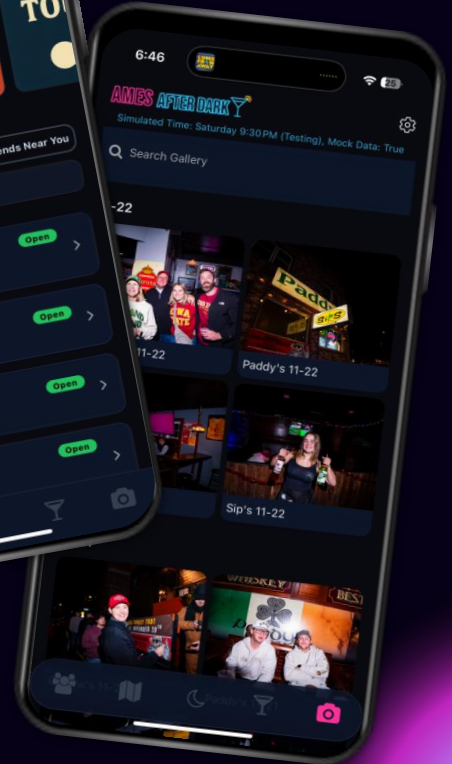


AMES AFTER DARK



Team: sdmay26-42

Members: Chase A, Nate C, Jaya D, Nathan K,
Analyn S, Maggie S, Geni W

Advisor: Maruf

Website: <https://sdmay26-42.sd.ece.iastate.edu/>

Meet the Devs



Chase Anderson

Client / Project Lead
Full Stack Engineer



Nate Couture

DevOps Lead
Back-End Engineer



Jaya Davis

Team Communication Lead
Front-End Engineer



Nathan Krieger

Client Liaison
Full Stack Engineer



Analyn Seeman

Project Manager
Front-End Engineer



Maggie Sullivan

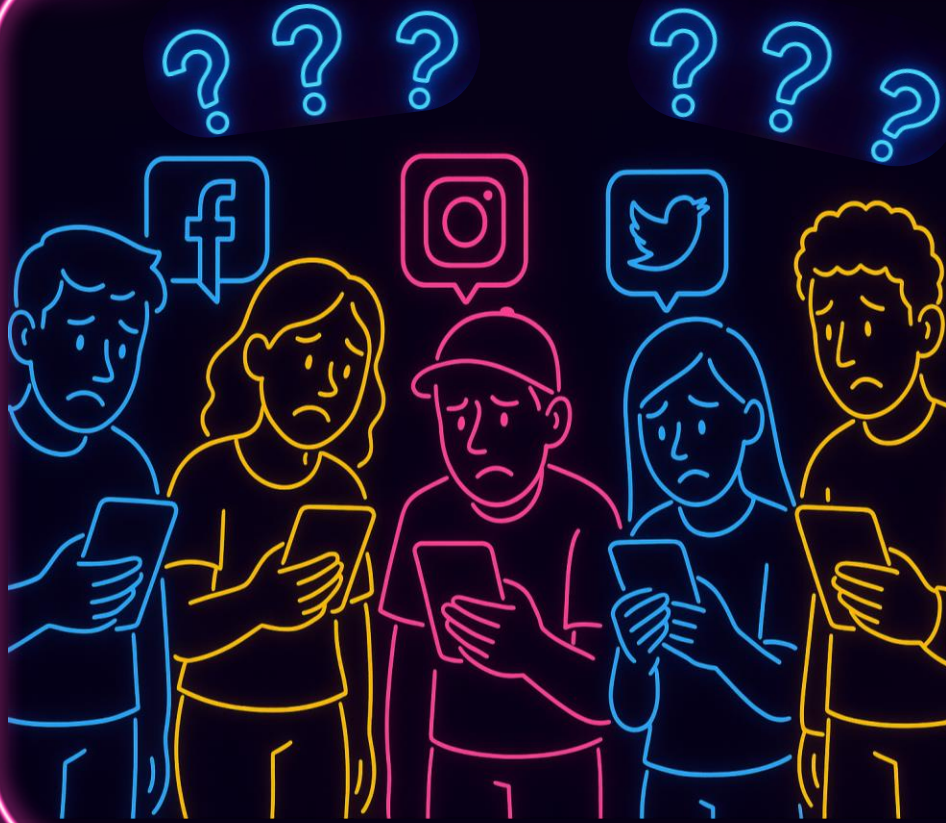
Documentation Lead
Full Stack Engineer



Geni Williams

Meeting Scribe
Back-End Engineer

Project Overview



The Problem

No single reliable place for nightlife info in Ames, students rely on scattered social posts & word-of-mouth.

