Overview

1 Product Overview

GoClass is an aPaaS solution for online interactive classrooms provided by ZEGO. It modularizes the audio and video calls, whiteboards/files, cloud recording, real-time messaging, business background and other capabilities required for online classrooms. Developers do not need to integrate a three-party SDK or services, and can establish an interactive teaching platform as soon as 15 minutes. GoClass not only covers a variety of classroom teaching scenarios, but also supports flexible and expandable business functions on the basis of ensuring the real-time interactive function of the classroom, and seamlessly connects with other business systems of the organization with standard interfaces, which greatly reduces the development threshold.

2 Education Solution Difference

ZEGO currently provides aPaaS and PaaS solutions for online interactive classrooms. The following is the detailed difference between the two solutions:

	aPaaS Education Solution	PaaS Education Solution
Applicable customers	Suitable for customers who have tight development schedules, need to quickly launch online teaching platforms, and have certain customization needs.	Suitable for customers with a long development cycle and high demand for customization.
Development Cost	Low	High
Online time	15 minutes minimum	1 to 3 months
Realization	• The classroom covers core	Customers implement real-

function	functions such as real-time audio and video, interactive whiteboard, file sharing, real-time messaging, recording, and screen sharing. • It provides cloud service functions such as classroom management and authority management. • Support flexible expansion of business functions, and dock with customers' business systems.	time audio and video, interactive whiteboard, file sharing, cloud recording and other functions by themselves.
Scalability	Strong	Strong
Data Security	Developers store business data by themselves.	Developers store business data by themselves.
Front-end UI	Provides default classroom UI and supports customized modification.	The customer implements all the UI by himself.
Supported platforms	Android, iOS, macOS, Windows, Web, Electron	Supports more than 20 platforms and frameworks.
Covering scenes	• 1 to 1 online teaching • Small classes • Interactive large classes	Customers define and realize any online Teaching scene.

3 Realize the Scene

ZEGO GoClass supports the following teaching scenarios:

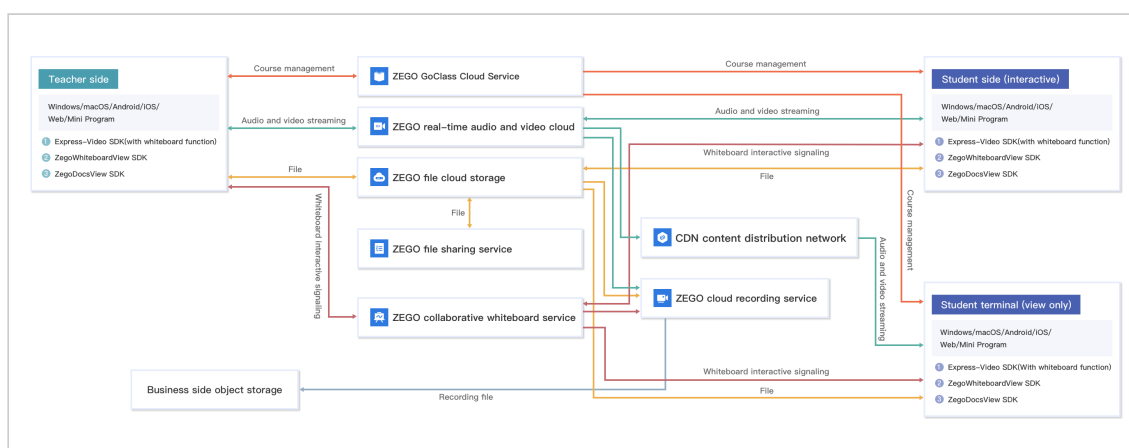| Scene	Description
1V1	1 teacher conducts online classroom tutoring for 1 student.
Small classes	1 teacher conducts online teaching to a small number of students and conducts real-time audio and video interaction.
Large classes	1 teacher conducts large-scale live teaching to tens of thousands of students. Teachers and students can interact with each other through raising hands, quizzes, games, etc.

4 Function List

Function	Description
Real-time audio and video	Real-time audio and video interaction between teachers and students, students and students can form a good classroom interaction atmosphere.
Electronic Interactive Whiteboard	Teachers can use whiteboard tools to do doodle teaching, and students can also use doodle tools to participate in classroom interaction, increasing the delivery of teaching effects.
Teaching courseware sharing	Comprehensive coverage of mainstream file formats, high-definition vector rendering of courseware, enriching classroom fun.
Real-time message interaction	Teachers and students can send text messages in real time in the classroom.
Interactive teaching tools	Support students to raise their hands to interact with the teacher, support the teacher to control the student's audio, video, sharing and other permissions, so that the teacher can manage the classroom order.
Business system docking	There is no need to separately integrate or align different SDKs one by one, and quickly complete the platform construction by simply modifying the UI, Logo and other

	parameters, and docking with the teaching platform's course scheduling system.
Background data statistics	Distinguish common roles in teaching scenes, such as teachers, teaching assistants, students, etc. Different roles have different classroom permissions, and provide multi-dimensional course data such as number and duration.
Course Recording and Playback	Support single-stream recording, mixed-stream recording, whiteboard file recording, which can perfectly record the audio-visual interaction of teachers and students during class, and save the real teaching scenes for students to review and review.
Teaching quality testing	• Support audio and video equipment testing such as microphones, cameras, speakers before class, and network monitoring in class. • Provide audio and video quality analysis platform "prism" to ensure high-quality teaching interaction.

5 Technical Solution

The GoClass education scene can be built through the following SDKs and services:

6 Program Advantages

1. Minimal access, fast online in 15 minutes

Encapsulate hundreds of API interfaces to reduce 90% of the complex development work, no need to form a huge technical development team, novices can quickly go online with low threshold.

2. Modular design, flexible and expandable functions

Supports classroom interactive functions such as audio and video, interactive whiteboard, file sharing, real-time messaging, recording and playback, and flexible expansion of business functions, seamlessly docking customer business needs with standard interfaces to meet the diverse teaching needs of institutions.

3. Close to the educational scene, more efficient teacher-student interaction

Support 1V1, small class, interactive large class and other types of classes, fit the actual teaching process, support teachers and students in the classroom teaching scenes for audio and video interaction, courseware sharing, real-time messaging, raise hands and connect wheat and other interactive functions , To help teachers and students build an efficient classroom.

4. Multi-dimensional back-end services, guaranteed quality of operation

Provide quality analysis platform "prism", support multi-dimensional analysis of classroom data and classroom quality, provide data support for teaching and market strategy adjustment, and ensure the high quality and high efficiency of teaching interaction.

5. Full platform adaptation, compatible with a large number of devices

- Support multiple platforms and development architectures such as Windows, macOS, Web, iOS, Android, Electron, etc.
- Deeply compatible with 15000+ device models to ensure the consistency of global teacher and student experience.

6. Global coverage, stable and smooth

The network nodes cover 200+ countries and regions around the world, with a total of 500+ core nodes, ensuring a stable and smooth viewing experience for users all over the world.