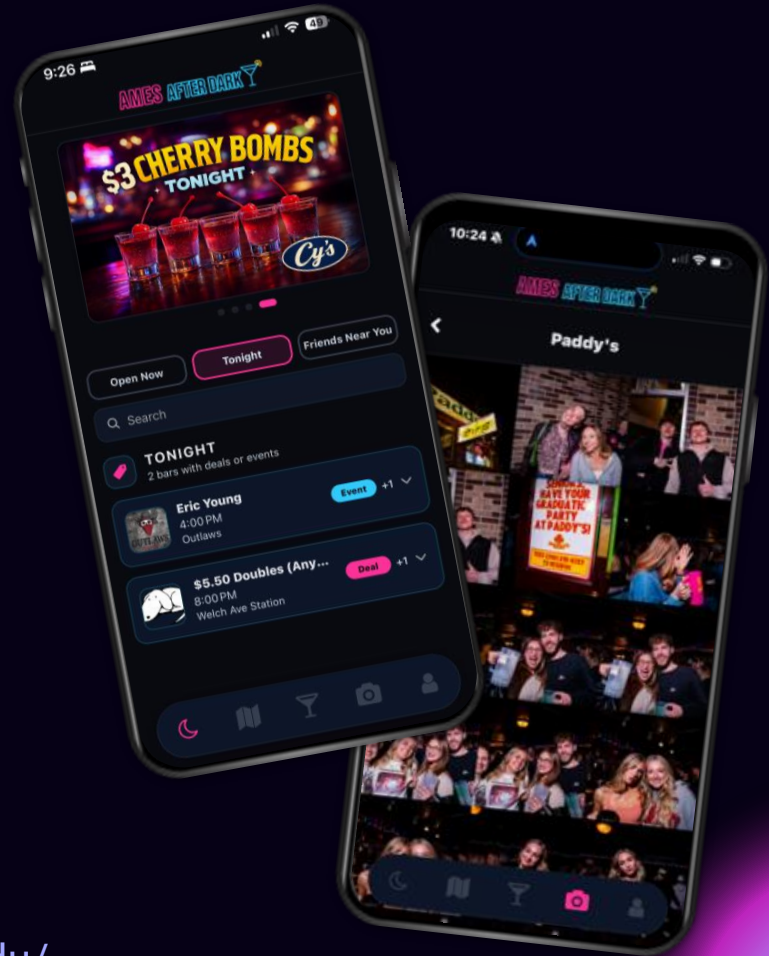


AMES AFTER DARK



Team: sdmay26-42

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

Advisor: Professor 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
Full Stack Engineer



Maggie Sullivan

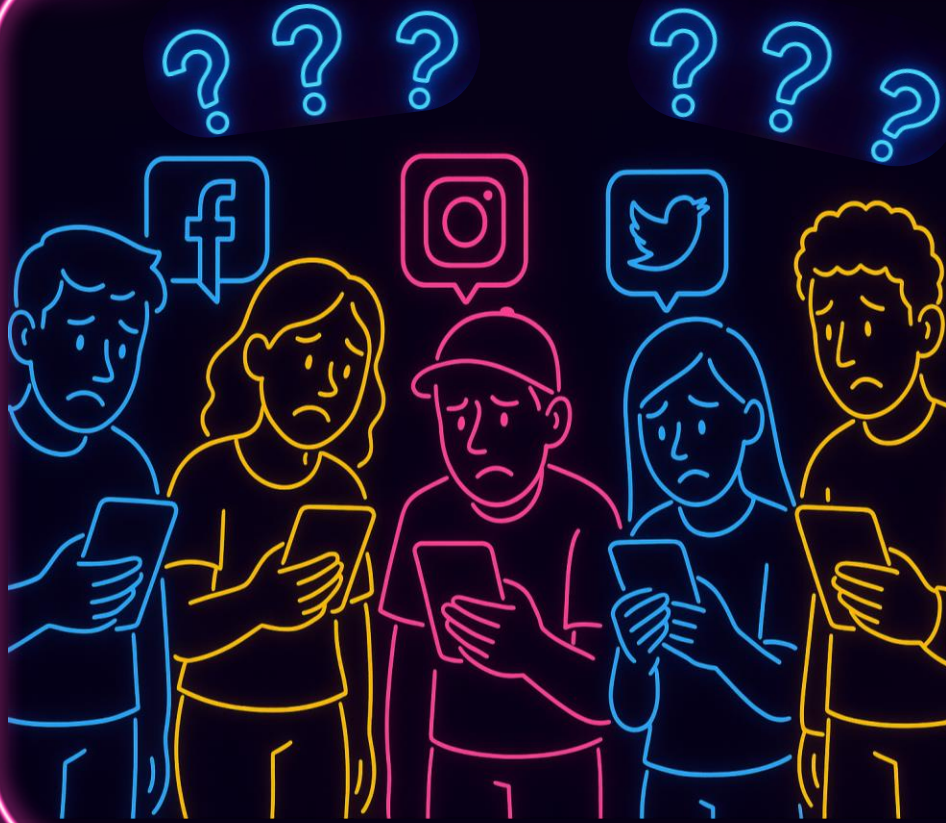
Documentation Lead
Full Stack Engineer



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 venue 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 venue 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 deal/event info
- Ability to explore New Venues

Venue Owners



- Post deals and events
- Reach more customers

Functional Requirements

Core Features



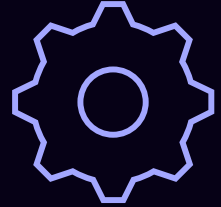
- Live events/specials
- Interactive venue map
- Venue Directory
- Weekly galleries w/ downloads

User Interaction



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

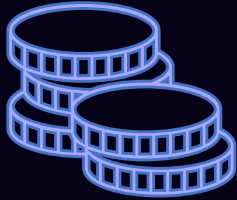
System Operations



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

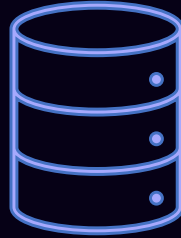
Non-Functional Requirements

Cost



- Free for Everyone
- Future Venue Owner fee

Data Accuracy



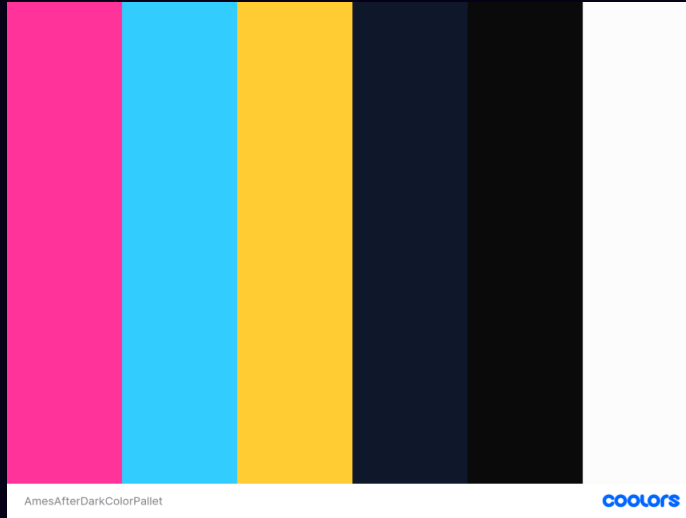
- Venue Hours
- Deals
- Hourly Updates

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 sliders for background and foreground colors.

