Project Documentation: Serverless File Viewer

# Part-1 – Index

## Project Summary

This project demonstrates a serverless web backend using Amazon API Gateway, AWS Lambda, and Amazon S3. It allows users to list all files stored in an S3 bucket via a HTTP API.

## Functionality

- Fetch and display all files present in the S3 bucket.  
- Secure, scalable, and serverless architecture.

## Architecture Drawing

[User] → API Gateway → Lambda → S3 Bucket → Return File List

# Part- 2 – Project Summary

## Objective

To build a lightweight, cost-effective backend system using AWS services that enables listing of files stored in an S3 bucket via a HTTP API.

## AWS Services Used

- Amazon API Gateway: Creates RESTful endpoints.  
- AWS Lambda: Executes serverless logic to connect to S3.  
- Amazon S3: Stores files and returns file lists.  
- IAM Roles & Permissions: Secure access between services.

## Use Cases

- File management system for students or teams..

# Page 3 – Functionality

## List Files API (GET /files)

Flow:  
- API Gateway receives a GET request.  
- Lambda function is triggered.  
- Lambda lists all files in `my-file-uploader-bucket-salman`.  
- File names are returned as a JSON response.

## Architecture Drawing (Detailed)