Project Overview

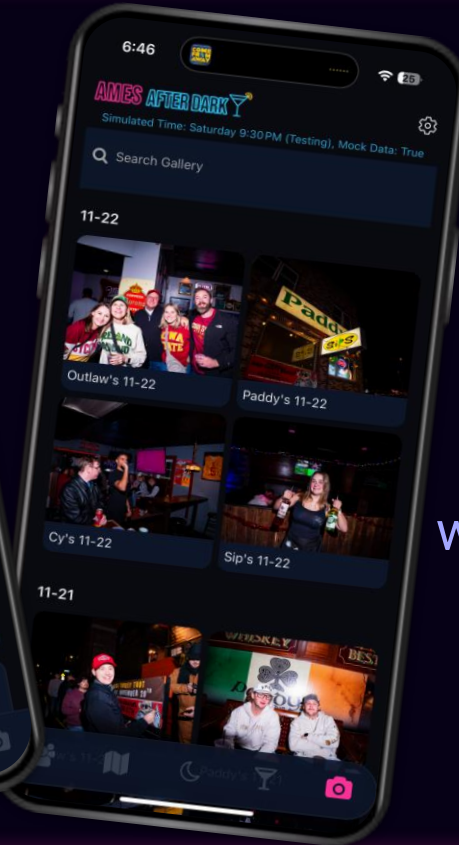
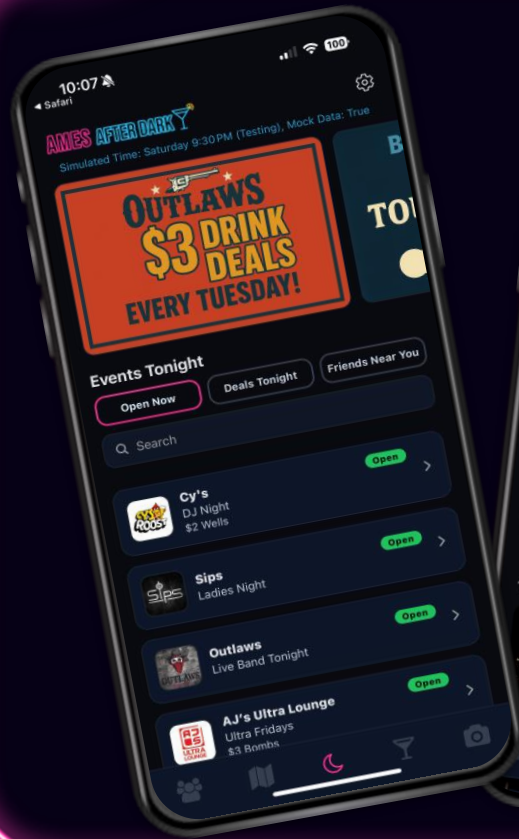
AMES AFTER DARK



The Solution

A cross-platform mobile app where users can discover events, find bar specials, see where their friends are, and stay safe going out

Project Overview



The Solution

A cross-platform mobile app where users can discover events, find bar specials, see where their friends are, and stay safe going out

Our Users

College Students



- Iowa State & Nearby Schools
- Quick Info/Updates
- Safety

Ames residents



- Up-to-date bar/event info
- Ability to explore New Bars

Bar owners



- Post deals and events
- Reach more customers

Functional Requirements

Core Features



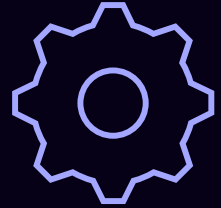
- Live events/specials
- Interactive bar map
- Bar Directory
- Weekly galleries w/ downloads

User Interaction



- Secure login/profiles
- Friend connections
- Location opt-in
- Filters

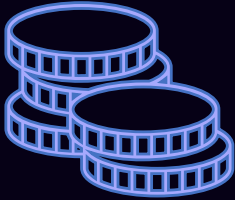
System Operations



- Admin portal
- Cloud backend w/ real-time database
- Support for iOS & Android

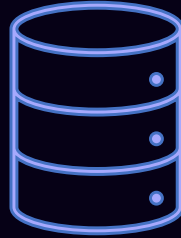
Non-Functional Requirements

Cost



- Free for Everyone
- Future Bar Owner fee

Data Accuracy



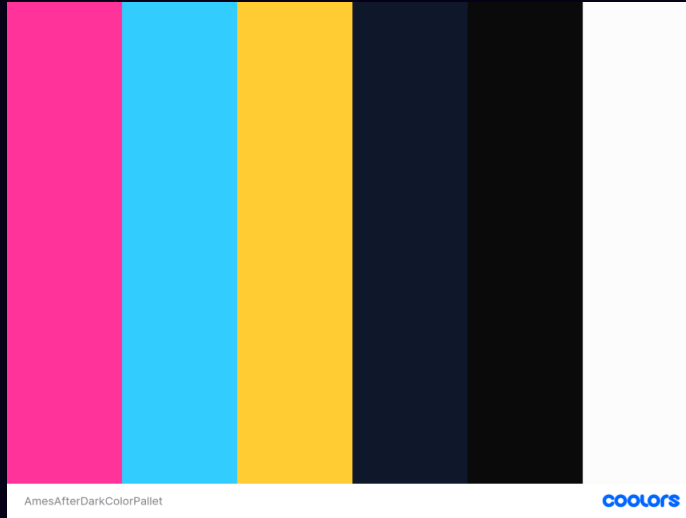
- Bar Hours
- Deals
- Hourly Updates

Accessibility



- Readable Fonts
- Color Contrasts

Accessibility



Colour contrast checker

14.42

Pass ✓ AA Large, Pass ✓ AAA Large, Pass ✓ AA Normal, Pass ✓ AAA Normal

Background colour: #0f172a, Foreground colour: #e5e7eb

RGB, HSL sliders for both colors.

Reverse colours, Save colours

Colour contrast checker

5.26

Fail ✗ AA Large, Fail ✗ AAA Large, Pass ✓ AA Normal, Fail ✗ AAA Normal

Background colour: #0f172a, Foreground colour: #ff3399

RGB, HSL sliders for both colors.

Reverse colours, Save colours

Colour contrast checker

9.54

Pass ✓ AA Large, Pass ✓ AAA Large, Pass ✓ AA Normal, Pass ✓ AAA Normal

Background colour: #0f172a, Foreground colour: #33ccff

RGB, HSL sliders for both colors.

Reverse colours, Save colours

Colour contrast checker

11.85

Pass ✓ AA Large, Pass ✓ AAA Large, Pass ✓ AA Normal, Pass ✓ AAA Normal

Background colour: #0f172a, Foreground colour: #ffcc33

RGB, HSL sliders for both colors.