Reverse colours, Save colours

Colour contrast checker

5.26

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

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

RGB sliders for background and foreground 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 sliders for background and foreground 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 sliders for background and foreground colors.

Reverse colours, Save colours

Constraints & Considerations



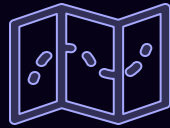
No in-app
ticket sales or
payments



Rely on free-tier
cloud hosting



Data Manually
Curated

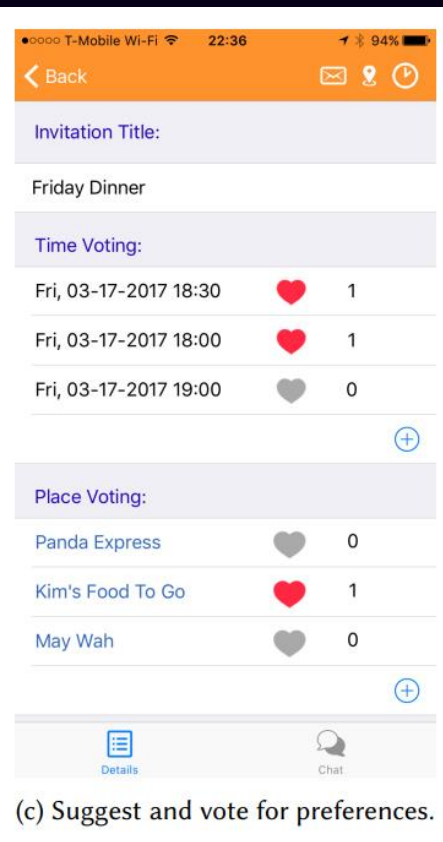
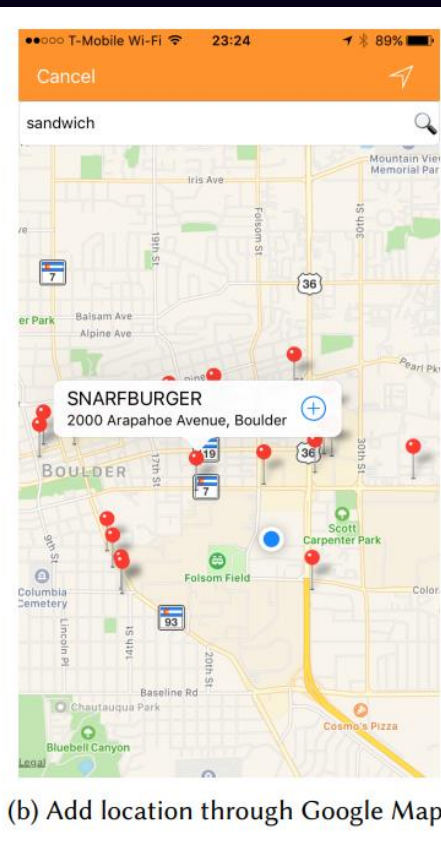
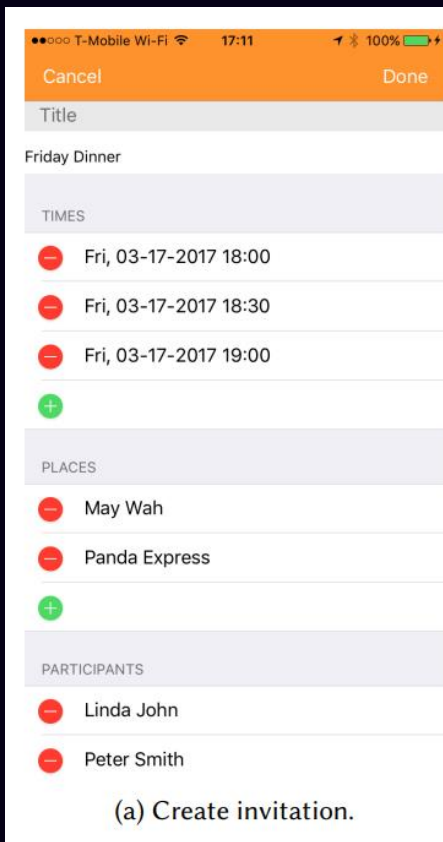


User location
restricted to
mutual friends



Limited
Development
Time

Market & Prior Work: OutWithFriendz



Risks & Mitigations

Location Privacy

High Risk



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

Security & Access

High Risk



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

Venue Participation

Medium Risk



- Utilize venue connections
- Offer free onboarding
- Pitch value

Third-Party Dependency

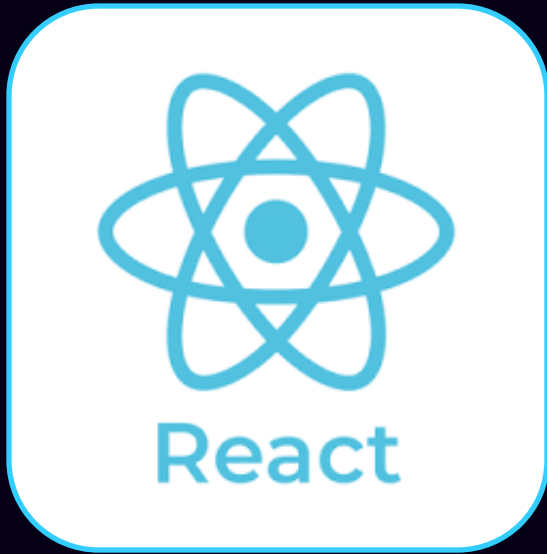
Medium Risk



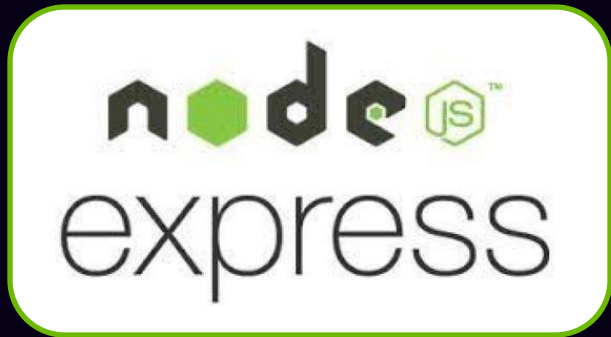
- Caching responses
- Retry logic/limit handling
- Backup images
- Alternate provider plan

Detailed Design

Technology Stack (Frontend)



