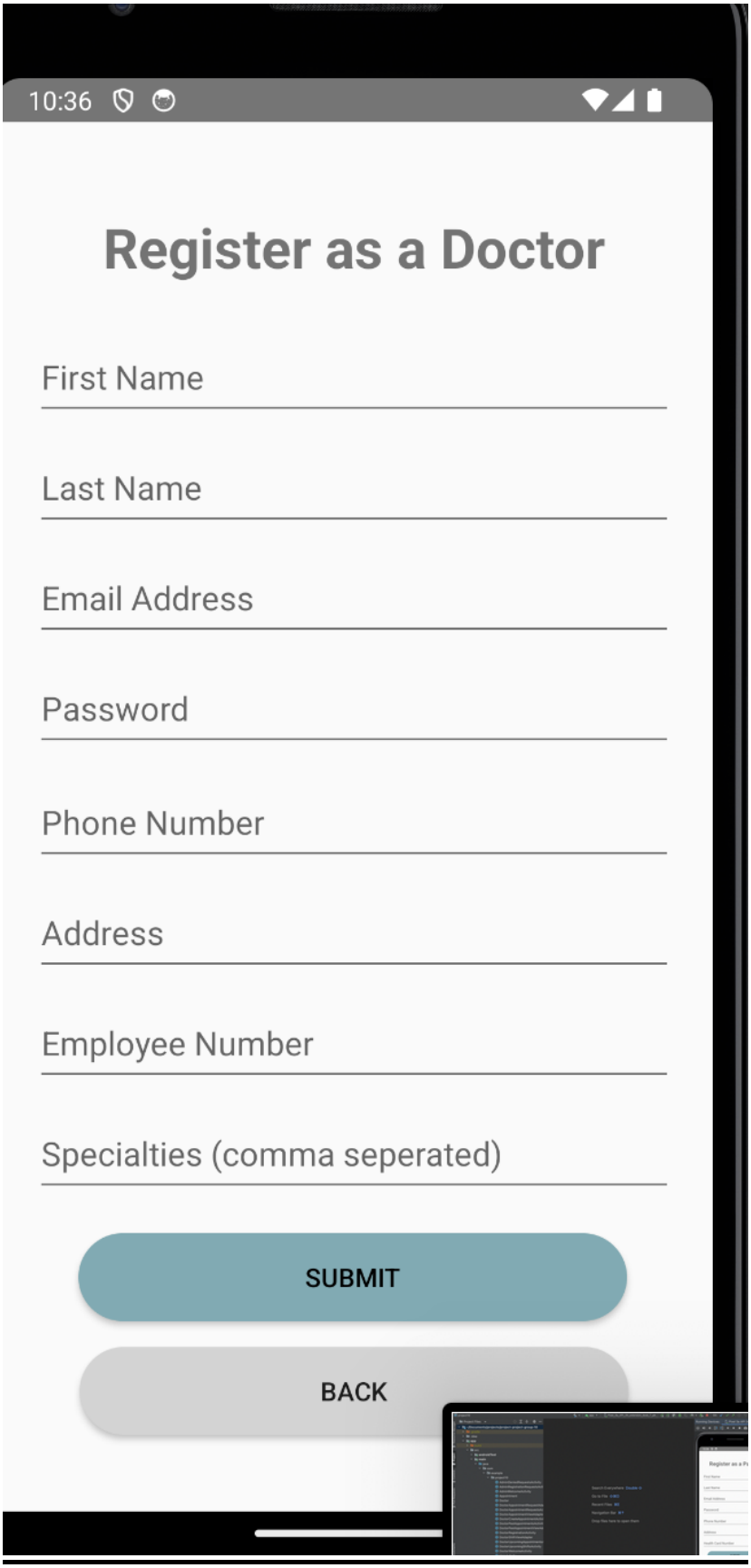

10:36
BACK
HAMS
DENIED REQUESTS
Registration Requests
Mark Smith
patient
Health Card: 3674839028
mark@outlook.com
Phone #: 6134657489
No specialties
Accept
Deny