Reverse colours, Save colours

Constraints & Considerations



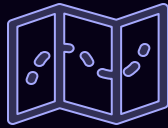
No in-app
ticket sales or
payments



Rely on free-tier
cloud hosting



Data Manually
Curated

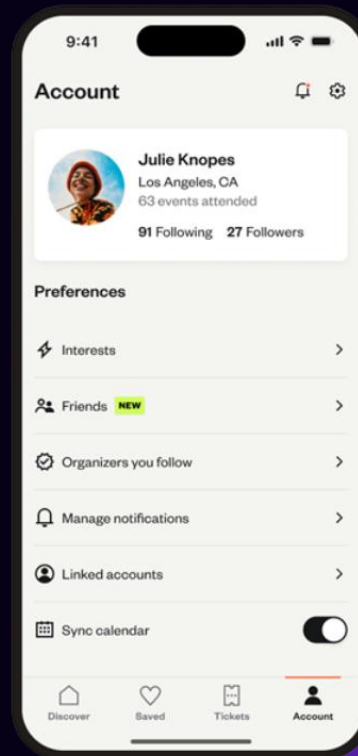
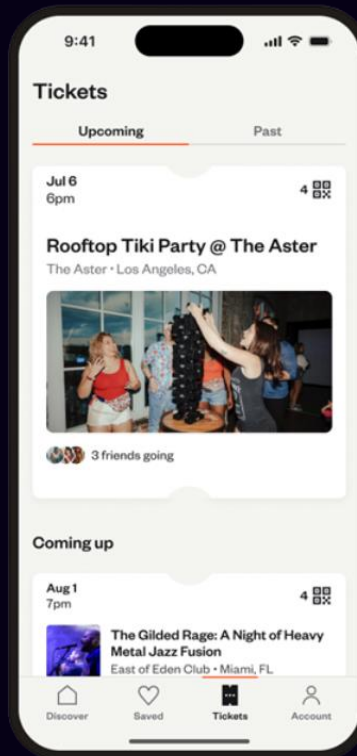
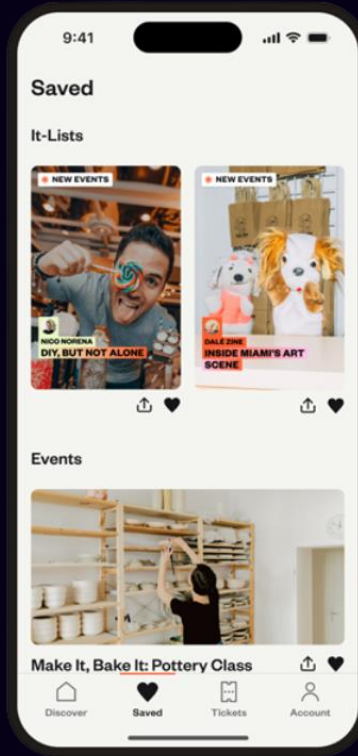
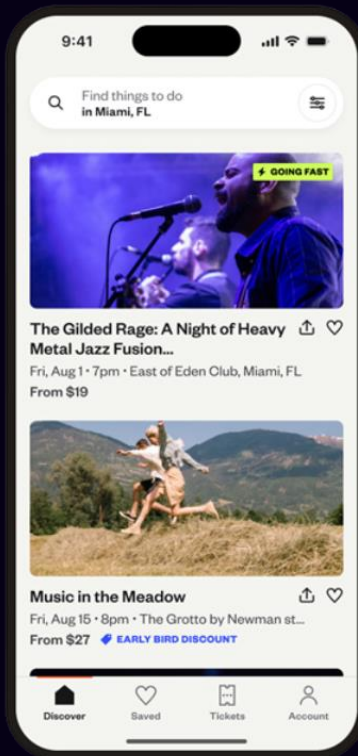


User location
restricted to
mutual friends

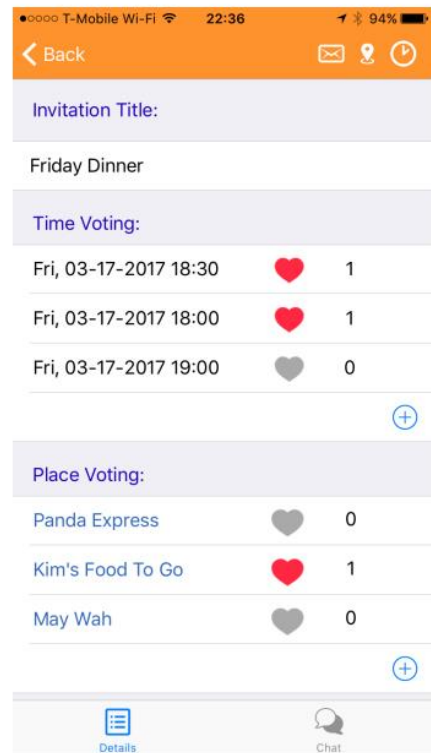
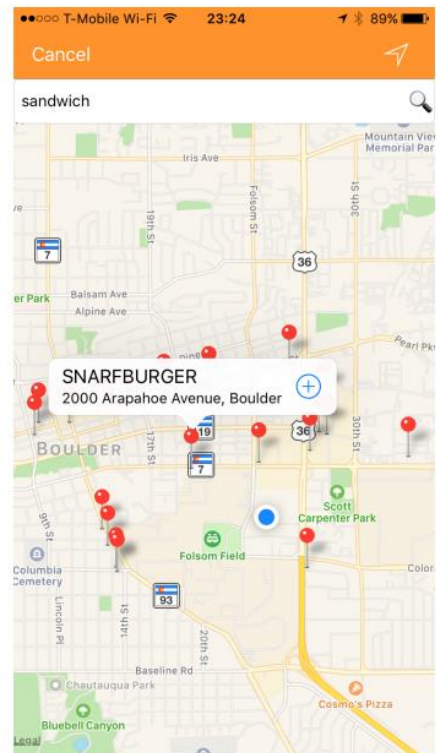
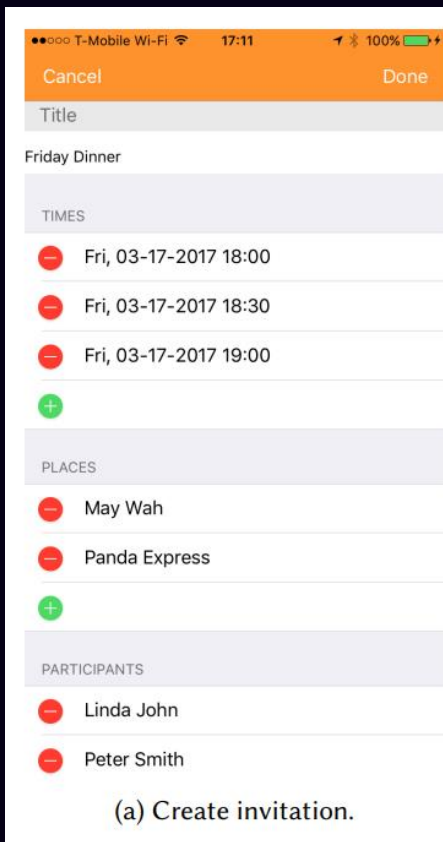


