Final Report for the E.A.M.S. Android Project
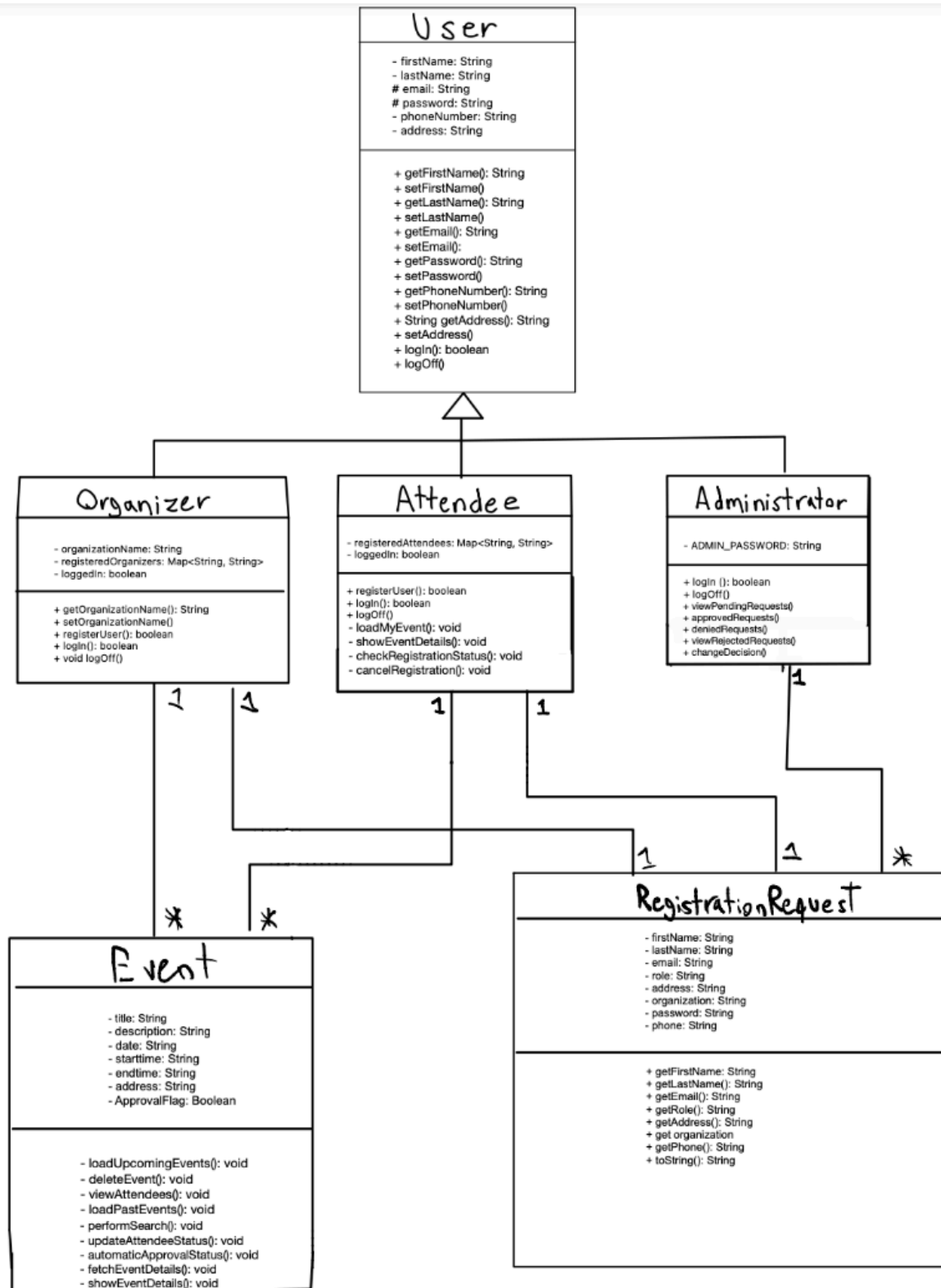
Final Report
E.A.M.S. Android Project
Basil Al Hasan, Aron Christensen, Jorge Guetchom, Rishi Patel, Zain Rizvi, Gunin Walia
University of Ottawa