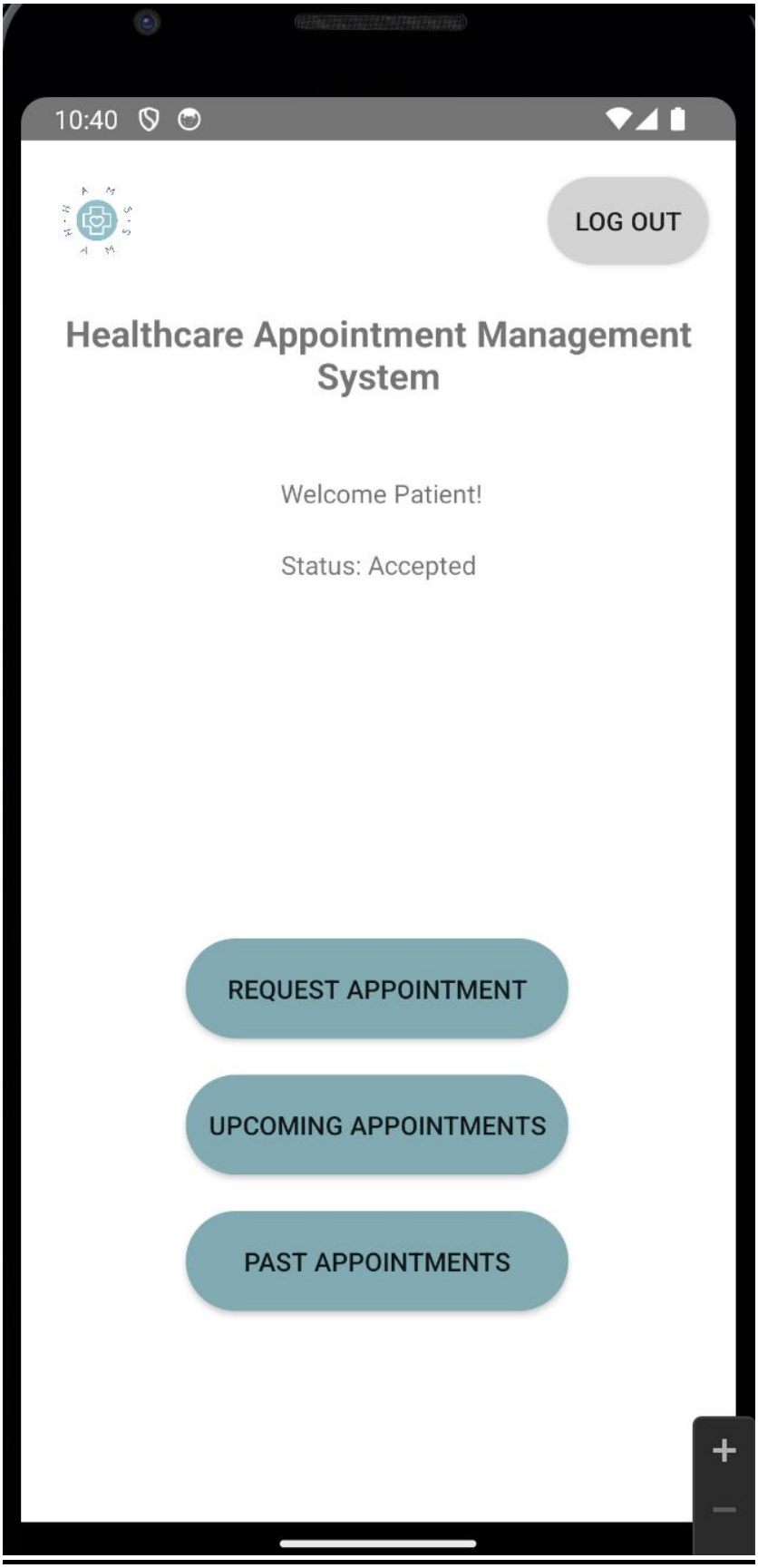

10:36
BACK
HAMS
Denied Requests
John Smith
patient
Health Card: 1234345432
smith@gmail.com
Phone #: 6475475675
No specialties
Accept

