**overview**

1) Integrating Google Sign-In for authentication.

2) Managing roles for students and teachers.

3) Implementing real-time messaging and notifications using Livewire, Pusher, and Webhooks.

**Prerequisites**

1) Google Cloud Project for OAuth credentials.

2) Backend Framework Laravel.

3) Livewire for real-time components.

4) Pusher for WebSocket communication.

5) Composer for package management.

**1. Set Up Google Sign-In**

1.1 Google Cloud Project Setup

1) Create a Project

2) Enable APIs

3) Configure OAuth Consent Screen

4) Create OAuth 2.0 Credentials

**1.2 Laravel Integration**

1) Install Required Packages

2) Set Up Routes and Controller

**2. Implement Role-Based Access Control**

1) Define User Models

2) Manage User Sessions and Redirects

**3. Implement Real-Time Messaging with Livewire and Pusher**

1) Setup Livewire and Pusher

2) Create Livewire Components

3) Create the Event

4) Broadcasting Configuration

**Conclusion**

It is a step-by-step approach to integrating Google Sign-In with Livewire, Pusher, and WebSockets in Laravel, focusing on managing roles and real-time features.