



CASE STUDY

**CLOUD-BASED WEB APP
DEVELOPMENT & DEPLOYMENT**



CCS
technologies

www.ccs-technologies.com

ABOUT CLIENT

The US-based client provides innovative learning solutions that schools and companies can subscribe to. They aim to cater to the learning requirements of children by providing an exemplar framework for use by schools, companies, nonprofits and more to center family learning and to structure a way to guide families and caregivers through the world.

BUSINESS NEED

- The client had an on-premises infrastructure.
- They wanted a web app developed and deployed on the cloud.
- The web app needed to be compliant with FERPA in terms of security.
- They expected the web app to have low latency and be available across the USA.
- The total cost of infra had to be reduced.
- The web app needed to be scalable to accommodate future growth and security needs.

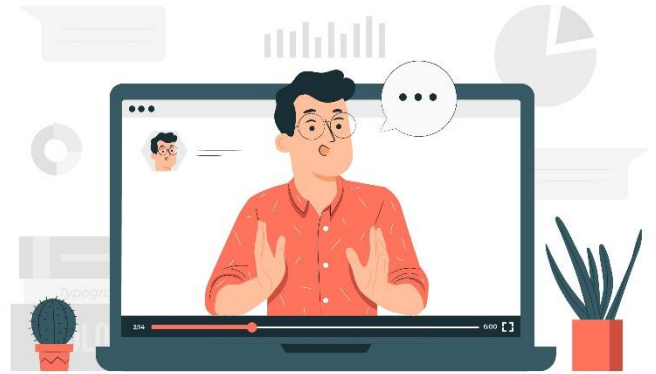
CCS SOLUTION

- CCS Team did an expert analysis of the client's business requirements before recommending AWS for the web app.
 - The cloud infra was FERPA compliant, and cost-effective.
 - Right-sized and provisioned optimal resources based on workloads.
 - Monitored the cloud infrastructure using CloudWatch.
 - EC2 Instances were considered for the web app and database servers.
 - Automation of the AMI backup and instance level scheduling was achieved using AWS Lambda.
 - OAI and WAF were used for secure and effective static content delivery from S3.
 - Caching in CloudFront was disabled to avoid latency issues in dynamic content delivery.
 - Lambda@Edge was used to secure the Website using Security Headers.
 - Helped the client opt for ACM certificates for end-to-end encryption and cost benefits.
 - Application Load Balancer was used for securing web API endpoints in EC2.
 - CloudFront was used to cache objects to reduce the load on the Application Load Balancer.
-

-
- CCS Engineers met the client's infra requirements with effective use of open-source services.

BUSINESS BENEFITS

- 20% faster access and availability of the web app across the target locations in USA.
- Cloud-based development ensured zero investment in hardware and its maintenance.
- CCS Engineers incorporated zero touch backup and disaster recovery solution without additional charges.
- Automated the VM Start/Stop of DEV and UAT environments and saved 60% on the TCO.
- Made it possible for the client to easily scale up/scale down as per business needs.
- Web app and infra are FERPA compliant which helped the client maintain the security of the customer/student/user data.





CORPORATE OFFICE

39/5173 - D, K C Abraham Master Road,
Panampilly Nagar, Ernakulam, India

US OFFICE

919 North Market Street, Suite 950
Wilmington, DE 19801, USA

DEVELOPMENT CENTER 1 & 2

1st & 4th floor, Lulu Cyber Tower 1,
Infopark, Kakkanad, Cochin 682030, India

DEVELOPMENT CENTER 3

Erayilkadavu, Kottayam, Kerala
686 001, India

collaborate@ccs-technologies.com

Business Enquiries: +91 96564 89733, +91 95676 71727, +1 909 979 9884