Limited
Development
Time

Market & Prior Work: Eventbrite



Market & Prior Work: OutWithFriendz



Risks & Mitigations

Location Privacy

High Risk



- Mutual opt-in sharing
- Geo-fence
- No location history data

Security & Access

High Risk



- Auth0-based login
- Encrypted data
- Follow ISO/IEC 27001

Bar Participation

Medium Risk



- Utilize bar connections
- Offer free onboarding
- Pitch value

Third-Party Dependency

Medium Risk



- Caching responses
- Retry logic/limit handling
- Backup images
- Alternate provider plan

Detailed Design

Technology Stack (Frontend)



React



Technology Stack (Backend)



Technology Stack (DB + Server)



PostgreSQL

aws



Functional Decomposition

Routes

Location Route
LocationRoutes.js

Controllers

Location Controller
LocationController.js

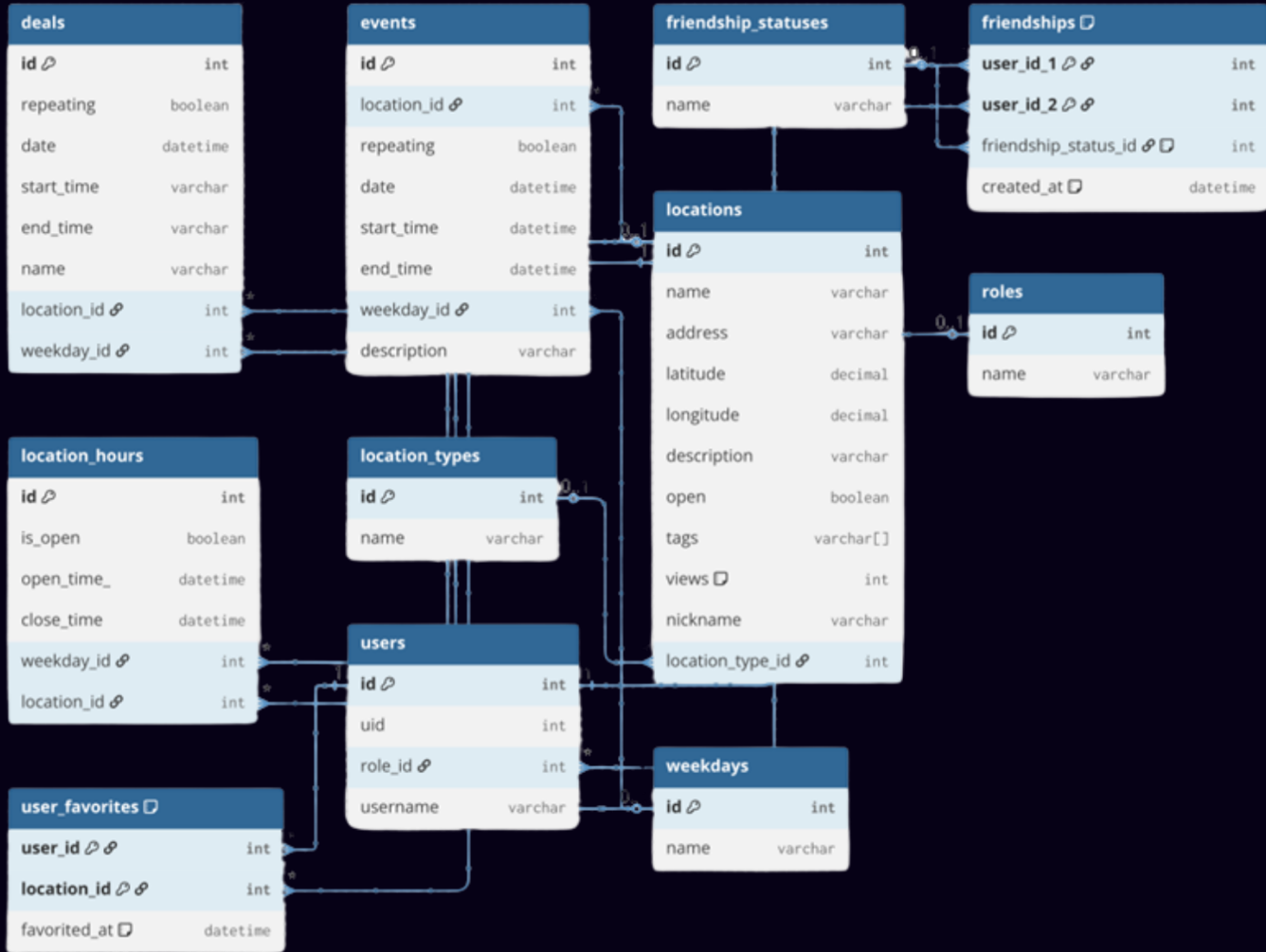
Services

Location Service
LocationService.js

Express API
Index.js

Prisma
Client
+
Database

Functional Decomposition



Authentication Flow

Ames After Dark

Sign In



Welcome

Log in to dev-lz0c3j2voxj6hy6v to continue to Ames After Dark.