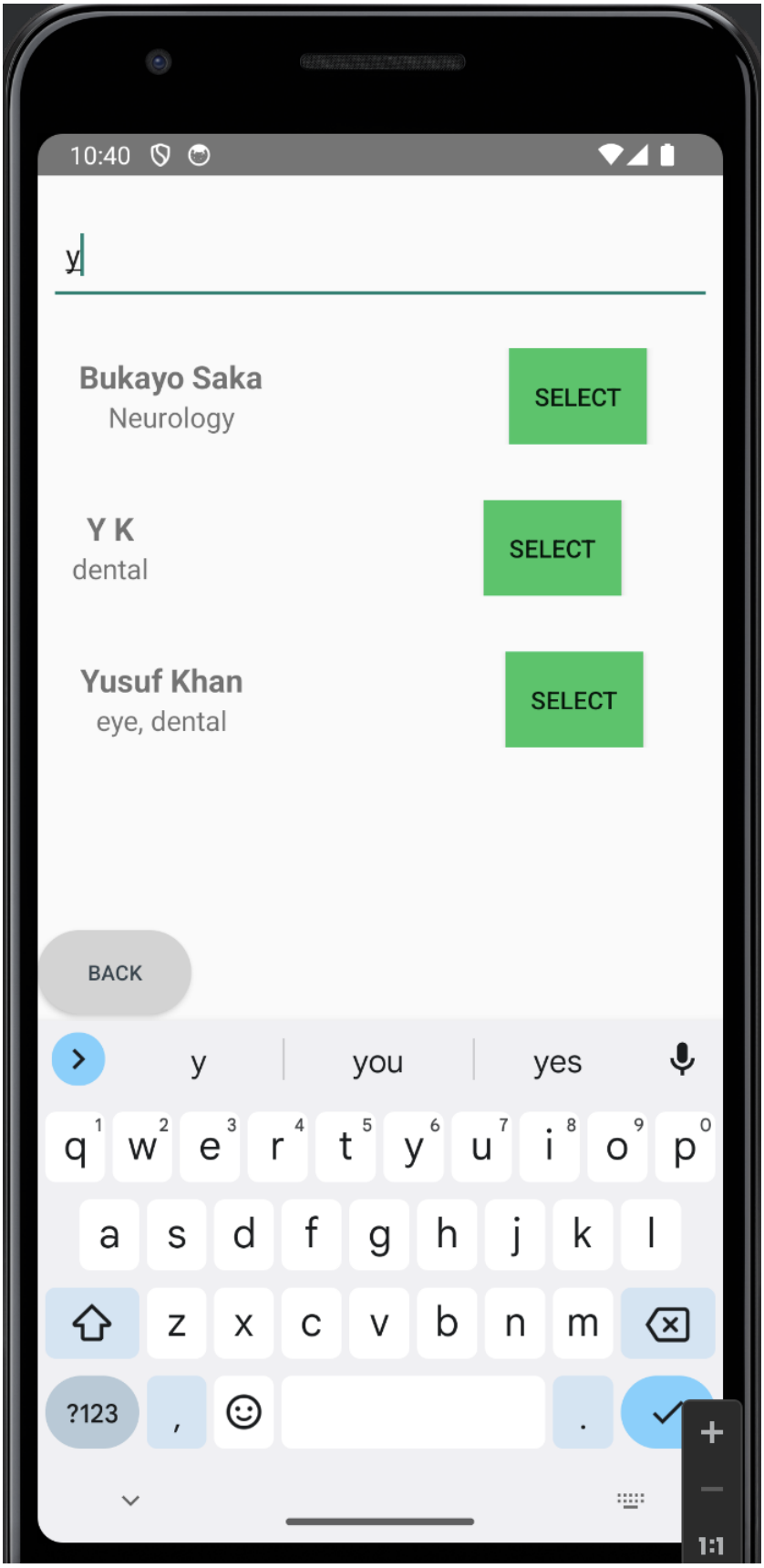

10:35
Healthcare Appointment Management System
HAMS
Email Address
Password
SIGN IN
REGISTER