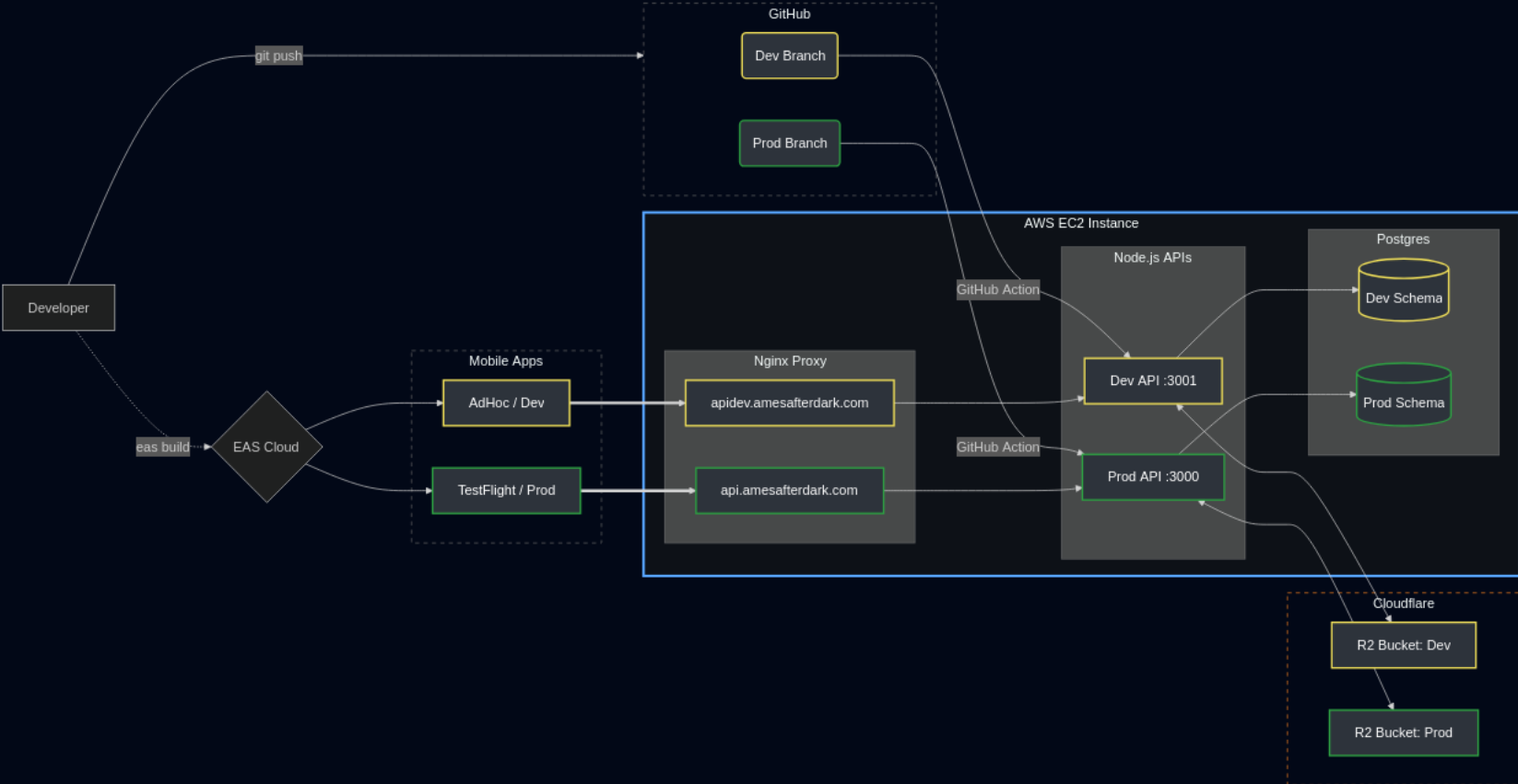
Technology Stack (Backend)



Technology Stack (DB + Server)

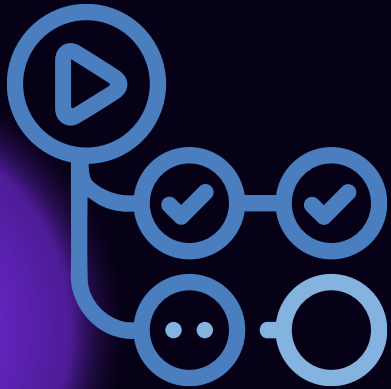


End-to-End System Architecture



Tooling

GitHub Actions



Swagger



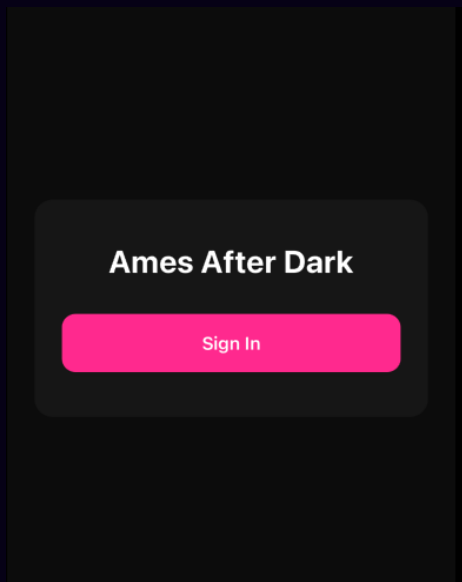
Cloudflare R2



EAS



Authentication Flow



Cancel | [voxf6hy6v.us.auth0.com](#)

AMES AFTER DARK

Welcome

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

Email address*

Password*

[Reset password](#)

Continue

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

OR

Continue with Google

Complete Your Profile

We need a few more details to get you started

Display Name

e.g. John Doe

Username

username

Phone Number

(555) 555-5555

Birthday

2026-05-03

You must be 21 or older to use this app

Cancel Registration

Continue

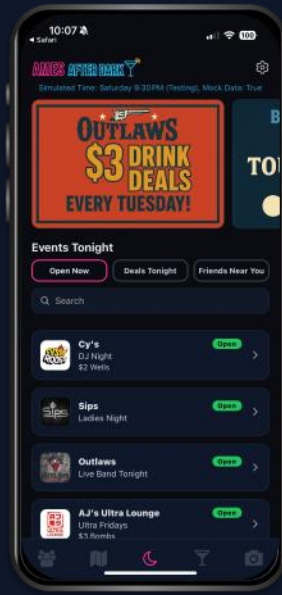
UI/UX Overview (Navigation)