INTRODUCTION

This report offers an in-depth look at the Event Attendance Management System (EAMS) developed as part of our Android project called CrowdSync. CrowdSync is designed to streamline the event management process for three distinct users: administrator, organizer and attendee to simplify event administration and attendance monitoring. Each user has the ability to use the app with tailored features to address its unique requirements ensuring an intuitive and efficient user experience. The report summarizes our work done through a total of four deliverables, where each deliverable progressively implemented the system's functionality, incorporating new features at each stage to create a scalable android application. In addition to more insight into the app, the report includes an updated UML diagram, detailed breakdown of the group's contributions, reflections on the project and lessons learnt. Through this report, we aim to provide a comprehensive understanding of CrowdSync's development journey, highlighting both the technical achievements and the collaborative efforts that brought the application to life.
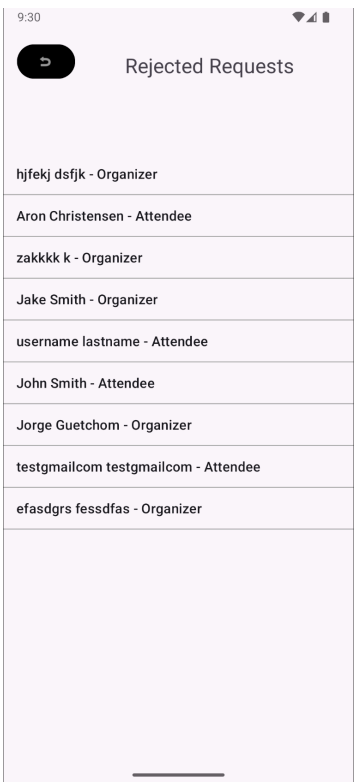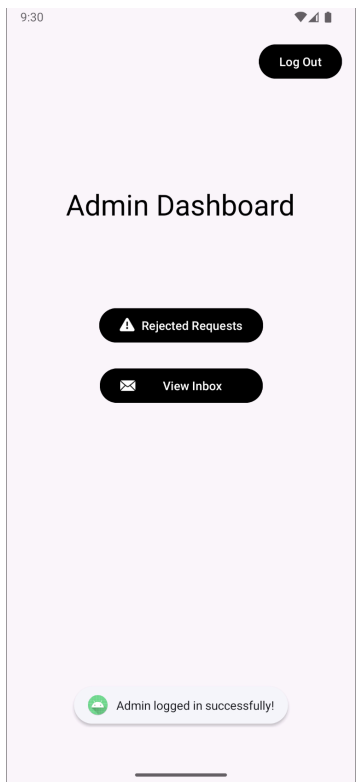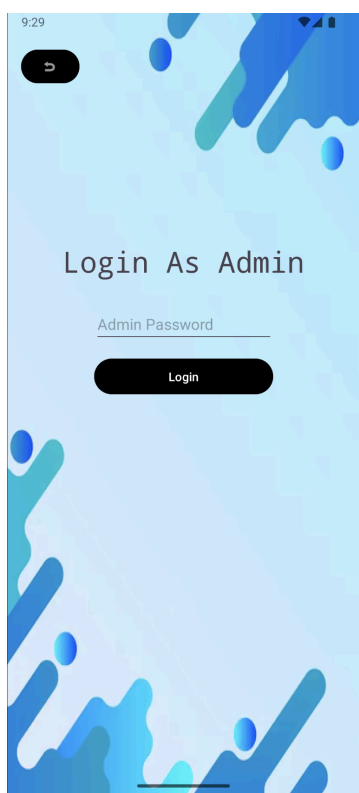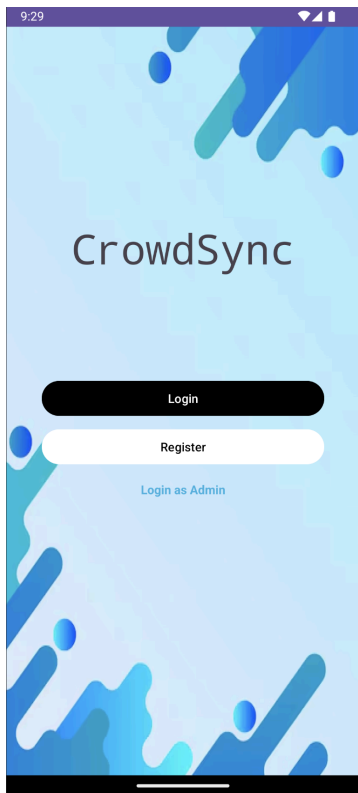
UML DIAGRAM