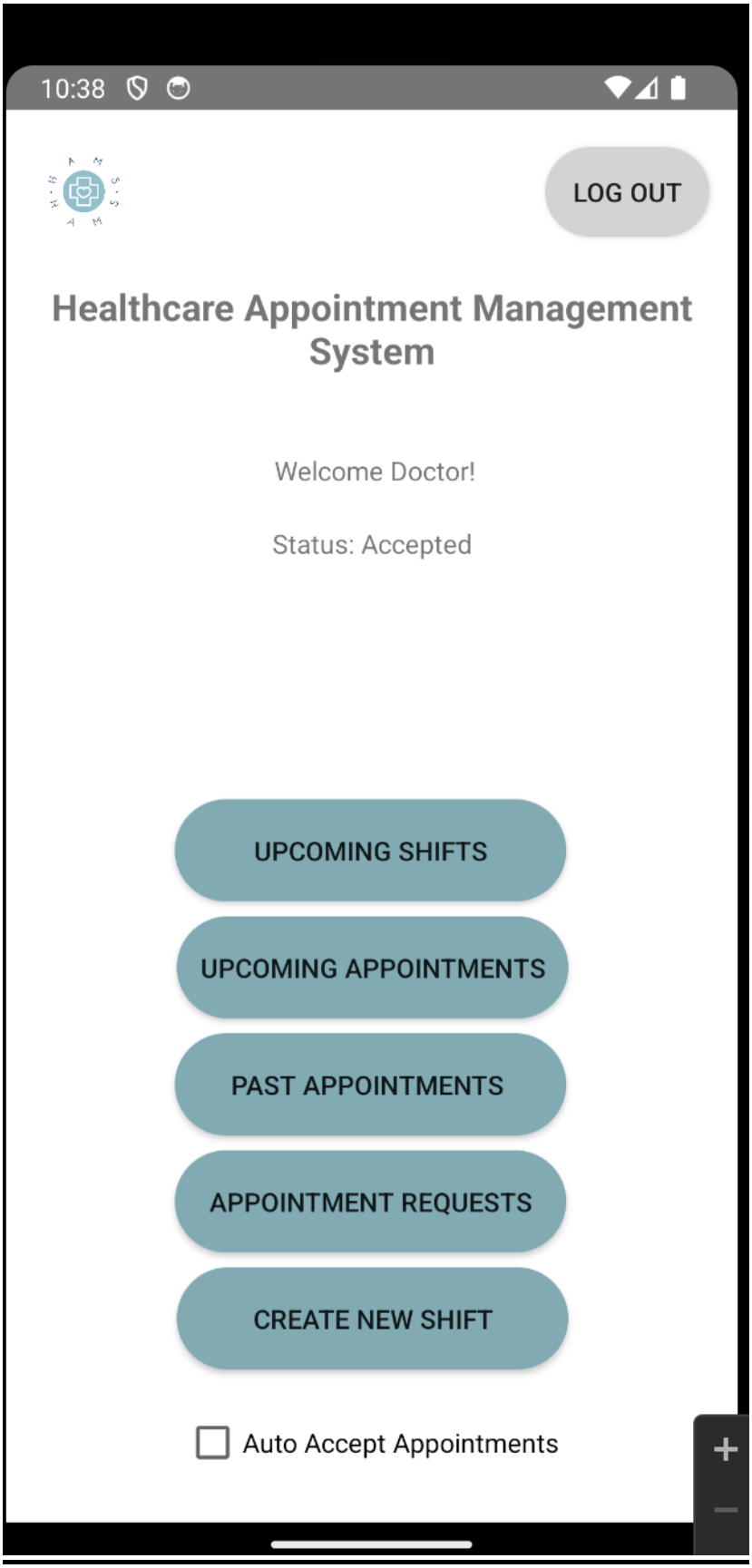

10:36
Healthcare Appointment Management System
Register as:
PATIENT
DOCTOR
BACK

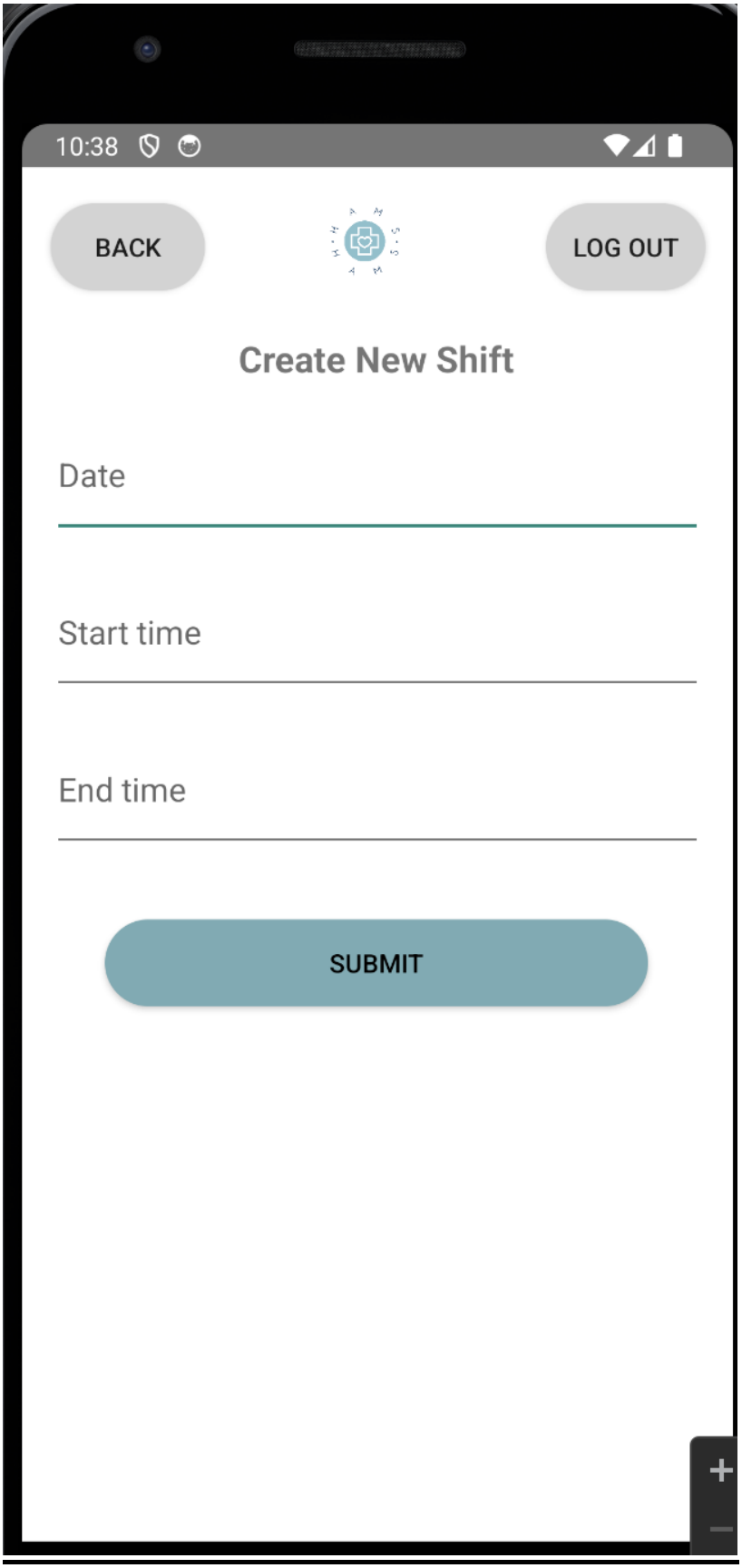

10:36
Register as a Patient
First Name
Last Name
Email Address
Password
Phone Number
Address
Health Card Number
SUBMIT
BACK

