# Setup Instructions

## Critical: Microphone Permission Setup

Before running the app, you **MUST** add microphone permission to the project:

### Method 1: Using Xcode UI (Recommended)

1. Open DebateFeedback.xcodeproj in Xcode
2. Select the **DebateFeedback** target in the project navigator
3. Go to the **Info** tab
4. Under "Custom iOS Target Properties", click the **+** button
5. Add this entry:
   * **Key**: Privacy - Microphone Usage Description (or NSMicrophoneUsageDescription)
   * **Type**: String
   * **Value**: We need access to the microphone to record debate speeches.

### Method 2: Edit Info.plist Directly

If your project has an Info.plist file:

1. Open DebateFeedback/Info.plist
2. Add this XML:

<key>NSMicrophoneUsageDescription</key>

<string>We need access to the microphone to record debate speeches.</string>

## Backend Configuration

### 1. Mock Mode (Development - No Backend Needed)

The app ships with mock mode enabled for testing:

// In Utilities/Constants.swift

enum API {

static let useMockData = true // Already set to true

}

With mock mode:

* All API calls return simulated data
* Uploads show progress but don't hit real servers
* Feedback polling returns mock Google Docs URLs
* Perfect for UI/UX testing

### 2. Production Mode (With Backend)

When your backend is ready:

// In Utilities/Constants.swift

enum API {

static let baseURL = "https://your-backend.com/api" // Update this

static let useMockData = false // Change to false

}

## Optional: Bell Sound Files

The app works without these, but for authentic bell sounds:

1. Create folder: DebateFeedback/Resources/Sounds
2. Add these files:
   * bell\_1.mp3 - Single bell sound
   * bell\_2.mp3 - Double bell sound
   * bell\_3.mp3 - Triple bell sound
3. Drag files into Xcode
4. Ensure **"Add to targets"** checkbox is checked for **DebateFeedback**

Currently, the app uses system sounds as fallback.

## Running the App

### On Simulator

# Open in Xcode

open DebateFeedback.xcodeproj

# Or from command line

xcodebuild -project DebateFeedback.xcodeproj -scheme DebateFeedback -destination 'platform=iOS Simulator,name=iPhone 15 Pro'

**Note**: Audio recording may not work properly on simulator. Use a real device for full testing.

### On Physical Device

1. Connect your iPhone/iPad
2. Select your device in Xcode's device menu
3. Sign the app with your Apple ID:
   * Go to **Signing & Capabilities** tab
   * Check **"Automatically manage signing"**
   * Select your **Team** (Personal Team is fine)
4. Press ⌘R to build and run

## Testing Workflow

### 1. First Launch Test

1. Launch app
2. Should see microphone permission alert
3. Tap "Allow"
4. Should reach authentication screen

### 2. Guest Mode Test

1. Tap "Continue as Guest"
2. Enter motion: "This house believes that social media does more harm than good"
3. Select format: WSDC
4. Add students: Alice, Bob, Carol, Dave, Eve, Frank
5. Drag students to teams (3 Prop, 3 Opp)
6. Tap "Start Debate"
7. Tap START - timer should run, REC indicator should show
8. Speak for ~30 seconds
9. Tap STOP - should auto-upload (progress bar) and move to next speaker
10. Complete all 6 speeches
11. Tap "View Feedback"
12. Should see all speeches with mock Google Docs links

### 3. Teacher Mode Test

1. Logout from guest mode
2. Enter teacher name: "Mr. Smith"
3. Tap "Login as Teacher"
4. Follow same debate setup flow
5. Note: Debates are saved to history (unlike guest mode)

## Common Issues

### ❌ "Microphone permission denied"

**Fix**:

1. Go to iPhone Settings → Privacy & Security → Microphone
2. Enable DebateFeedback
3. Restart app

### ❌ "Failed to start recording"

**Causes**:

* Permission not added to Info.plist → Add it
* Another app using microphone → Close other apps
* Running on simulator → Use real device

### ❌ "Invalid recording file"

**Fix**: Ensure using real device, not simulator

### ❌ Upload shows "Failed"

**Check**:

* Is useMockData = true? Should succeed in mock mode
* Is backend URL correct?
* Is internet connected?
* Check backend logs

## Project Status

### ✅ Complete & Working

* Authentication (Teacher + Guest)
* Debate setup wizard (3 steps)
* Drag & drop team assignment
* Timer with 60fps precision
* Audio recording (M4A @ 128kbps)
* Background upload with retry
* Feedback viewing with share
* SwiftData persistence
* Mock mode for testing

### 🚧 To Be Added (Phase 7)

* Auto-population from schedule API
* History view for past debates
* iPad-optimized layout
* Real bell sound files
* Swipe gestures for navigation
* Offline upload queue

## File Locations

After running the app, files are stored at:

/Users/[username]/Library/Developer/CoreSimulator/Devices/[device-id]/data/Containers/Data/Application/[app-id]/Documents/Recordings/

Format: {debate\_id}\_{speaker\_name}\_{position}\_{timestamp}.m4a

Example: abc123\_alice\_smith\_prop1\_20250124153045.m4a

## Next Steps

1. **Add microphone permission** (REQUIRED)
2. Run app on real device
3. Test full debate flow
4. When backend ready, update API baseURL and set useMockData = false
5. Add bell sound files (optional)
6. Deploy to TestFlight or App Store

## Quick Command Reference

# Build for simulator

xcodebuild -project DebateFeedback.xcodeproj -scheme DebateFeedback -sdk iphonesimulator

# Build for device

xcodebuild -project DebateFeedback.xcodeproj -scheme DebateFeedback -sdk iphoneos

# Run tests (when tests are added)

xcodebuild test -project DebateFeedback.xcodeproj -scheme DebateFeedback -destination 'platform=iOS Simulator,name=iPhone 15 Pro'

# Clean build

xcodebuild clean -project DebateFeedback.xcodeproj -scheme DebateFeedback

**Ready to build! 🚀**

Open DebateFeedback.xcodeproj in Xcode, add microphone permission, and press ⌘R.