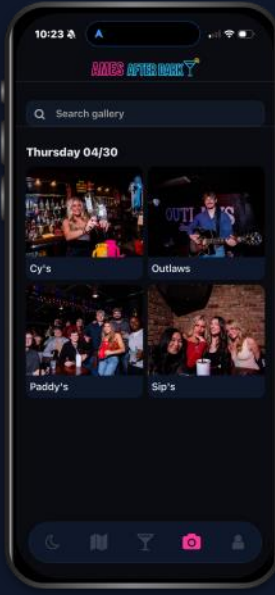
Tonight



Map



Venues



Gallery

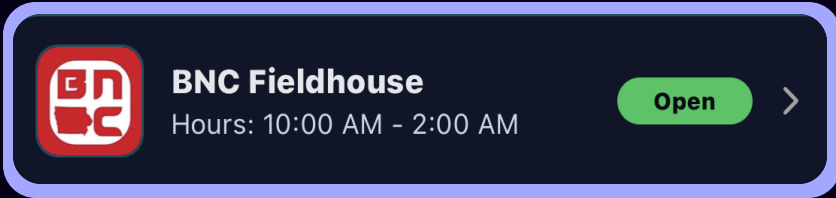


Profile

Tonight Page

Open Now

- Live Venue List
- Search all venues
- See Events and Deals



A dark blue rounded rectangular card for BNC Fieldhouse. On the left is the BNC logo (a red square with white 'BNC' text). To its right, the text reads 'BNC Fieldhouse' in white, followed by 'Hours: 10:00 AM - 2:00 AM' in a smaller font. On the right side of the card is a green rounded button with the word 'Open' in white, and a white chevron icon to its right.

Tonight

- All deals and events for the night in search
- Scroll featured deals
- Tap any deal for details

Friends Near you

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



Tonight Page

- Live venue List
- Search all Venues
- See Events and Deals

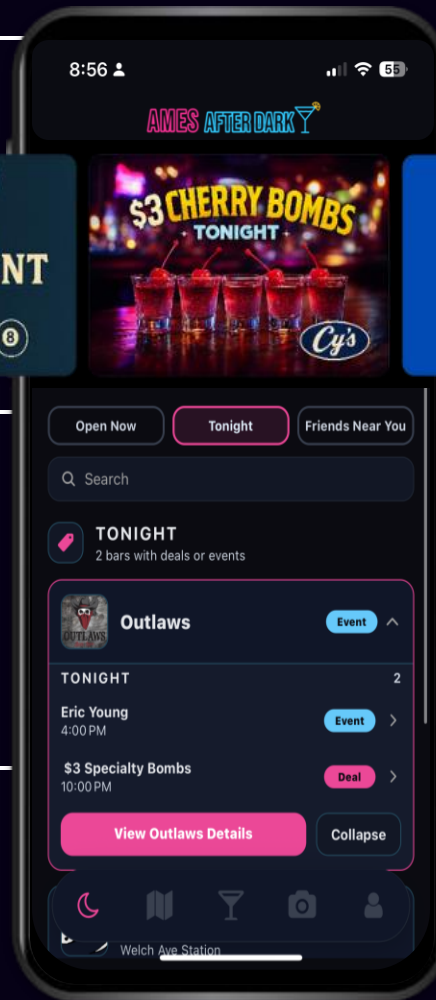


Deals Tonight

- All deals and events for the night in search
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- Tap any deal for details

Friends Near you

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- Friends venue locations
- Tap to navigate



Tonight Page

Open Now

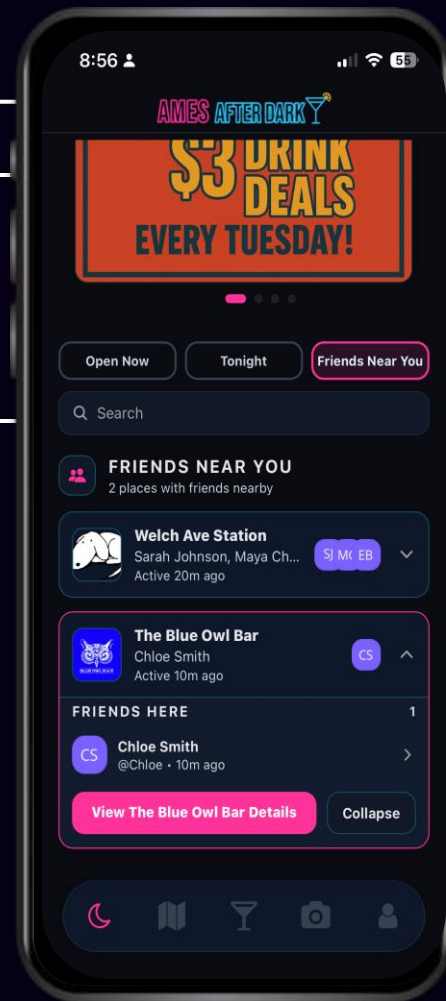
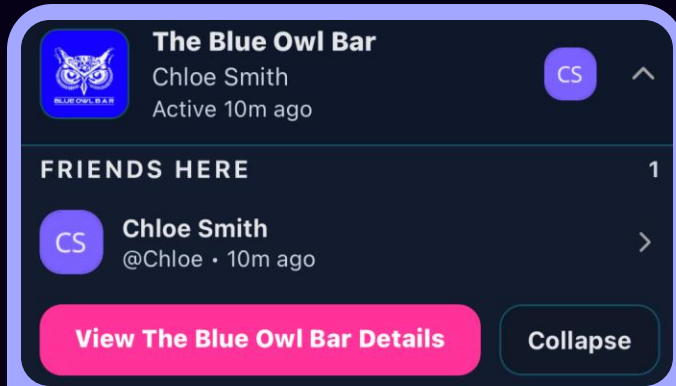
- Live venue List
- Search all Venues
- See Events and Deals

Deals Tonight

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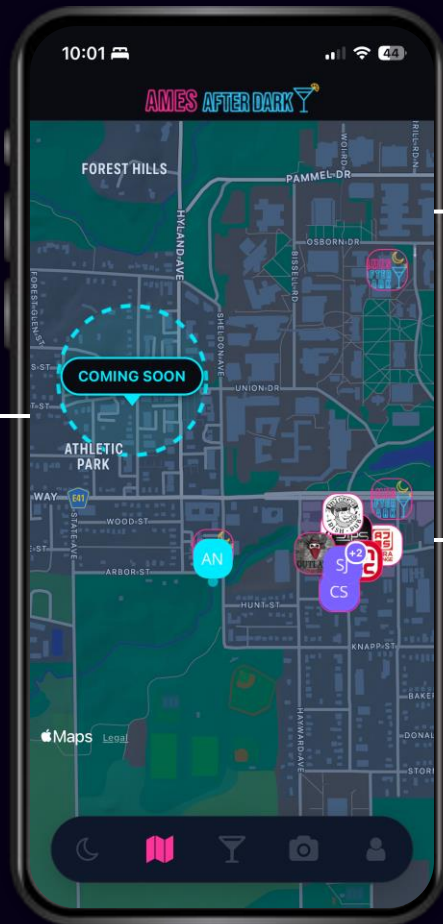


Map Page

&n

Venue Logos

Easy to differentiate between venues at a glance



Familiar Interface

Uses Apple Maps or Google Maps (device dependent)