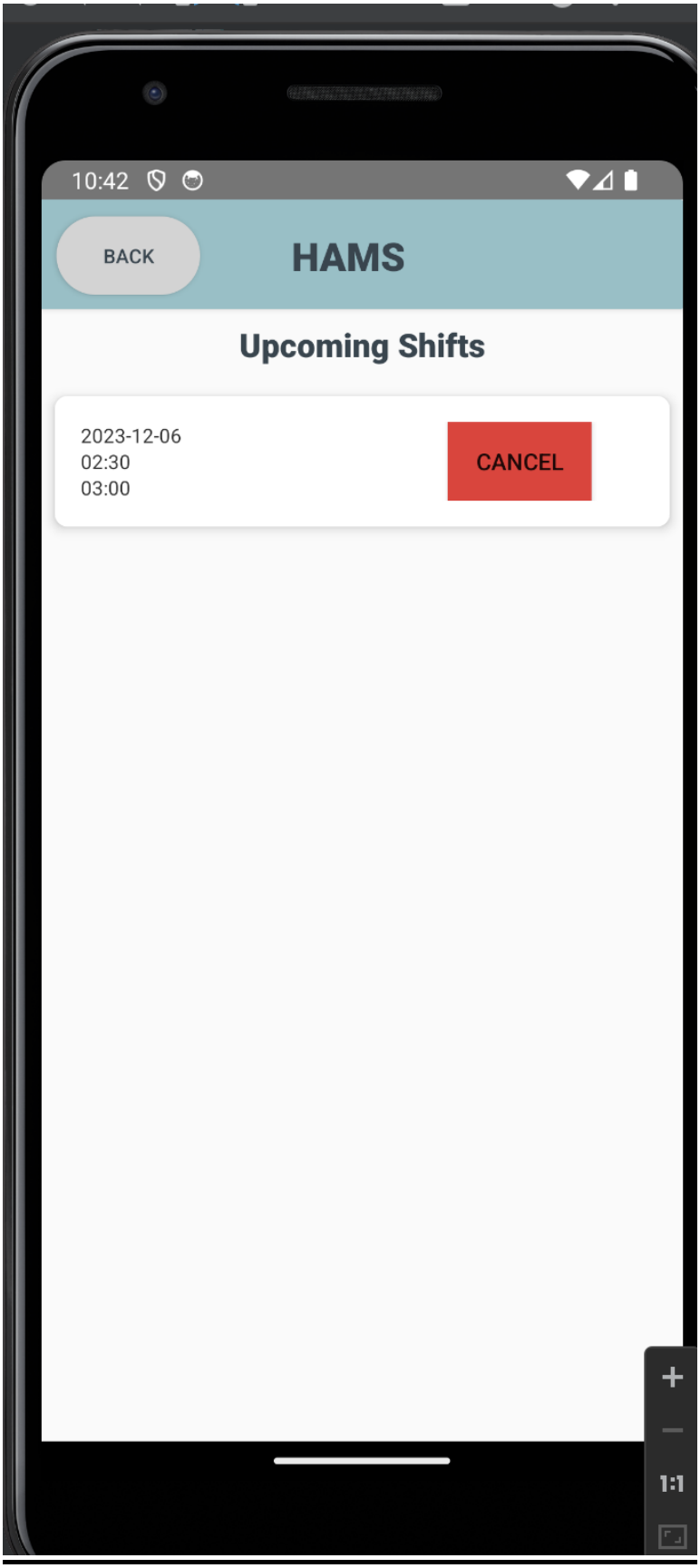

10:36
Register as a Doctor
First Name
Last Name
Email Address
Password
Phone Number
Address
Employee Number
Specialties (comma seperated)
SUBMIT
BACK

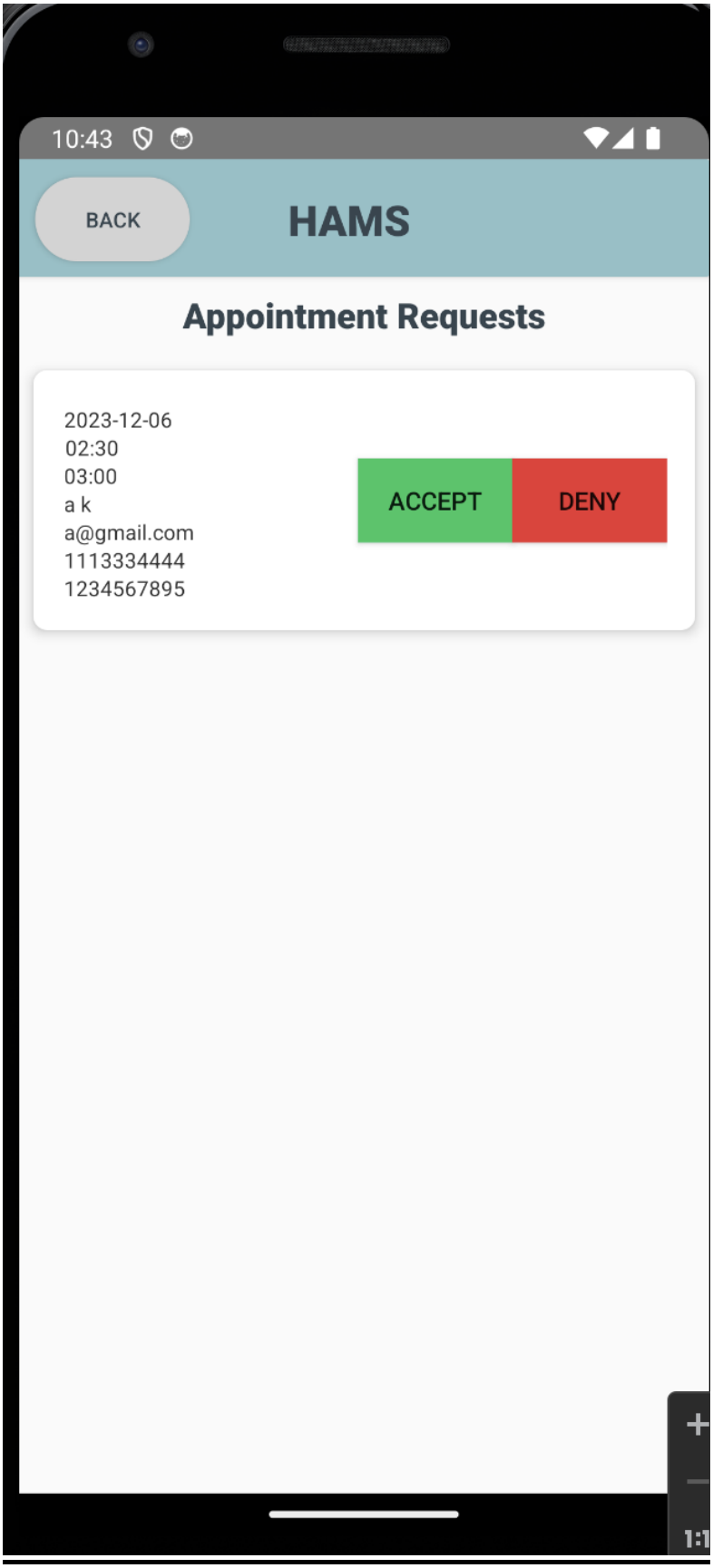

10:40
LOG OUT
Healthcare Appointment Management System
Welcome Patient!
Status: Accepted
REQUEST APPOINTMENT
UPCOMING APPOINTMENTS
PAST APPOINTMENTS