User

- firstName: String
- lastName: String
email: String
password: String
- phoneNumber: String
- address: String

+ getFirstName(): String
+ setFirstName()
+ getLastName(): String
+ setLastName()
+ getEmail(): String
+ setEmail():
+ getPassword(): String
+ setPassword()
+ getPhoneNumber(): String
+ setPhoneNumber()
+ String getAddress(): String
+ setAddress()
+ logIn(): boolean
+ logOff()

Organizer

- organizationName: String
- registeredOrganizers: Map<String, String>
- loggedIn: boolean

+ getOrganizationName(): String
+ setOrganizationName()
+ registerUser(): boolean
+ logIn(): boolean
+ void logOff()

Attendee

- registeredAttendees: Map<String, String>
- loggedIn: boolean

+ registerUser(): boolean
+ logIn(): boolean
+ logOff()
- loadMyEvent(): void
- showEventDetails(): void
- checkRegistrationStatus(): void
- cancelRegistration(): void

Administrator

- ADMIN_PASSWORD: String

+ login (): boolean
+ logOff()
+ viewPendingRequests()
+ approvedRequests()
+ deniedRequests()
+ viewRejectedRequests()
+ changeDecision()

Event

- title: String
- description: String
- date: String
- starttime: String
- endtime: String
- address: String
- ApprovalFlag: Boolean

- loadUpcomingEvents(): void
- deleteEvent(): void
- viewAttendees(): void
- loadPastEvents(): void
- performSearch(): void
- updateAttendeeStatus(): void
- automaticApprovalStatus(): void
- fetchEventDetails(): void
- showEventDetails(): void

RegistrationRequest

- firstName: String
- lastName: String
- email: String
- role: String
- address: String
- organization: String
- password: String
- phone: String

+ getFirstName: String
+ getLastName(): String
+ getEmail(): String
+ getRole(): String
+ getAddress(): String
+ get organization
+ getPhone(): String
+ toString(): String

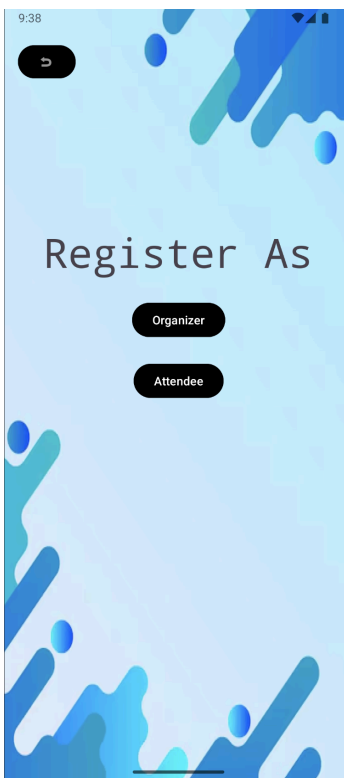1   1   1   1   1   1   *

*   *

GROUP CONTRIBUTIONS

|	Deliverable 1	Deliverable 2	Deliverable 3	Deliverable 4
Basil Al Hasan	Added all functionality for Attendee Added all functionality for Organizer	Add all functionality and methods for Admin Processing Requests (view, reject, approve, and change decision) Bug Fixes UI Changes	Bug Fixes UI Changes	Added cancel Registration Feature for Attendee Bug Fixes Report
Aron Christensen	Integrated functionality with UI Bug Fixes Demo Video & submission	Bug Fixes Demo Video & Submission	Demo Video & Submission	Demo Video & Submission Bug Fixes
Jorge Guetchom	UML Diagram Bug Fixes	UML Diagram Added notifications	UI Changes UML Diagram	UI changes to Admin Bug Fixes UML Diagram
Rishi Patel	Bug Fixes Added Field Verification Added Database Created UI Account Creation Log Off Functionality	Created Admin UI Bug Fixes Integrated Admin with Database Field Validations	Created Organizer Welcome Page Added all Functionality for Organizer Integrated Organizer Features with Database Bug Fixes	Added Search and View Event functionality for Attendee Added functionality for Organizer Registration Status Indicator Bug Fixes
Zain Rizvi	GitHub Setup & Created main Classes	Bug Fixes RejectedRequest sFunctionality	CircleCI	Added Junit test cases
Gunin Walia	Added functionality for	Updated Message Dialogs	UI Changes	Added Junit test cases

