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DGCT Meet: A Meeting Application Using AWS

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ABSTRACT: Advances in communication technologies offer new opportunities, the Education processes apply online distance learning in presenting the learning materials. Here **DGCT-Meet** is a platform created where the organization can access it efficiently. This study uses the theory cloud service with AWS. The characteristics of descriptive study. The AWS uses a cloud storage s3 bucket, ec2 instance to host in cloud platform, **Amazon Chime** is a new communications service that transforms meetings with a secure, easy-to-use application that you can trust. It provides AWS SDK (software development kit). DGCT meet works seamlessly across your devices so that you can stay connected. You can use DGCT meet for online meetings, video conferencing, calls, chat, and to share content, both inside and outside your organization. The study results show that DGCT-Meet application has made it easy for the college lecturers to present, conduct meetings by the own cloud platform using AWS providing a new DGCT meet communication service.

KEYWORDS: Amazon Chime, ec2, AWS, s3Bucket, IAM, SDK.

I. INTRODUCTION

Due to the pandemic situation we are all adapt to the online era. For purpose of education to conduct classes we create a video conferencing application named as DGCT Meet. This project is a desktop based web application which works under cloud that provides computing resources as services to conduct classes, interviews etc. The main purpose of this project is to create a video conferencing application using AWS CHIME SDK (provides a set of real time communications components that developers can use to add features like audio, video, screen sharing etc.). In today's world the time and place doesn't play an important role when it comes to web based system. Since this project is a web application, the user can access from anyplace and anytime and everywhere and the data are secured.

The main objective of the project is to conduct classes in online platform for organization each and every data gathered and processed can be handled by the administrator. The confidentiality of the contents is now maintained by organization. This application is user-friendly and hence the user can easily attend classes and maintain own data. The teacher schedule meetings and student get notification for meeting, The time and frequency of is scheduled by the employer or an authorized person who handles the system. The system uses cloud storage to perform all the processes hence it is faster and safer to use. The main scope of this project is to create own meeting application with Amazon chime SDK. The system does not require separate software requirements and this makes it OS independent. Importing the image with optical scanner or by digital photography. Our project A meeting application using AWS will be the best application that can be used to experience a new conference application using the Amazon chime SDK. It will be more efficient since it is a web Application. Provides a set of real time communications components that developers can use to add features like audio, video, screen sharing etc. Since it's an internet application, the user can access from anyplace and anytime. The whole process is flexible, To make System more user friendly.

This study uses the speculation cloud service with AWS. The AWS SDK, the Chime API that your server application uses to authenticate and authorize meeting requests from your web application efficiently. Although we've got Many application for video conferencing the main use of DGCT MEET is each and each data gathered and processed can be handled by the administrator. The changes and implementation may be developed as per the necessity of the organization. Every module will be modified and developed by the wants of the user. No subscription required, Based upon the usage the payment is generated. Though it's designed for an corporation. It will be used for the method of making interviews, Immediate Meetings. Can be used as Placement Assistant. Hence our project is meant to Experience a replacement

communications service Amazon Chime.

II. EXISTING SYSTEM

Even though we've got many conferencing application in web .Many have faces disadvantages in successfully launching to beat it . To beat the difficulties faced here the proposed system is introduced for better experiencing the platform.

Disadvantages:

- The main disadvantage is that the Fixed UI.
- Other Video conferencing application Cannot integrate in cross-platform.
- Outside domain are visiting to be blocked or restricted in Existing systems.

III. PROPOSED SYSTEM

The system provides the flexible UI/UX for the users. This study uses Speculation cloud service with AWS. The AWS SDK, the Chime API that your server application uses to authenticate and authorize meeting requests from your web application efficiently ,although we've got many applications for video conferencing the foremost use of DGCT MEET is each and each data gathered and processed are often handled by the administrator. The changes and implementation will be developed as per the requirements of the organization.

Advantages

- Service that transforms meetings with a secure, easy-to-use application that you can trust.
- The Amazon Chime SDK offers pay-for-use pricing with no upfront fees.
- Every module will be modified and developed by the wants of the user.
- No subscription required, Based upon the usage the payment is generated.
- Though it's designed for a company It can be used for the meeting making interviews, Immediate Meetings. May be used as Placement Assistant.