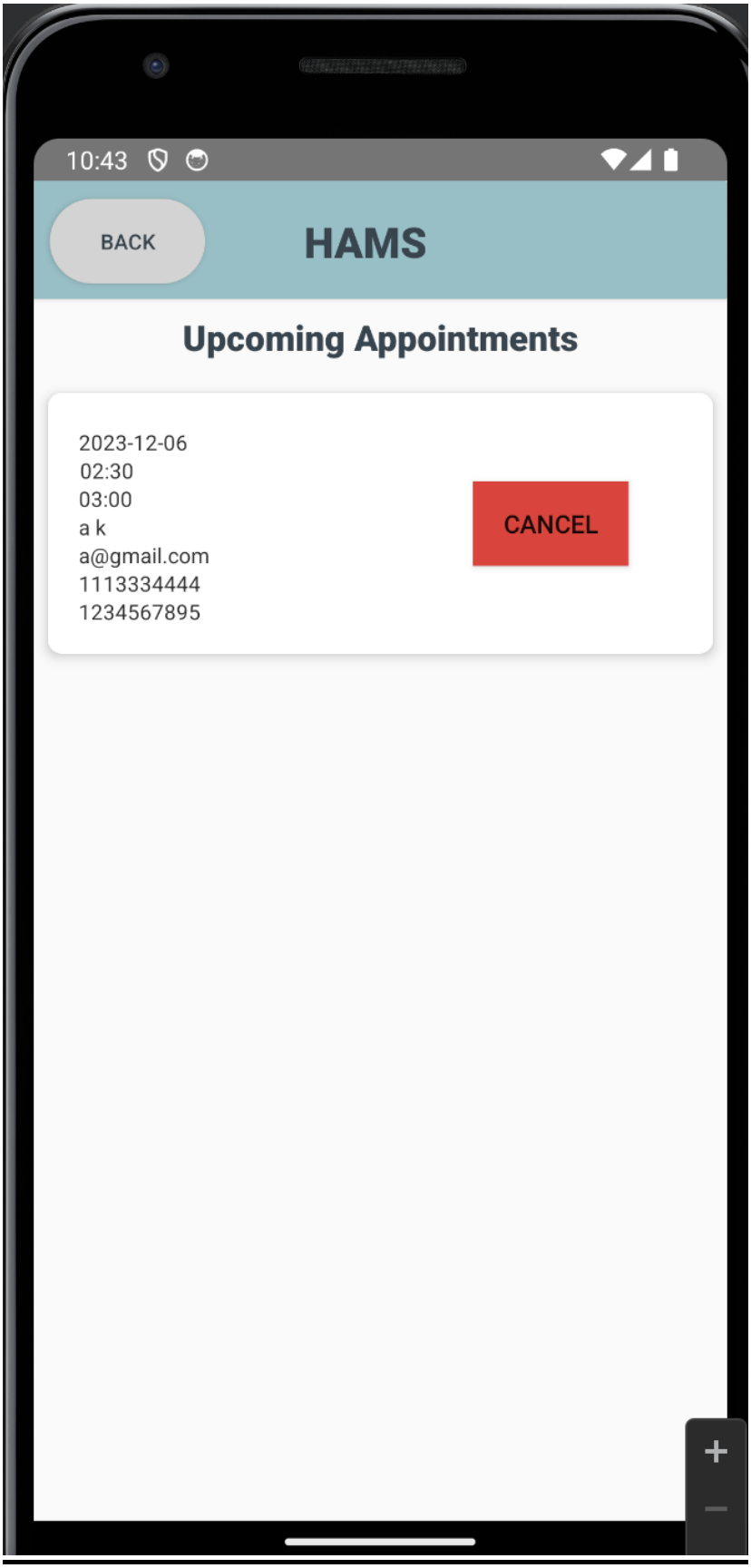

10:40
y
Bukayo Saka
Neurology
SELECT
Y K
dental
SELECT
Yusuf Khan
eye, dental
SELECT
BACK
y
you
yes
1:1