	Admin		CircleCI	Report

APP SCREENSHOTS

CrowdSync

Login

Register

Login as Admin

Login As Admin

Admin Password

Login

Log Out

Admin Dashboard

⚠ Rejected Requests

✉ View Inbox

Admin logged in successfully!

↩ Rejected Requests

hjfekj dsfjk - Organizer

Aron Christensen - Attendee

zakkkk k - Organizer

Jake Smith - Organizer

username lastname - Attendee

John Smith - Attendee

Jorge Guetchom - Organizer

testgmailcom testgmailcom - Attendee

efasdgrs fessdfas - Organizer

Screen 1: Rejected Requests

Rejected Requests

hjfekj dsfjk - Organizer

Aron Christensen - Attendee

zakkkk k - Organizer

Jake Smith - Organizer

Approve Request from Aron Christensen

Email: aronchristensen@gmail.com
Role: Attendee
Phone: 6131234567
Address: 123 Ring Lane

CANCEL   APPROVE

efasdgrs fessdfas - Organizer

Screen 2: Registration Requests

9:30

Registration Requests

Jobfdsfr ihfbdsvjk - Organizer

Event Attendee - Attendee

Event Organizer - Organizer

hjkl gdfa - Organizer

John Doe - Attendee

John Doe - Attendee

John Jones - Attendee

jorge talom - Organizer

Jjorge Guetchom - Organizer

n m - Organizer

Screen 3: Registration Requests

9:31

Registration Requests

Jobfdsfr ihfbdsvjk - Organizer

Event Attendee - Attendee

Event Organizer - Organizer

hjkl gdfa - Organizer

Request from EventAttendee

Email: ea@gmail.com
Role: Attendee
Phone: 1234535332
Address: 25 Portland St.

Cancel   Deny   Accept

Jjorge Guetchom - Organizer

n m - Organizer

Screen 4: Register As

9:38

Register As

Organizer

Attendee

Screen 1 (9:40)

Steven

Johnson

steven@gmail.com

••••••

1234567890

Long Road

Register

🔋 Registration request sent. Waiting for Admin approval.

Screen 2 (9:39)

Michael

Lee

michalee@gmail.com

••••••

1234567890

Chamberlain Street

Donuts Co.

Register

🔋 Registration request sent. Waiting for Admin approval.

Screen 3 (9:46)

Please enter your credentials:

Username

Password

Login

Screen 4 (9:47)

Log Out

Organizer Dashboard

⊕ Create Event

▶▶ Upcoming Events

◀◀ Past Events

🔋 Login successful!

Screen 1:

⤺

NBA Game

Warriors vs Lakers

Chase Center

2024-12-12

02:30   01:30

Approve All Registrations ⬤

Create Event

☁ End time must be after start time.

Screen 2:

⤺

NBA Game

Wa

2024
Thu, Dec 12

December 2024   ›

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Cancel   OK

Screen 3:

⤺

NBA Game

Warriors vs Lakers

Ch

02:15

00
55   05
50   10
45   15
40   20
35   25
30

⌨ Cancel   OK

Screen 4:

⤺

Upcoming Events

Same Day Test 2 - Mon Dec 02 23:00:12 EST 2024

2 - Tue Dec 03 03:30:33 EST 2024

1 - Tue Dec 03 03:30:33 EST 2024
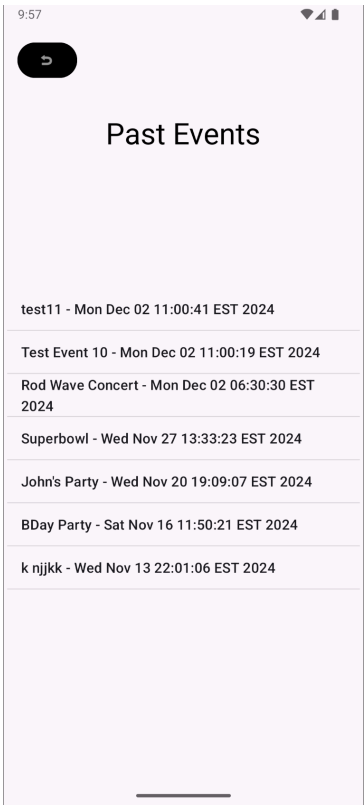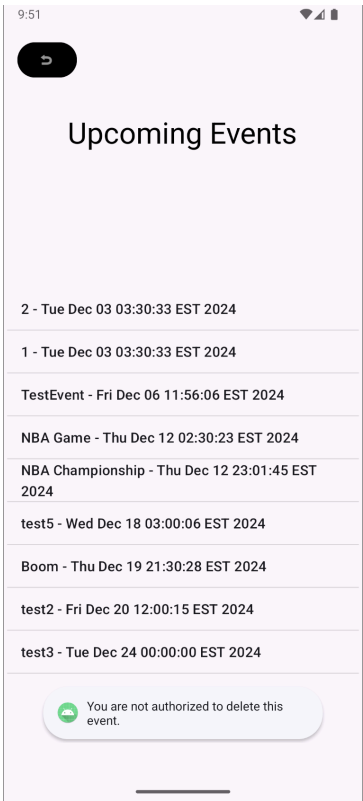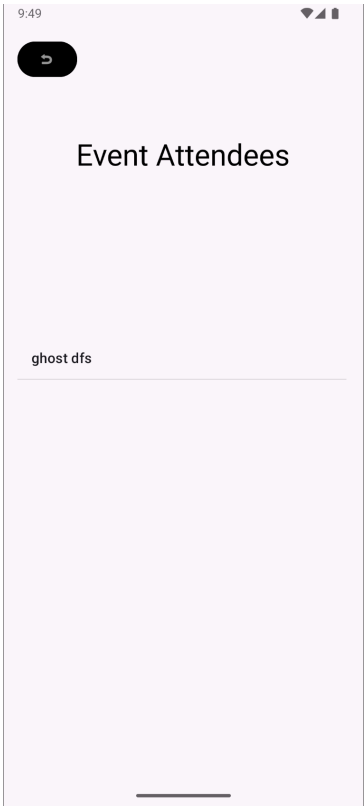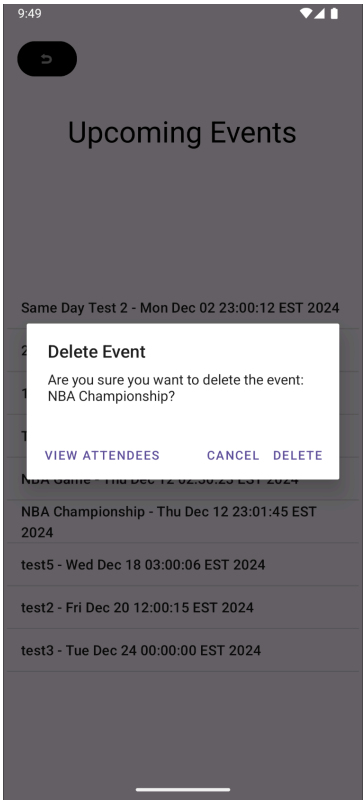
TestEvent - Fri Dec 06 11:56:06 EST 2024

NBA Game - Thu Dec 12 02:30:23 EST 2024

NBA Championship - Thu Dec 12 23:01:45 EST 2024

test5 - Wed Dec 18 03:00:06 EST 2024

test2 - Fri Dec 20 12:00:15 EST 2024

test3 - Tue Dec 24 00:00:00 EST 2024

Upcoming Events

Same Day Test 2 - Mon Dec 02 23:00:12 EST 2024

Delete Event

Are you sure you want to delete the event:
NBA Championship?