Email address*

Password*



[Forgot password?](#)

Continue

Don't have an account? [Sign up](#)

OR



Continue with Google



Continue with Facebook

Complete Your Profile

Birthday

YYYY-MM-DD

Phone Number

+1234567890

Complete Profile

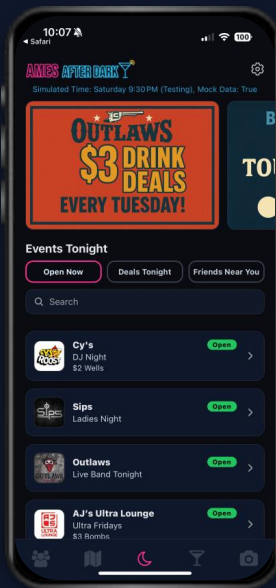
UI/UX Overview (Navigation)



Account



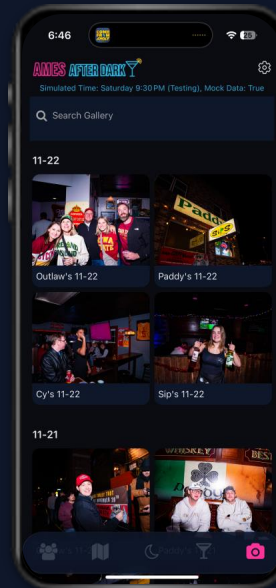
Maps



Tonight



Bars



Gallery

Tonight Page

Open Now

- Live Bar List
- Search all Bars
- See Events and Deals



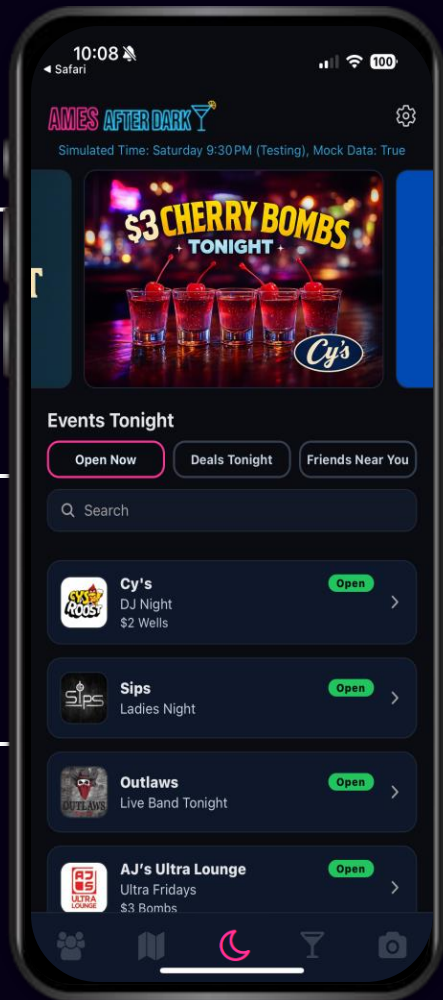
A card for 'Cy's DJ Night' with a 'Cy's ROOST' logo, 'DJ Night' text, '\$2 Wells' price, and a green 'Open' button with a right arrow.

Deals Tonight

- All deals in search
- Scroll featured deals
- Tab any deal for details

Friends Near you

- Quick meet-up view
- Friends bar locations
- Tap to navigate



Tonight Page

- Live Bar List **Open Now**
- Search all Bars
- See Events and Deals

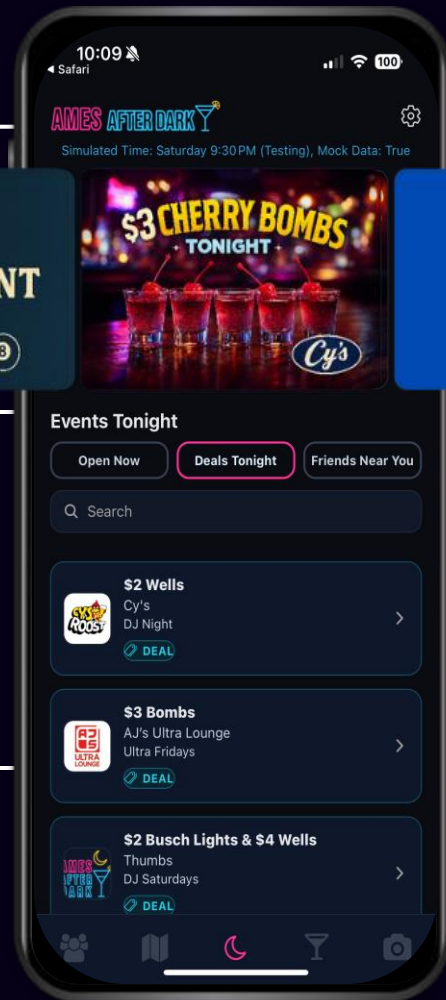


Deals Tonight

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Tonight Page

Open Now

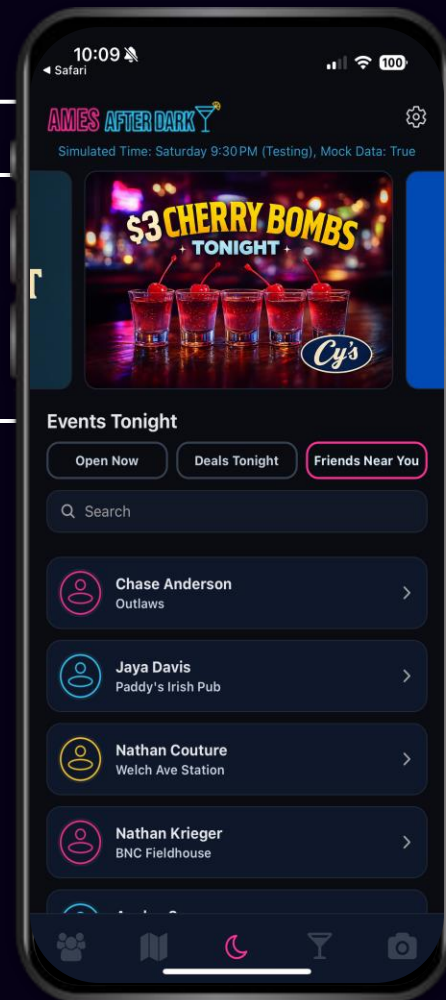
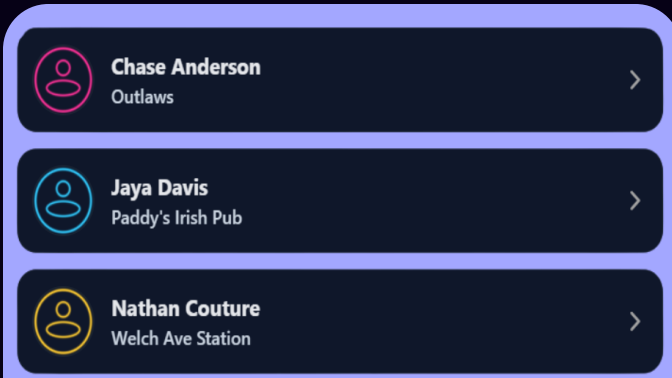
- Live Bar List
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Deals Tonight