IV. SOFTWARE REQUIREMENTS SPECIFICATION AND ANALYSIS

The important components employed in designing the project are as follows:

Hardware Specification

- Processor: Intel Core I5.
- Motherboard : Genuine Intel.
- RAM : Min 4 GB.
- Hard Disk : 512 GB HDD and better.
- Monitor .
- Mouse and Keyboard as Input Devices

Software Specification

- Operating system: Windows OS.
- Technology Used: PHP, chime client SDK,AWS composer.
- IDE: PhpMyAdmin
- Tools used: PHP,MySQL.
- Cloud as a service.

V. SYSTEM IMPLEMENTATION

System implementation is the process of: defining how the information system should be built (i.e., physical system design), ensuring that the information system is operational and also ensures that the information system meets quality standard (i.e., quality assurance). As mentioned in the system testing this application had been tested with desktop systems. Here, the quality of the information means how the outputs are satisfying the user's expectations. Hence our project is designed to Experience a new communications service using Amazon Chime.DGCT-Meet is a platform created where the organization can access it efficiently as per their development.

CHIME

Amazon Chime is a communications service that lets you meet, chat, and place business calls inside and outside your

organization, all using a single application.

With Amazon Chime, customers can: Conduct and attend online meetings with HD video, audio, screen sharing, meeting chat, dial-in numbers, and in-room video conference support. Use chat and chat rooms for persistent communications across desktop and mobile devices. Administer enterprise users, manage policies, and setup SSO or other advanced features in minutes using the Amazon Chime management console. Amazon Chime offers an easy-to-use app available for Windows, Mac, web, IOS, Android devices. For a set of real-time communications components to quickly add messaging, audio, video, and screen sharing capabilities to your web or mobile applications, please visit Amazon Chime SDK.

IAM

AWS Identity and Access Management (IAM) provides fine-grained access control across all of AWS. With IAM, you can specify who can access which services and resources, and under which conditions. With IAM policies, you manage permissions to your workforce and systems to ensure least-privilege permissions. IAM is an AWS service that is offered at no additional charge. To get started using IAM or if you have already registered with AWS, go to the IAM console. With IAM, you can manage AWS permissions for workforce users and workloads. For workforce users, we recommend that you use AWS Single Sign-On (AWS SSO) to manage access to AWS accounts and permissions within those accounts. AWS SSO makes it easier to provision and manage IAM roles and policies across your AWS organization. For workload permissions, use IAM roles and policies, and grant only the required access for your workloads.

S3 BUCKET

Amazon Simple Storage Service (Amazon S3) is an object storage service offering industry-leading scalability, data availability, security, and performance. Customers of all sizes and industries can store and protect any amount of data for virtually any use case, such as data lakes, cloud-native applications, and mobile apps. With cost-effective storage classes and easy-to-use management features, you can optimize costs, organize data, and configure fine-tuned access controls to meet specific business, organizational, and compliance requirements. In terms of implementation, buckets and objects are AWS resources, and Amazon S3 provides APIs for you to manage them. For example, you can create a bucket and upload objects using the Amazon S3 API. You can also use the Amazon S3 console to perform these operations. The console uses the Amazon S3 APIs to send requests to Amazon S3. For information about working with objects, see Amazon S3 objects overview. Amazon S3 supports global buckets, which means that each bucket name must be unique across all AWS accounts in all the AWS Regions within a partition. A partition is a grouping of Regions. AWS currently has three partitions: aws (Standard Regions), aws-cn (China Regions), and aws-us-gov (AWS GovCloud (US)). about exceeding the capacity of their storage devices. Many organizations have turned to CaaS to both offload IT maintenance and management chores to a cloud provider and to migrate from a capital expense to operational expense model with predictable monthly fees for various IT services provided by cloud vendors. This increases IT efficiency and enables resources to focus on business tasks instead of 'firefighting' server, storage, security, and networking issues.

VI. CONCLUSION

DGCT MEET is a system by which the system provides the flexible UI/UX for the users. Web Hosting Environment is used to provide services for building the application in An user-friendly way. XMPP is an open-source web server platform in which the application modules are tested before implementation Using PhpMyAdmin, Remote MySQL database is implemented on the server side and runs on any web server Chime provides AWS SDK (software development kit). The AWS uses a cloud storage s3 bucket , ec2 instance to host in cloud platform. No subscription required, Based upon the usage the payment is generated. Though it is designed for an organization It can be used for the process of creating interviews ,Immediate Meetings. Hence DGCT-Meet is a platform created where the organization can access it efficiently as per their development.

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