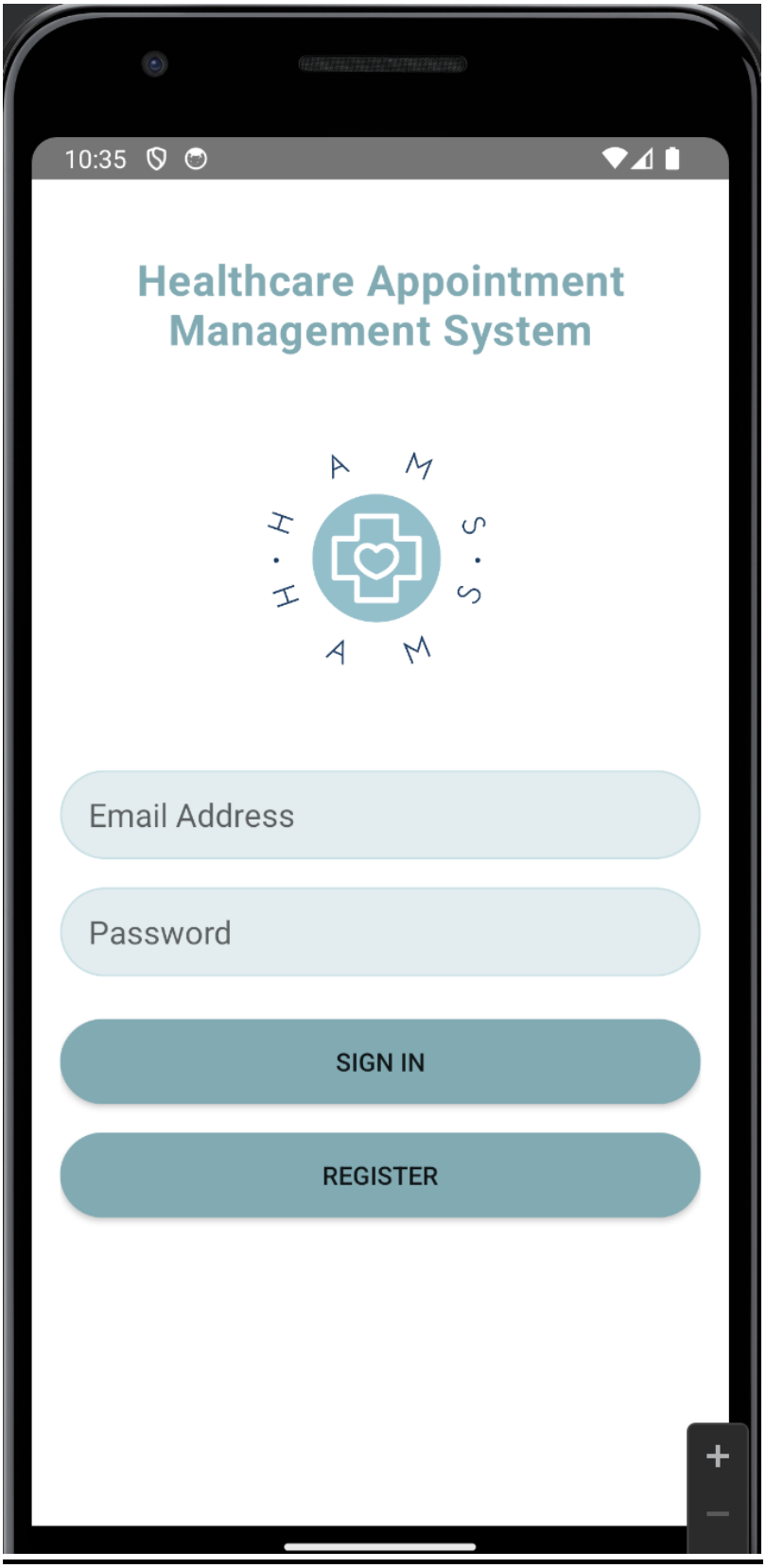

10:38
LOG OUT
Healthcare Appointment Management System
Welcome Doctor!
Status: Accepted
UPCOMING SHIFTS
UPCOMING APPOINTMENTS
PAST APPOINTMENTS
APPOINTMENT REQUESTS
CREATE NEW SHIFT
Auto Accept Appointments