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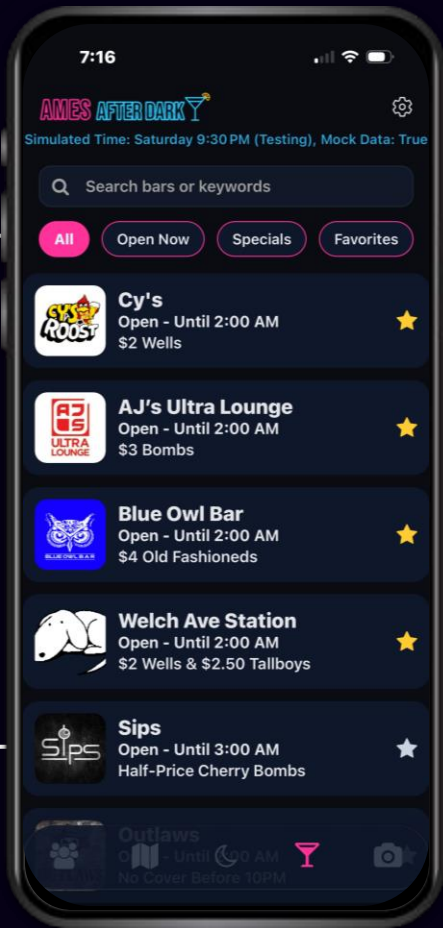
Bar Page

Search & Filters

- Name search
- All / Open Now / Specials / Favorites
- Real-time "open now" updates

Bar Cards

- Logo, name, hours
- First special/event preview
- Tap to see bar profile



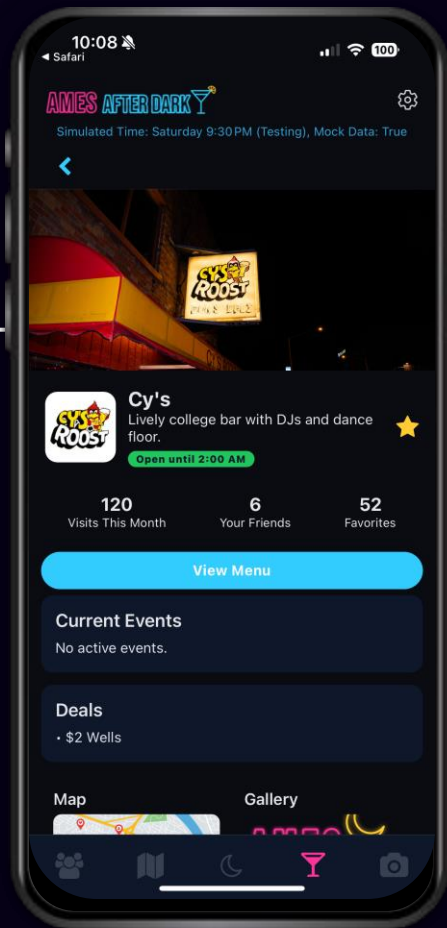
Favorites

- Quick star toggle
- Local session-based
- Updates instantly

Bar Page

Bar Overview

- Cover photo & logo
- Description & hours
- Live status pill
- Map & Gallery navigation below



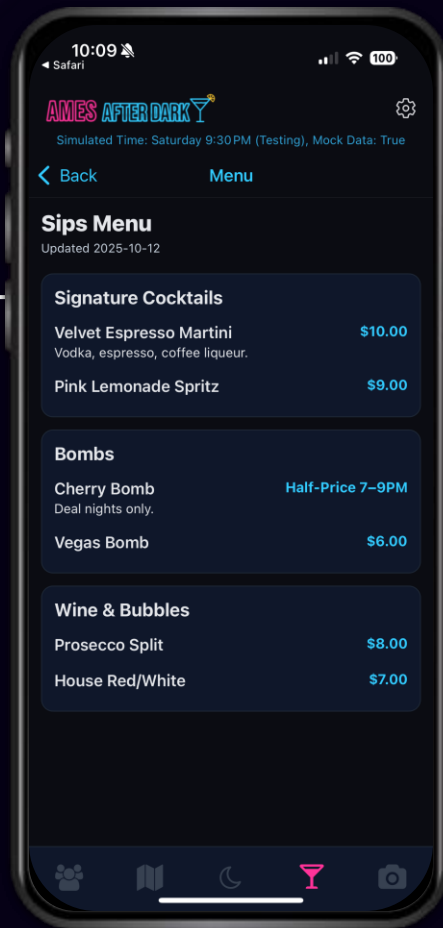
Events & Deals

- Active specials & events
- Clean empty-state messaging
- Real-time data from backend

Bar Page

Sectioned Menu

- Grouped items (drinks, specials, etc.)
- Item description & pricing
- Scrollable layout