Friend Icons

Quickly see which venue your friends are at

Map Page

Location Names

Only appear when zoomed in on locations



Venue Info

Quick access to important information

Map Page

Venue

See how many friends are at a venue



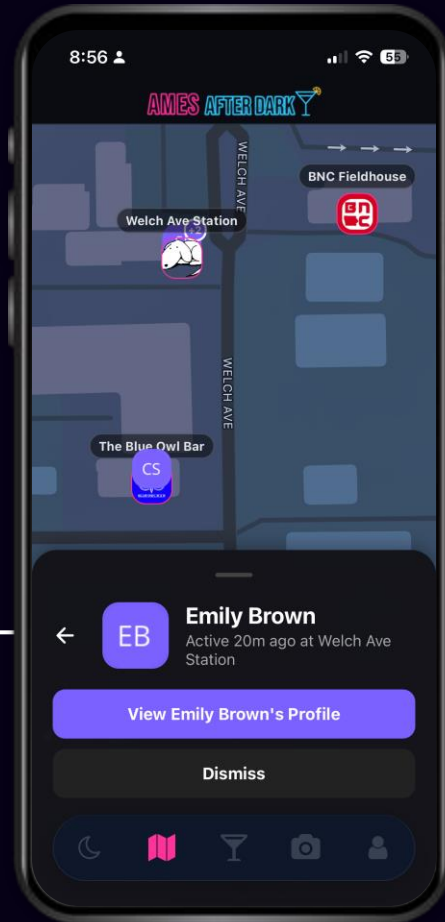
Friend List

Only appear when zoomed in on venue

Map Page

Back

Easily return to viewing your list of friends at each bar



Timestamp

See how long ago your friend was last active

More Info

View their profile

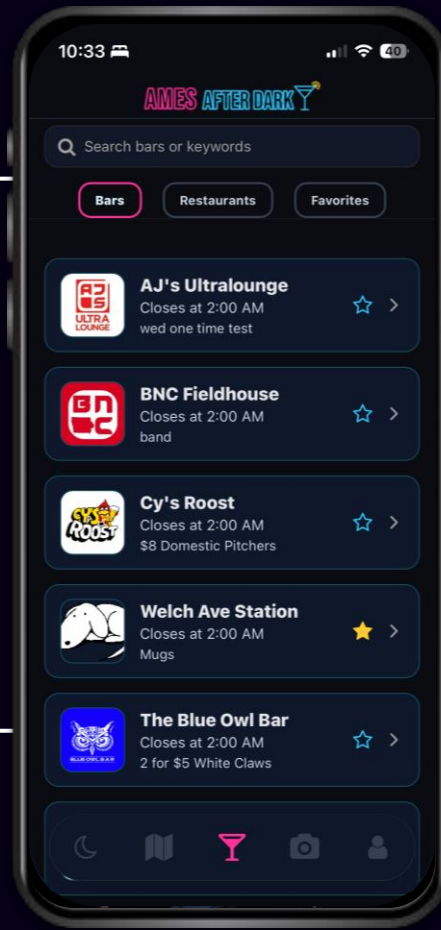
Venue Page

Search & Filters

- Name search
- Bar / Restaurant / Favorites
- Real-time "open now" updates

Venue Cards

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



Favorites

- Quick star toggle
- Updates instantly

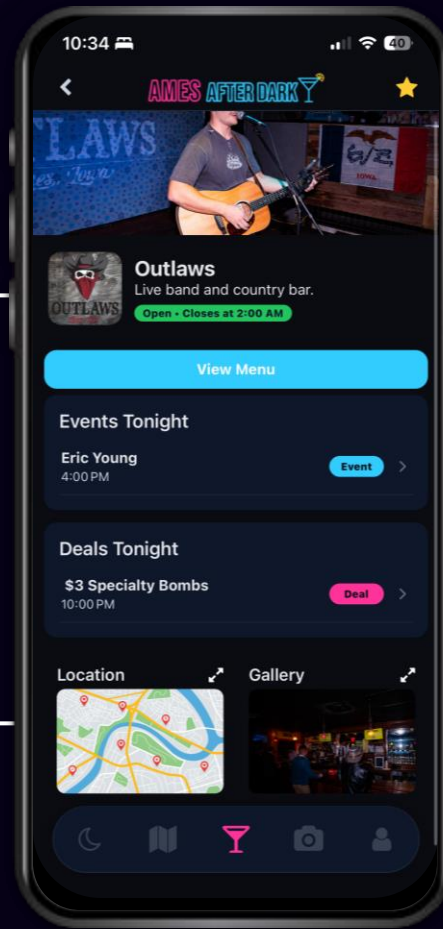
Venue Page

Venue Overview

- Cover photo & logo
- Description & hours
- Live status pill

Location

- View venue on the 'In-App' Map or Device Native Map



Events & Deals

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

Gallery

- Navigate directly to venue's album

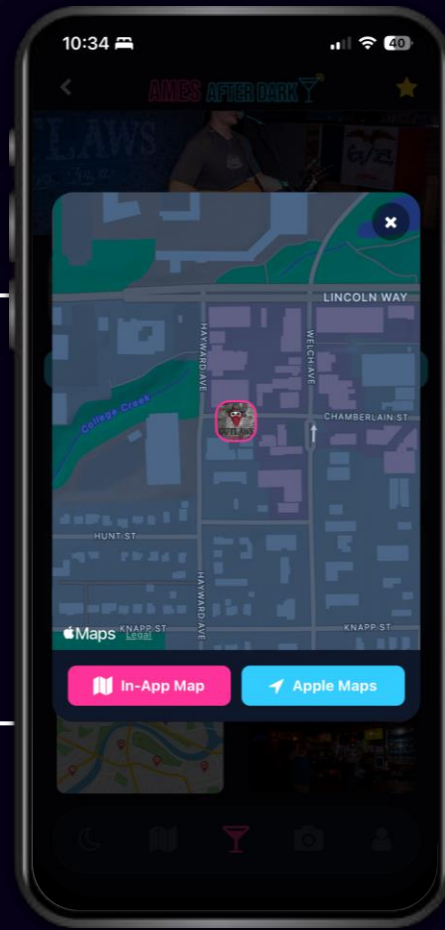
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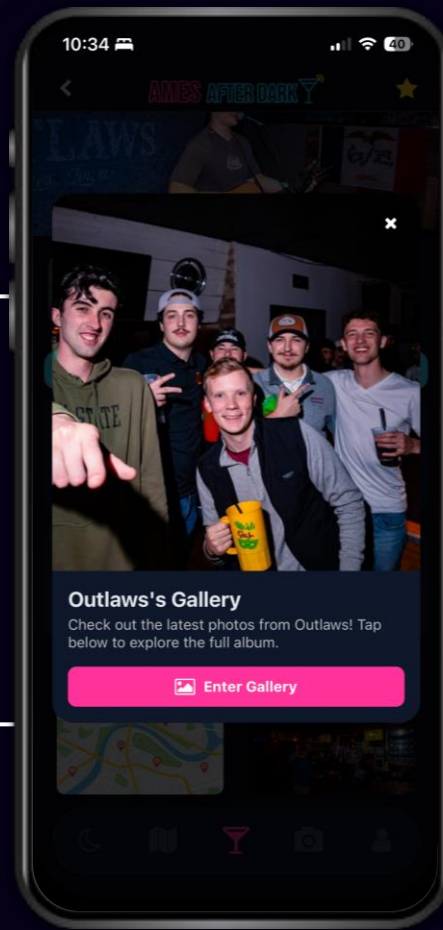
Venue Page

