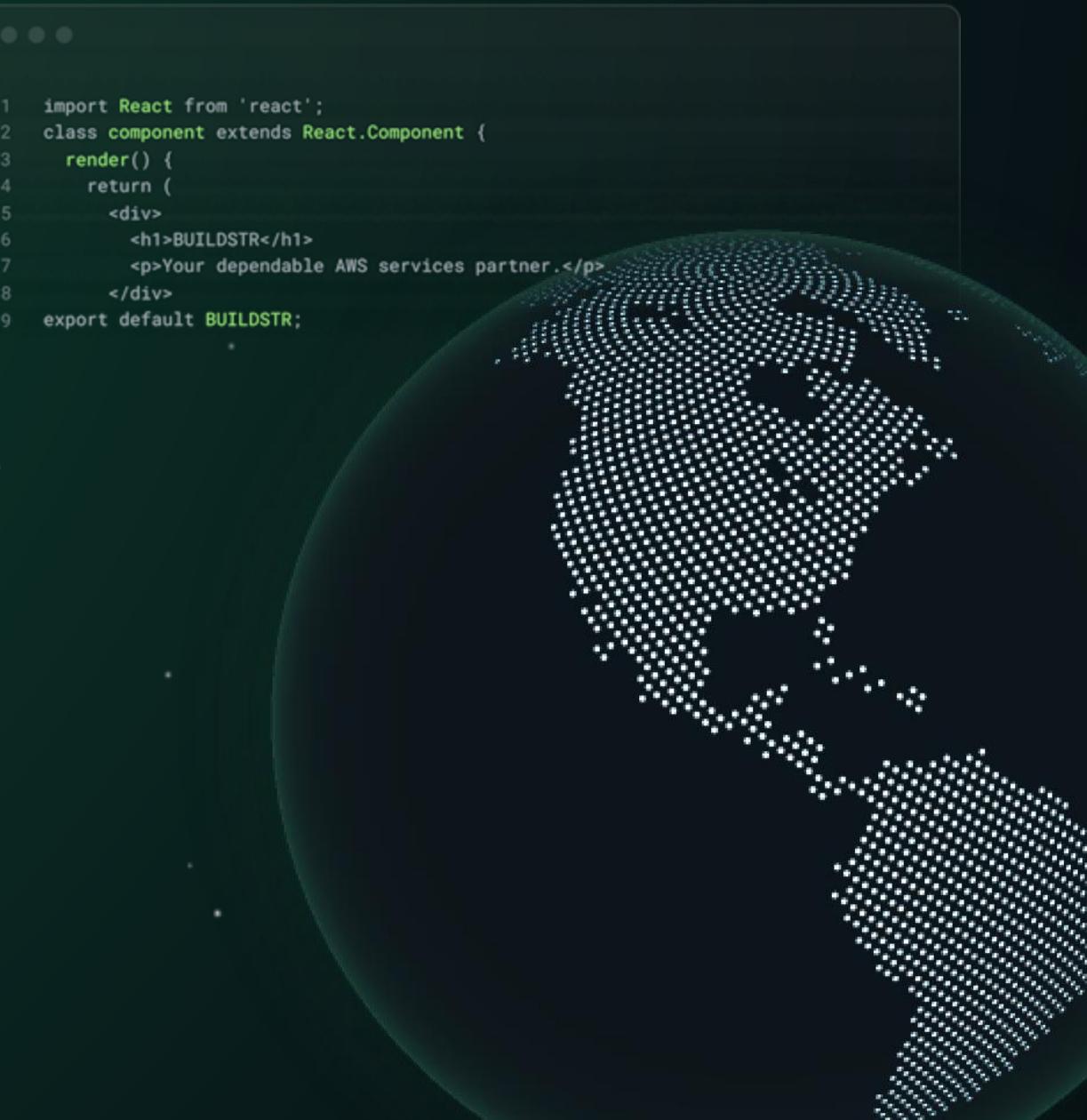


2025

# Project proposal for Groopview

Projects | Android Application Changes & Live Streaming



# Background

BUILDSTR is proposing to work with Groopview to modify the code for their Android Mobile Application and develop Live Streaming capability. Currently the Groopview team has a production ready solution that leverages Chime SDK to engage the front and rear cameras of a device, enables invitations to a session, records a session, and enables uploading a file from a device to the cloud. The goal of this engagement is to ensure the Android version of their application is able to record sessions in the cloud, and that customers using either the Android or the iOS versions of the application are able to Live Stream.

These will add efficiency to the system and increase the quality of the customer experience. The BUILDSTR team will make any adjustments to the strategy of testing & implementation as necessary during this engagement.

# BUILDSTR Proposal

## Android Application Changes

BUILDSTR will make the changes to the Android applications so that session can be recorded in the cloud. This work will include:

- Implement MediaProjection API integration to capture screen content and audio from Android system level, bypassing the need for native C++ Chime APIs
- Develop WebRTC track capture mechanism using JNI (Java Native Interface) to bridge between Java/Kotlin Chime SDK and any required native processing
- Create JNI wrapper layer to expose captured media tracks to C++ components if needed for processing or transmission

This work will be done over the course of 2 weeks by offshore BUILDSTR Engineers. The team will include 1 PM, 1 Sr. AWS Engineer, and 2 Sr. Mobile Application Developers.

- 1-*Project Manager*
- 1-Sr. *AWS Engineer*
- 2-Sr. *Mobile App Developers*

**Total cost = \$16,580**

# BUILDSTR Proposal

## Live Streaming

BUILDSTR will make the changes to the iOS & Android applications to enable Live Streaming. This work will include:

### Backend Development

#### **Infrastructure Setup**

- Create basic S3 buckets (input-chunks, live-segments, final-videos)
- Set up simple IAM role with S3 + Lambda + MediaLive + MediaPackage permissions
- Deploy basic CloudFormation template for POC resources
- Configure basic CloudWatch logging
- Set up CloudFront distribution for global HLS/DASH delivery

#### **MediaLive + MediaPackage Setup**

- Create MediaLive channel with basic configuration
- Configure SRT input endpoint
- **Create MediaPackage channel for HLS/DASH packaging**
- **Configure MediaPackage endpoint for live viewing**
- Set up archive output for recording chunks
- **Generate CloudFront distribution URL for followers**
- Test channel start/stop manually

### Application Development

#### **Streaming Side (Broadcaster)**

- Basic AVCaptureSession configuration
- Simultaneous video + audio capture
- Simple camera permission handling
- Front/back camera switching
- Integrate SRT streaming library
- Connect to backend MediaLive SRT endpoint
- Basic stream quality settings (720p, 30fps)
- Record and upload chunks while streaming

#### **Viewing Side (Followers)**

- HLS/DASH video player integration (AVPlayer or similar)
- Fetch live stream URL from backend
- Display live stream in app
- Handle stream connection/buffering states
- Auto-refresh for new live streams

- 1-Project Manager
- 1-Sr. AWS Engineer
- 2-Sr. Mobile App Developers

Total cost = \$49,740

# Get in touch

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