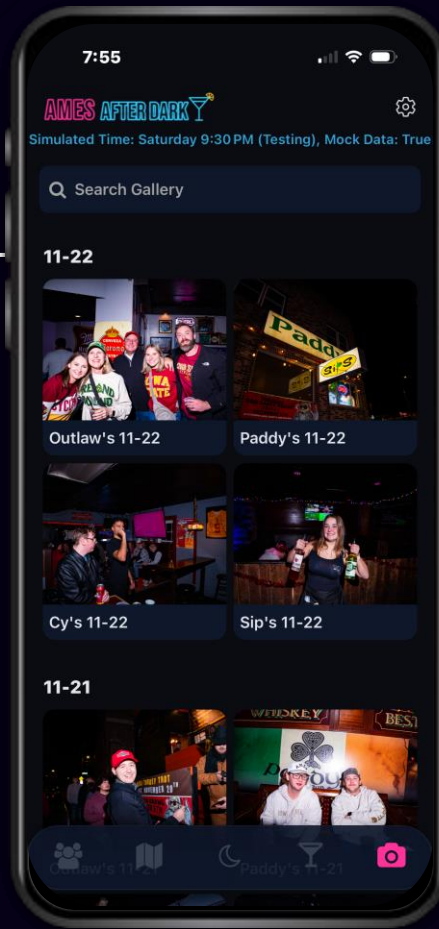
Dynamic Data

- Fetched per bar
- Auto-updates with bar changes
- "Last updated" timestamp

Gallery Page

Album Organization

- Date & venue-grouped albums
- Search bar
- Two-column album grid



SmugMug Integration

- Thumbnails & on-demand full images
- Supports pagination & date filtering
- Photo metadata linked to album (date, bar)

Gallery Page

Photo Grid & Viewer

- 3-column thumbnail grid
- Tap opens full screen, swipe able viewer
- Pinch/double-tap to zoom



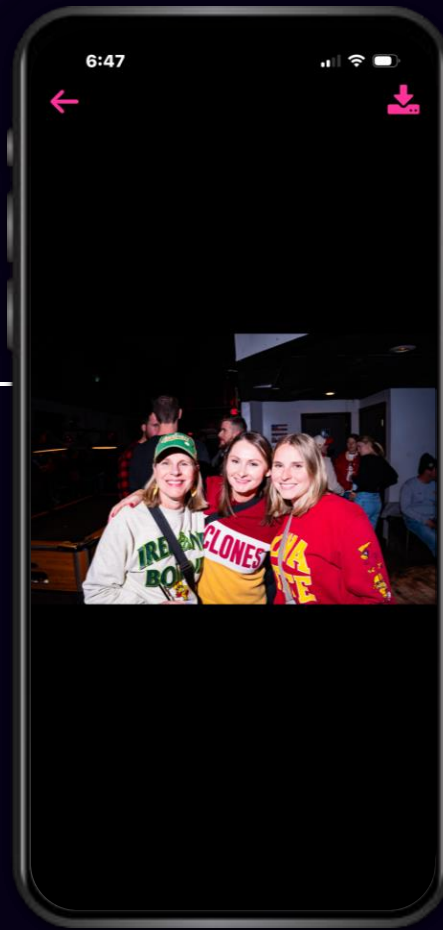
Save & Permissions

- Download via viewer or long-press
- Requests OS photo permission at save time
- Saves to "AmesAfterDark" cache, then media library

Gallery Page

Photo Grid & Viewer

- 3-column thumbnail grid
- Tap opens full screen, swipe able viewer
- Pinch/double-tap to zoom



Save & Permissions

- Download via viewer or long-press
- Requests OS photo permission at save time
- Saves to "AmesAfterDark" cache, then media library

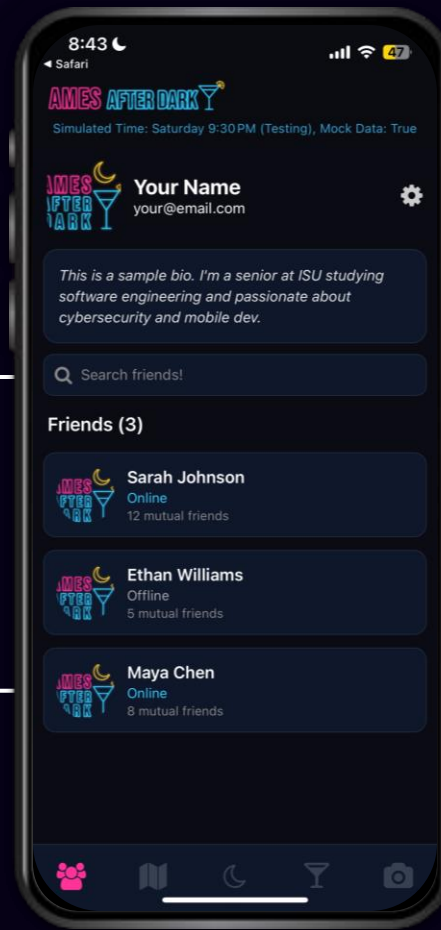
Account Page

Search

- Find Specific Friends

Friend Cards

- Name, Status, Mutuals
- Fetched for each user
- Scrollable
- Tap to view profile



User Profile

- Username, Profile Picture, Bio
- Edit in Settings

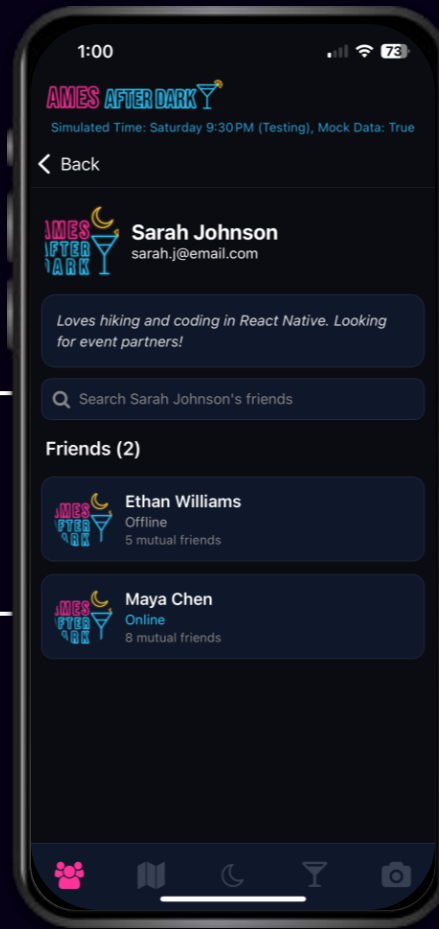
Friend Page

Search

- Find Specific Friends (help find new friends)