Venue Overview

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Location

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Events & Deals

- Active specials & events
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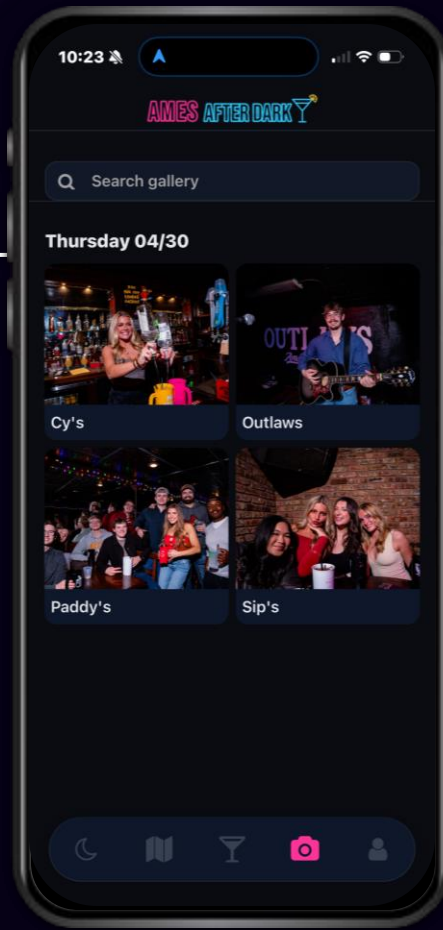
Gallery

- Navigate directly to venue's album

Gallery Page

Album Organization

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



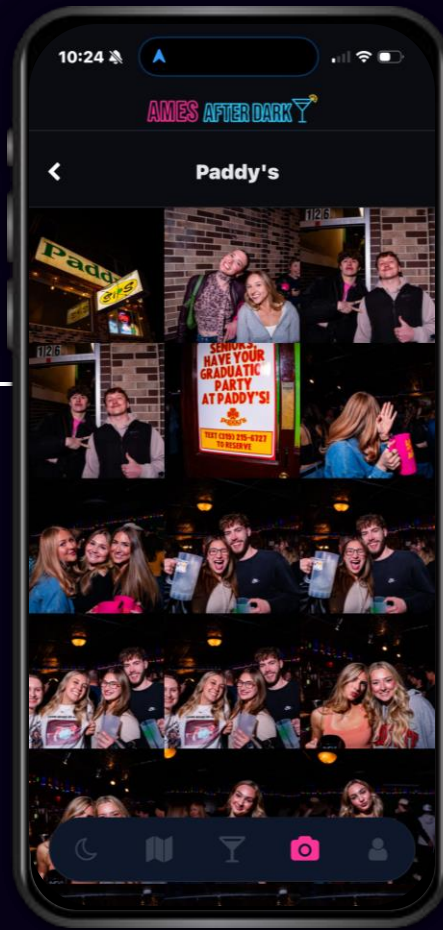
Cloudflare & R2 Integration

- Dynamic fetching from R2 storage
- On-the-fly edge resized thumbnails
- Photographer web portal

Gallery Page

Photo Grid & Viewer

- 3-column thumbnail grid
- Tap opens full screen, swipeable 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

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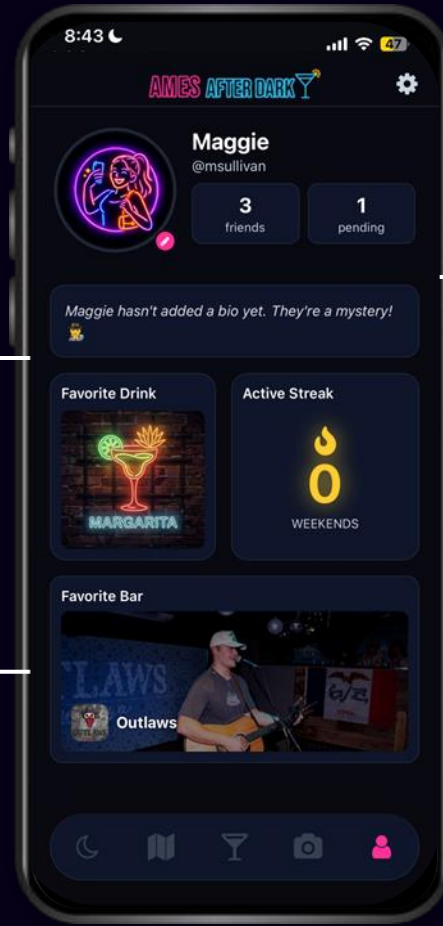
Account Page

Favorite Drink

- Choose and Display your favorite drink

Favorite Venue

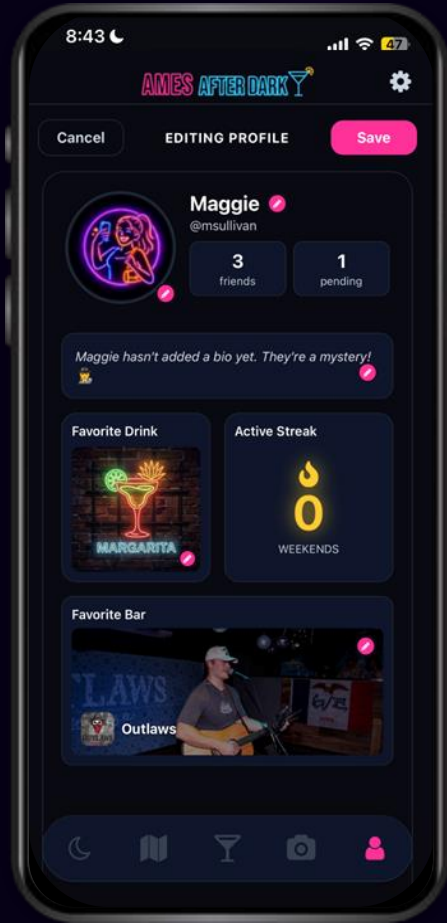
- Customize using provided venues and photos