VIEW ATTENDEES   CANCEL   DELETE

NBA Game - Thu Dec 12 02:30:23 EST 2024

NBA Championship - Thu Dec 12 23:01:45 EST
2024

test5 - Wed Dec 18 03:00:06 EST 2024

test2 - Fri Dec 20 12:00:15 EST 2024

test3 - Tue Dec 24 00:00:00 EST 2024

Event Attendees

ghost dfs

Upcoming Events

2 - Tue Dec 03 03:30:33 EST 2024

1 - Tue Dec 03 03:30:33 EST 2024

TestEvent - Fri Dec 06 11:56:06 EST 2024

NBA Game - Thu Dec 12 02:30:23 EST 2024

NBA Championship - Thu Dec 12 23:01:45 EST
2024

test5 - Wed Dec 18 03:00:06 EST 2024

Boom - Thu Dec 19 21:30:28 EST 2024

test2 - Fri Dec 20 12:00:15 EST 2024

test3 - Tue Dec 24 00:00:00 EST 2024

You are not authorized to delete this
event.

Past Events

test11 - Mon Dec 02 11:00:41 EST 2024

Test Event 10 - Mon Dec 02 11:00:19 EST 2024

Rod Wave Concert - Mon Dec 02 06:30:30 EST
2024

Superbowl - Wed Nov 27 13:33:23 EST 2024

John's Party - Wed Nov 20 19:09:07 EST 2024

BDay Party - Sat Nov 16 11:50:21 EST 2024

k njjkk - Wed Nov 13 22:01:06 EST 2024

Search for an event

NBA

NBA Game

Description: Warriors vs Lakers

Start Time: Thu Dec 12 02:30:23 EST 2024
End Time: Thu Dec 12 06:30:23 EST 2024
Address: Chase Center

Close   Register

Search for an event

NBA

Search
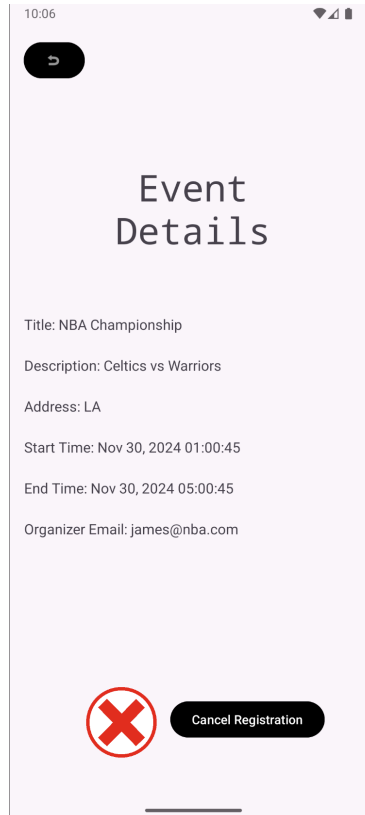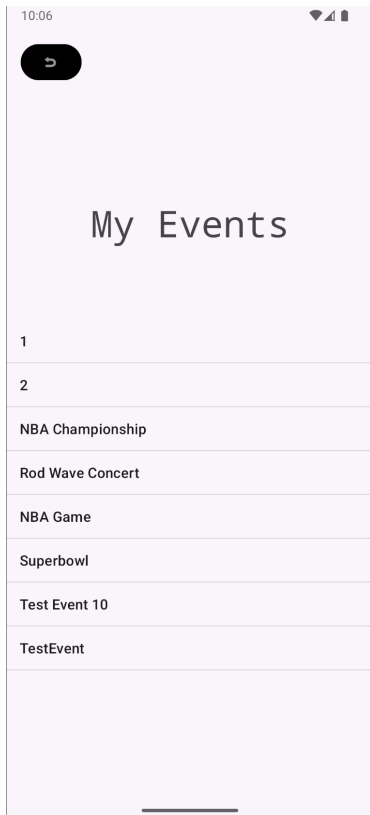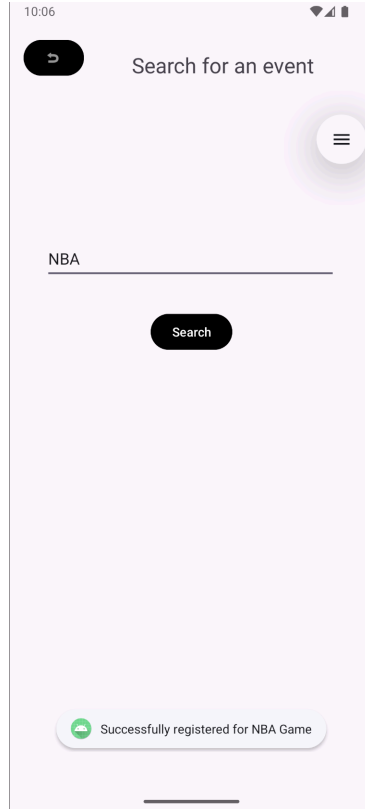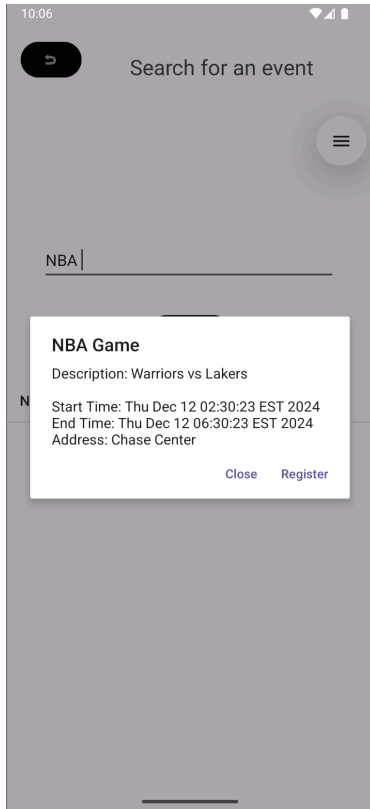
Successfully registered for NBA Game