Friend Cards

- Name, Status, Mutuals
- Fetched for each user
- Scrollable
- Tap to view profile



User Profile

- Username, Profile Picture, Bio
- Edit in Settings

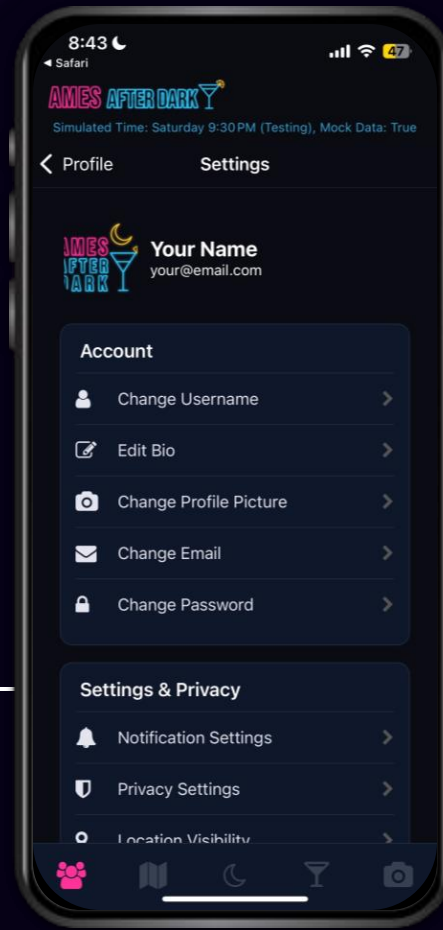
Add Friends

- Manually add friends

Settings Page

Manage Settings

- Notifications, Privacy, Location Visibility



Edit Account

- Modify Username
- Update Bio
- Upload new Profile Picture
- Change Email
- Update Password

Map Page

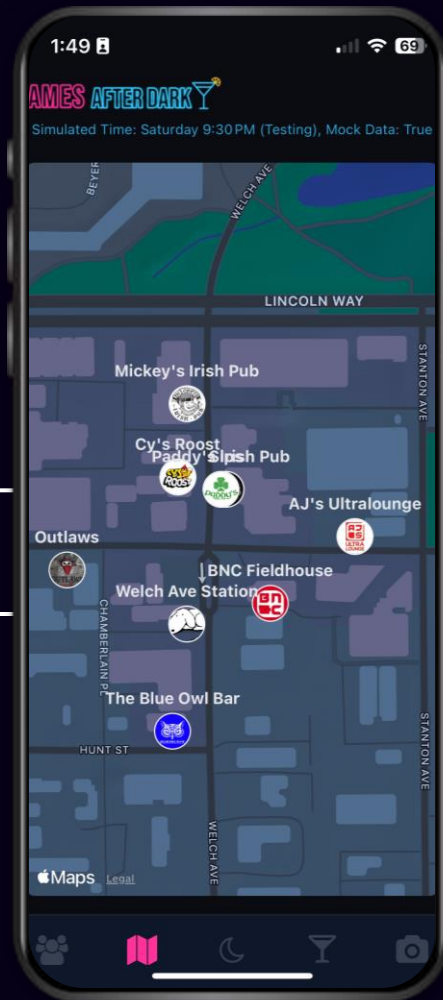
&n

Bar Logos

- Easy to differentiate locations

Location Names

- Only appear when zoomed in on location



Familiar Interface

- Uses Apple Maps or Google Maps (device dependent)

Bar Info

- Quick access to important information

Testing Plan

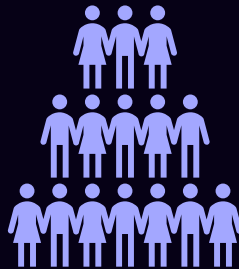
Expand CI/CD

Alerts us of regressions/breaking changes



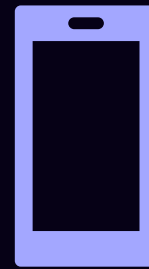
User Testing

Controlled tests for function, layout, and aesthetic



Test Flight

Larger group of testers



Project Timeline

Phase 1

Planning & Design

- Requirements finalized
- UI/UX mockups
- Architecture planned



Phase 2

Core Development

- Build Core functions
- Gallery, Bars, Map, Tonight, Friends



Phase 3

Integration & Testing

- Connect backend
- Test features
- Find Test users
- Fix bugs
Continuously



Phase 4

Final Delivery

- Polish UI
- Add remaining features



Current Project Status

Design & Planning COMPLETE

- Full UI mockups
- Color/theme finalized
- Navigation structure set
- Requirements final draft
- System architecture planned



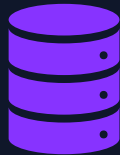
Front-End Progress IN PROGRESS

- All pages built
- Navigation functional
- Mock Data and Images added
- Connecting with live data in progress



Back-End & Data EARLY STAGE

- DB schema completed
- API endpoints functional
- Auth approach chosen
- Admin portal planned



User Testing & Integration NOT STARTED

- No user tests yet
- Map & backend pending
- Feature validation upcoming



Plans For Next Semester

1

Milestone 1

Deploy the System

- Mock → real data
- Map & events & friends fully functional
- Complete Bar Owner Portal
- Talk with the Ames Bar Owners

2

Milestone 2

Testing Deployment

- Launch app for user testing
- Deploy to test flight
- Gather user feedback

3

Milestone 3

Real User Testing

- Release for testing to any user
- Launch advertising on social media
- Market App Locally

AMES
AFTER
DARK



Thank you
Questions?