User Profile

- Username, Profile Picture, Bio, Friends, Friend Requests
- Weekend Streak

Account Page



Edit Profile

- Username, Bio, Picture, Favorite Drink, Favorite Bar

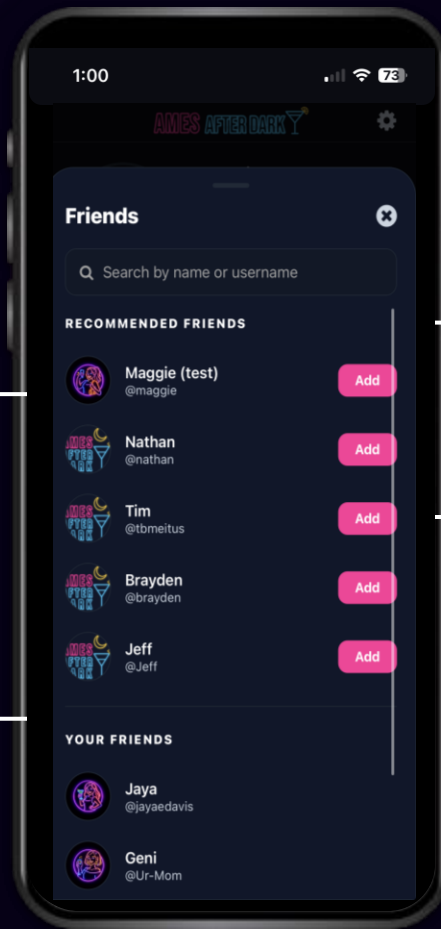
Friend Page

Search

- Find Specific Friends
- Searches Current Friends and All users

Friends

- List your Friends
- Click to view
- Scrollable



Recommended Friends

- Generated based on Mutual Friends Algorithm

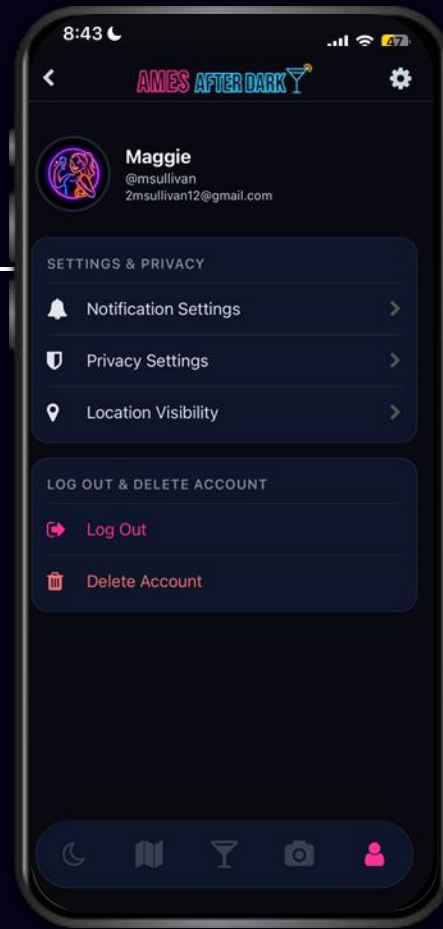
Add Friends

- Manually add friends

Settings Page

Manage Settings

- Notifications
- Privacy
- Location Visibility

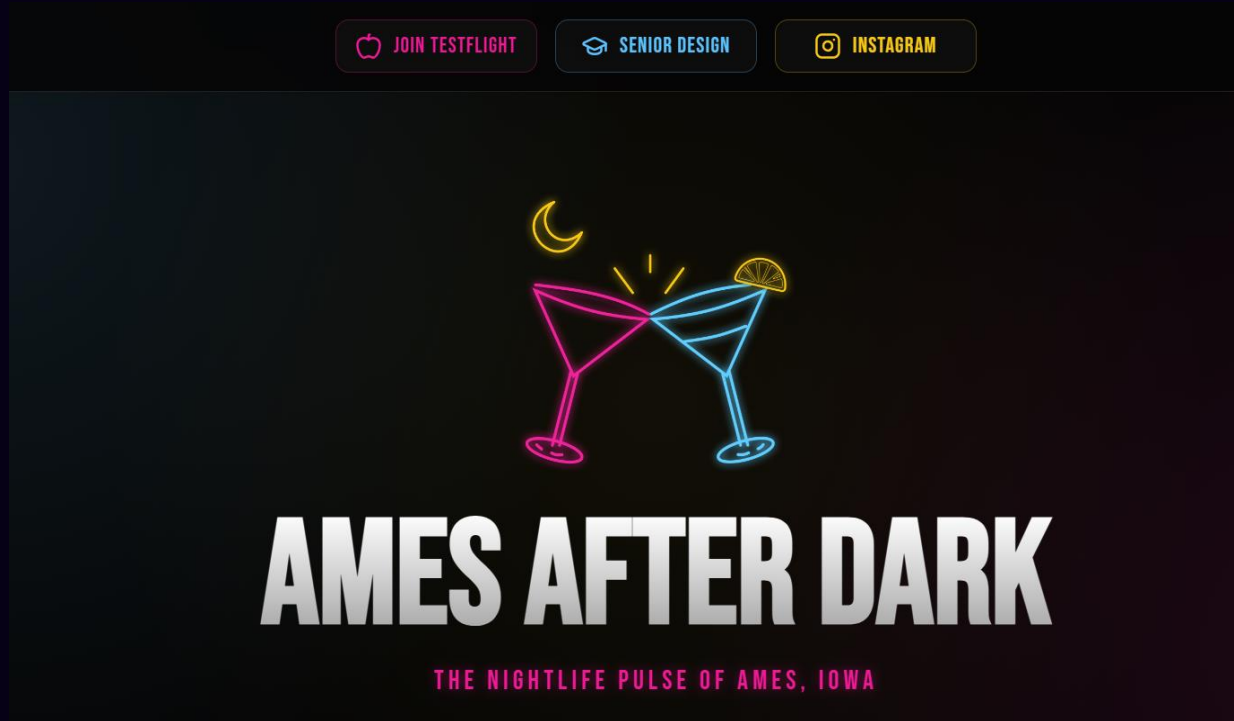


Account

- Logout and Delete Account

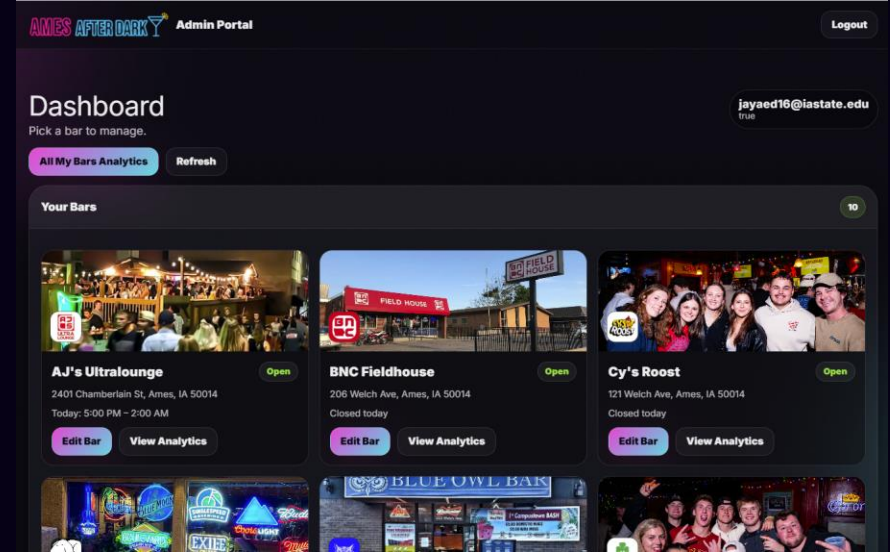
AmesAfterDark.com

- Central landing page for users and businesses
- Showcases app features and live platform value
- Demo content + visuals of real app experience