My Events

1

2

NBA Championship

Rod Wave Concert

NBA Game

Superbowl

Test Event 10

TestEvent

Event
Details

Title: NBA Championship

Description: Celtics vs Warriors

Address: LA

Start Time: Nov 30, 2024 01:00:45

End Time: Nov 30, 2024 05:00:45

Organizer Email: james@nba.com

Cancel Registration

Event Details

Title: Rod Wave Concert
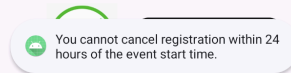
Description: rod wave

Address: rod wave street

Start Time: Dec 02, 2024 06:30:30

End Time: Dec 02, 2024 10:30:30

Organizer Email: james@nba.com

Cancel Registration

Event Details

Title: Rod Wave Concert

Description: rod wave

Address: rod wave street

Start Time: Dec 02, 2024 06:30:30

End Time: Dec 02, 2024 10:30:30

Organizer Email: james@nba.com

You cannot cancel registration within 24 hours of the event start time.

LESSONS LEARNED

Through the development of the Event Attendance Management System (EAMS), we were provided with lots of invaluable experience and lessons in the technical and collaborative aspects of software engineering. We were able to integrate the use of Firebase for real-time database management, implement role (attendee, admin, organizer) based functionality, manage different types of data operations and tackle a variety of conflicts. Through the challenges, we were able to deepen our understanding of mobile application development and practice cleaner coding practices that we learnt from the lectures. We also addressed issues like managing workflows, such as event conflict detection and registration status tracking, and implementing strong field validation. Our knowledge of creating mobile applications has increased as a result of these experiences. Additionally, we were able to translate our theoretical understanding provided through lectures and notes into a practical solution with the CrowdSync app. Furthermore, we were able to use many different tools and resources such as GitHub, Android Studio, Firestore and CircleCI to develop our foundational knowledge from labs. Using GitHub for code integration and version control, allowed us to enhance our communication and cooperation tactics from a teamwork standpoint. These procedures enabled us to adjust to obstacles and guarantee that every team member was a contributor. Overall, the experience highlighted the critical role of planning, testing, and collaboration in creating a successful application while preparing us to tackle future challenges we may face in our future software development experiences.