SoGnar — Sound and Audio Team

CS Field Session Proposal (CSCI 370)

Colorado School of Mines — Summer 2026

Creating the SoGnar Sound

Company Background

SoGnar is a Golden-based cycling technology startup building a gamified mobile application that transforms everyday bike rides into interactive adventures. The app uses GPS tracking to deliver rewards on real-world cycling rides, rewarding riders with in-app currency for miles ridden, trails explored, and challenges completed. Those rewards can then be used within our mini-game platform.

SoGnar originated as a CS Field Session project at the Colorado School of Mines in Fall 2025, and two students from that original team have continued development through an independent study this spring. The platform is built natively for iOS using Xcode, with MapKit integration for real-time route tracking and a GoDot game engine for the in-app cycling game. SoGnar holds a provisional patent covering its core gamification and GPS-based reward mechanics.

SoGnar is transitioning to a freemium business model. The current game and platform will serve as the foundation for the free tier, while premium subscribers will gain access to additional games, enhanced reward boosts, and exclusive content. The long-term vision is to offer four to five distinct game experiences as part of the premium subscription, making SoGnar a comprehensive gamified cycling ecosystem.

Description of the Work to Be Done

This team will design and implement the entire audio layer for the SoGnar platform, including:

- Sound effects (SFX)
- Background music
- UI/UX audio feedback
- Game-specific audio systems
- Accessability features

Currently, the app has no audio output, making this a true greenfield opportunity to define SoGnar's *sound*.

The team will be responsible for both creative sound design and technical implementation within the iOS app and mini-games.

Core Responsibilities

1. Sound Identity Development - Create a recognizable and consistent SoGnar audio identity, aligned with the brand's tone:

- High-energy
- Futuristic / Retrowave-inspired
- Slightly rebellious/edgy
- Playful and rewarding

2. Sound Effects (SFX) Design - Design and implement sound effects for:

Core App

- Button taps and navigation
- Reward collection (coins, achievements)
- Map interactions

Gameplay

- Obstacle collisions
- Trick execution in mini-games
- Power-ups and upgrades
- Movement feedback (speed, terrain, etc.)

3. Music & Soundtracks - Develop background music for:

- Main app environment
- Individual mini-games (unique themes per game)

Music direction may include:

- Synthwave / Retrowave
- Electronic/high-tempo riding beats
- Adaptive or looping soundtracks
- Samples from Rock or Rap

4. Audio Integration (Technical Implementation) - Implement audio into the app using iOS-compatible frameworks:

- Trigger-based sound playback

- Looping background tracks
- Volume balancing and mixing
- Performance optimization (low latency, minimal battery impact)

5. Scalable Audio System - Design the audio system so it can:

- Support multiple mini-games
- Easily add new sounds/music in the future
- Adjust audio levels globally (settings menu)

Technical Requirements

- Platform: iOS (Xcode)
- Integration with existing SoGnar app architecture
- Compatibility with current and future mini-games (GoDot or native)
- Smooth performance across iPhone devices
- A Mac is required for this project. A processing chip of M4 is desired.

Development Process & Toolchain

The team will operate in a Fractured Agile project management framework over the five-week session. Students will be trained in this process on the first day of the Project.

Tools:

- GitHub (version control)
- Slack (communication)
- Claude (AI-assisted development & prototyping)
- Audio tools (GarageBand, Ableton, Logic, etc.—team choice)

Desired Skill Set

Students are expected to learn, but helpful experience includes:

- Audio production or sound design
- Music composition (digital or instrumental)
- iOS development (Swift / Xcode)
- Game audio systems
- Basic understanding of UX design

Bonus:

- Experience with synthwave/electronic music styles

- Familiarity with audio libraries/APIs

Preferred Team Size

3–4 students. This allows for:, 1–2 team members focused on sound design & SFX, 1–2 team members focused on music composition, 1 team member focused on technical integration.

Internship Potential

Top-performing students may have the opportunity to continue working with SoGnar during an independent study, internship, or as an employee, Audio designers, Product contributors or as Long-term collaborators as the platform scales.

Location

All work may be performed remotely on the Mines campus or in the ORC conference room. The client is based on campus and is available for in-person meetings if desired, but remote collaboration via video calls and Slack is the expected norm. No mileage reimbursement is required. The ORC Conference room will be open to all SoGnar teams and individuals for meetings and collaboration. Students are encouraged to work at the ORC. Swag, drinks and snacks will be provided at the ORC for SoGnar teams. **Note**: an in-person Project Kickoff at the Outdoor Recreation Center will be required unless otherwise discussed. This meeting may last up to 4 hours.

Intellectual Property

Students will be asked to assign intellectual property rights for work produced during the field session to SoGnar Technologies LLC. These terms will be discussed and agreed upon before the project begins.

Why This Project Is Exciting

This is a rare opportunity to define the entire audio identity of a startup product from scratch.

Students won't just be adding sound...they will:

- Shape how the product *feels*
- Influence user engagement and retention
- Contribute directly to a live, growing platform

The work will be user-facing, portfolio-ready, and part of a real product used by riders.

For students interested in game development, music production, UX, or startups, this is a chance to build something creative, technical, and impactful.

Contact:

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Find out more at www.getsognar.com