

Overview

This document outlines the estimated monthly cost of using Amazon AWS S3 for file storage and access in an E-learning system. The system involves three types of users — Admin, Instructors, and Students — each interacting with the storage in different ways.

Storage Plan

We will use Amazon S3 Standard Storage, which is best suited for frequently accessed files like course videos, documents, and student uploads.

User Roles & S3 Usage

- **Admin**
 - Uploads small personal assets (e.g., profile pictures, platform branding).
 - Minimal impact on cost due to very small data size.
- **Instructors**
 - Upload course content (videos, PDFs, quizzes).
 - Download student submissions for review.
 - Estimated: 3–4 new courses uploaded per instructor per month.
- **Students**
 - Frequently access and download course content.
 - Upload assignments and quiz answers.
 - Daily interaction with the S3 storage, especially for video access.

Key Cost Factors

- Uploading files (by instructors and students) has a low cost.
- Accessing files (especially videos by students) contributes more to the overall cost due to higher data transfer out.
- Storage volume grows with more courses and student data, but will remain manageable at a small scale.

Estimated Monthly Cost Summary (Middle East – Bahrain Region)

We will use Amazon owned s3 storage server located in bahrain called me-south-1 since it's closer arab countries including somalia

Category	Estimated Use	Monthly Cost (Approx)
Storage (100–150 GB)	Videos, documents, files	\$2.30–\$3.45

Data Transfer (~150 GB)	Students viewing content	~\$13.50
Requests (GET, PUT, etc.)	~100,000/month	~\$0.50
Total Estimated Cost	-	~\$16–\$18 per month

The costs shown in this document are only **estimates**. The **actual amount you pay will depend on how much you use the system** each month.

For example:

- If instructors **don't upload any new courses** during a certain month, then there will be **no new storage added**, and the **storage cost may stay the same or even be very low**.
- If **very few students access the course content**, the **data transfer cost will be lower**, because you only pay for the amount of data sent out to the internet.
- Also, if the files stored in S3 are not changing often, there will be **very few request charges** (for reading, writing, or listing files).

In short, if the platform is **not heavily used** in a certain month, **you will pay much less** than the estimated amount in this document.

This document gives a **rough idea** of possible monthly costs when the platform is active, but AWS will only charge based on **actual usage**.

Keeping Course Content Safe

We will make sure that all course materials (like videos, documents, and assignments) are stored safely and only seen by the right people. Here's how:

Only Authorized People Can Access

- Students will only see the courses they are enrolled in.
- Instructors can only access their own courses and student submissions.
- No one else (including the public) can access the files.

Temporary, Secure Links

- When someone watches a video or downloads a course content file (documents), the system will create a special link that works for a short time only.
- These links cannot be shared or reused after they expire.

Files Are Locked and Encrypted

- All files stored are automatically locked and protected by the system.
- Even if someone tries to access them directly, they won't be able to open the files without permission.

Safe Connections

- Every time someone accesses the platform, the connection is secure and private (just like when you log into a bank website).

In short, your course content will be safe, private, and only available to the right users. This protects your work from being copied, shared, or misused.