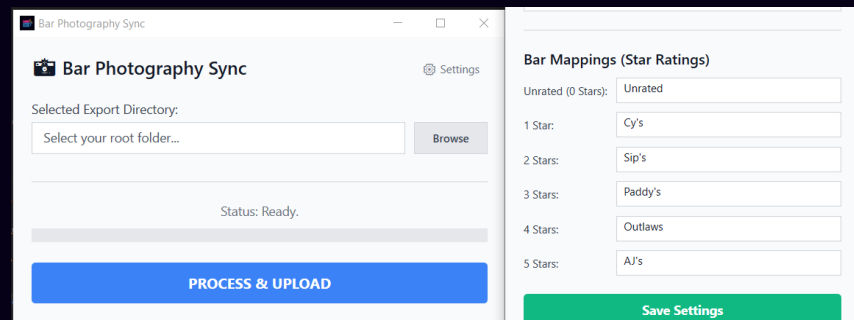
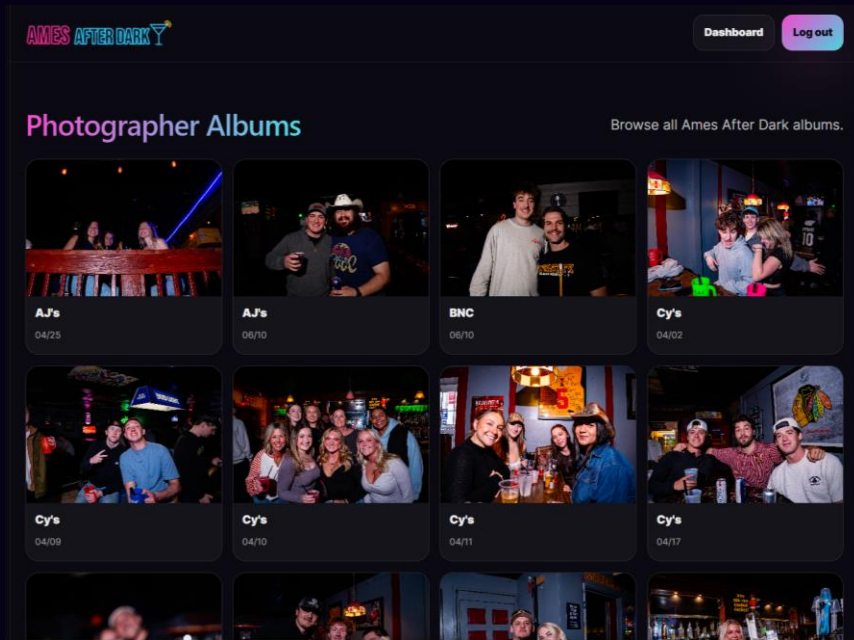
Admin Dashboard

- Interfaceable dashboard for venue managers to manage owned locations.
- Venue managers can see analytics, update deals, events, hours, etc.



Photographer Portal

- Photographer Photo Sync tool for uploading high-res photos to the Gallery.
- Manages folder creation, date assigning, photo upload, and real-time sync with our R2 bucket.



STRATEGY & MARKETING

GROWING AMES AFTER DARK



User adoption drives value

More users = more exposure = stronger platform



Instagram Campaign

Targeting ISU students through reels, posts, and stories



Promoting Deals & Events

Driving early app usage with real nightlife content



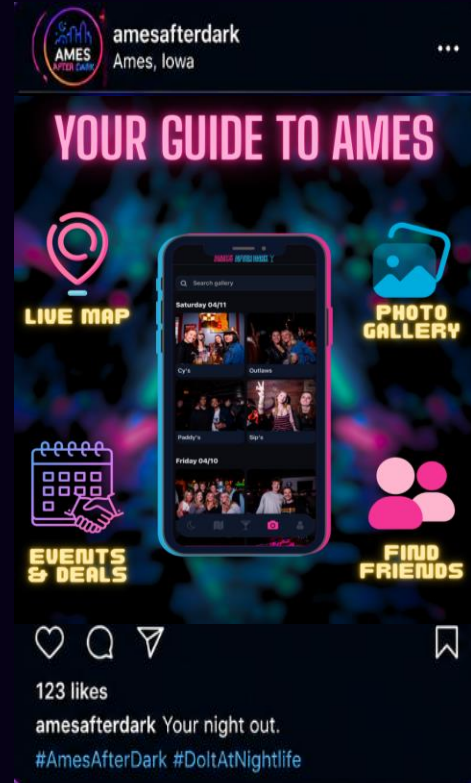
Campus & Venue Outreach

Partnering with students and local businesses



Building Momentum

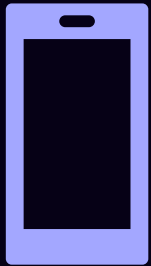
Growing awareness ahead of App Store launch



Testing Plan

Unit Tests CI/CD

Alerts us of regressions/breaking changes



Internal Testing Phase 1

Using Expo go, Initial functionality, core features, bug identification, etc.



External Testing Phase 2

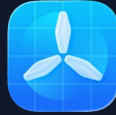
TestFlight, 50 real-world users with collection of feedback



Current Project Status

Deployment & Platform

IN PROGRESS



- Fully functional app live on TestFlight
- 50+ active users testing each weekend
- Preparing for official App Store release
- Final steps: compliance, polishing, submission

User Testing & Validation

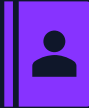
ACTIVE



- Real user feedback driving improvements
- Continuous bug fixes and UI refinements
- Testing core flows (events, map, profiles)
- Iterating based on real nightlife usage

Business & Partnerships

IN PROGRESS



- Communicating with local venue owners
- Building admin-side engagement
- Encouraging real-time content updates
- Aligning platform with business needs

Growth & Marketing

LAUNCHING



- Instagram and social media push
- Building awareness across ISU students
- Driving new user adoption
- Creating branded content for launch

What's Next for Ames After Dark?



LAUNCH

Completing the final steps for our App Store release.



BUILD

RELATIONSHIPS

Creating long-term partnerships with Ames venue owners and operators.



GROW OUR COMMUNITY

Continuing to grow our user base and strengthen the Ames nightlife community.



ENHANCE AND EXPAND

Adding new features, improving the experience, and expanding to more venues and events.



MAKE AN IMPACT

Building the go-to platform that makes nightlife safer, smarter, and more connected.

This is just the start

The team plans to continue developing Ames After Dark after graduation and turning this vision into something even bigger.

AMES AFTER DARK



Thank you Questions?