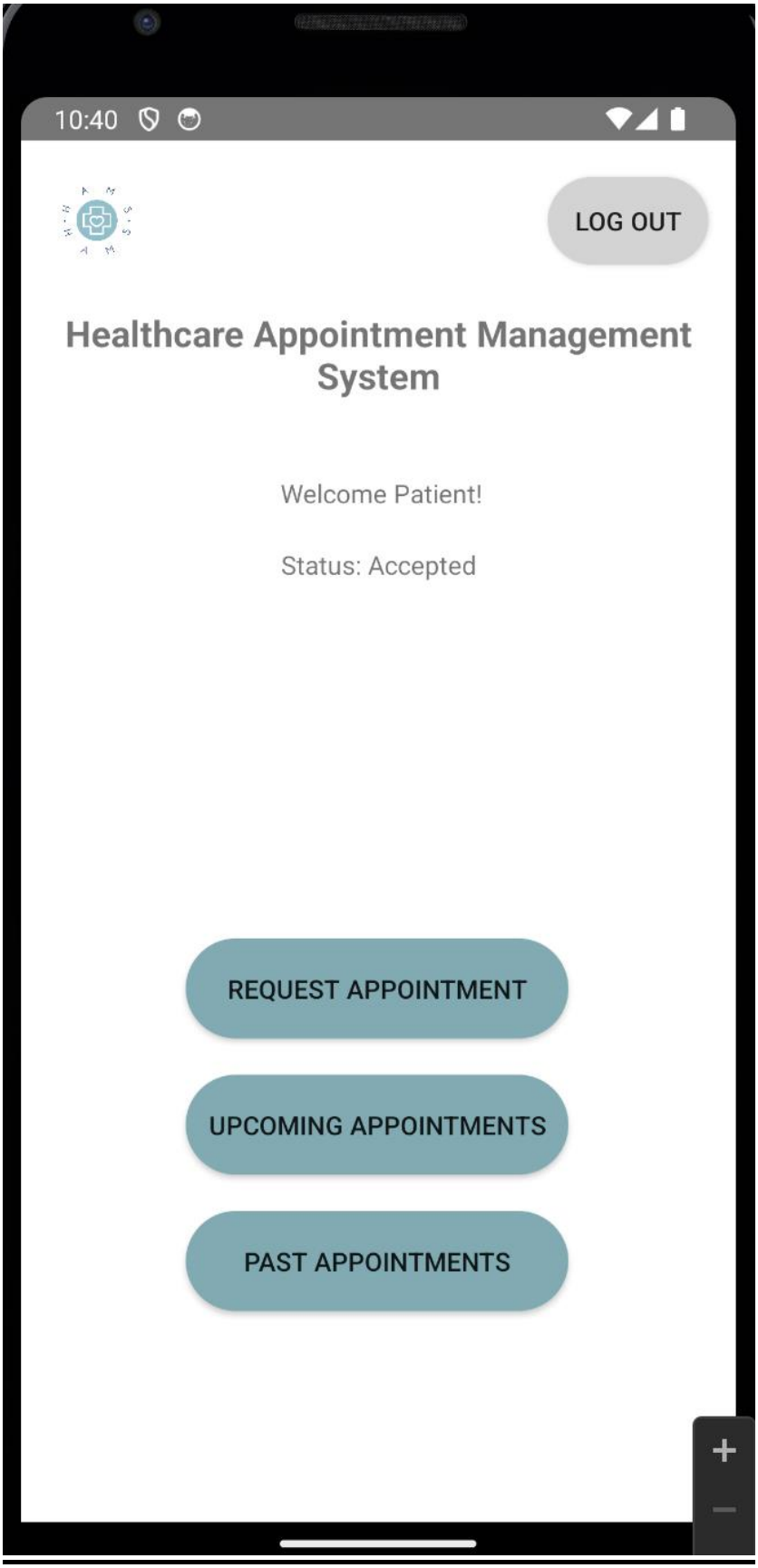

10:38
BACK
LOG OUT
Create New Shift
Date
Start time
End time
SUBMIT

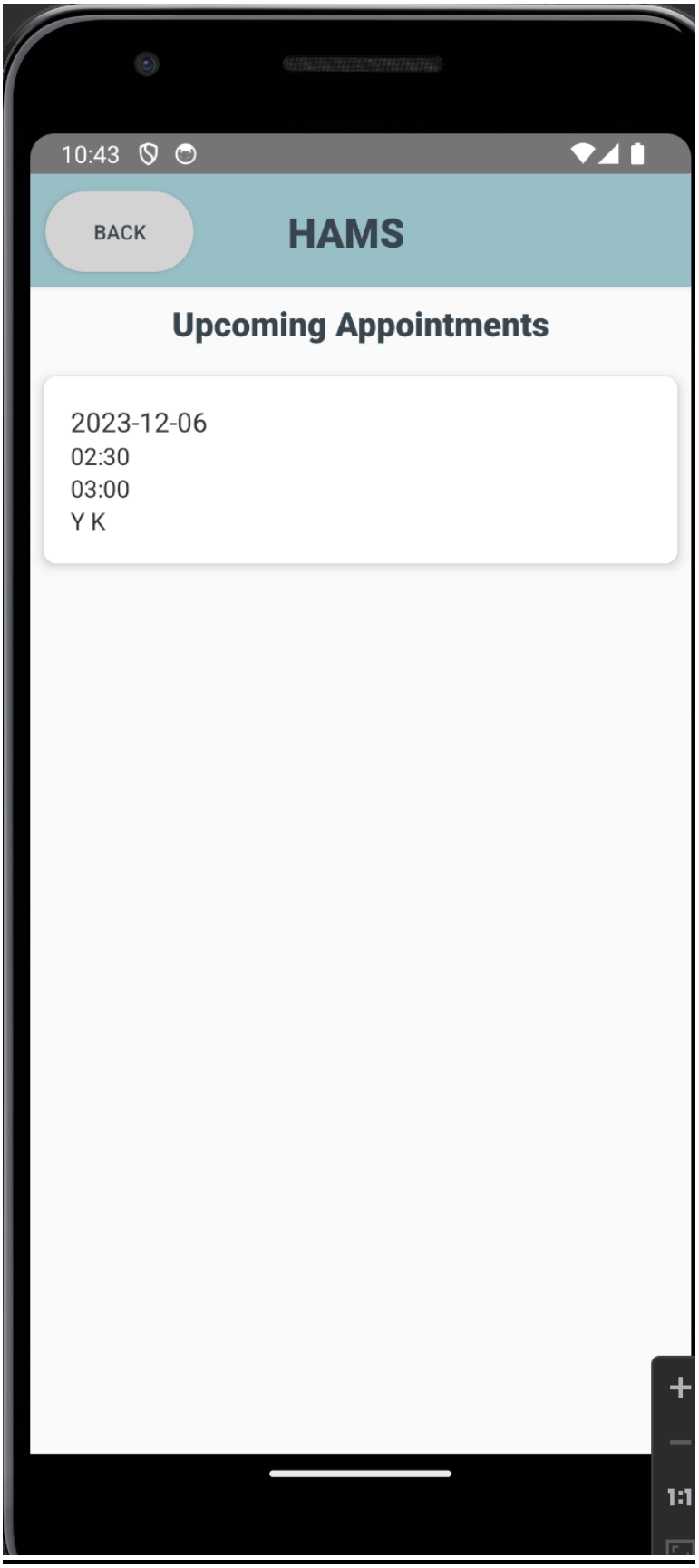

10:42
BACK
HAMS
Upcoming Shifts
2023-12-06
02:30
03:00
CANCEL
1:1


10:43
BACK
HAMS
Appointment Requests
2023-12-06
02:30
03:00
a k
a@gmail.com
1113334444
1234567895
ACCEPT
DENY


10:43
BACK
HAMS
Upcoming Appointments
2023-12-06
02:30
03:00
a k
a@gmail.com
1113334444
1234567895
CANCEL


10:35
Healthcare Appointment Management System
HAMS
Email Address
Password
SIGN IN
REGISTER


10:40
LOG OUT
Healthcare Appointment Management System
Welcome Patient!
Status: Accepted
REQUEST APPOINTMENT
UPCOMING APPOINTMENTS
PAST APPOINTMENTS


10:43
BACK
HAMS
Upcoming Appointments
2023-12-06
02:30
03:00
Y K
1:1