Document Management System using AWS

Abstract:

A document management system (DMS) is a computer system (or set of computer programs) used to track and store electronic documents. It is usually also capable of keeping track of the different versions modified by different users (history tracking). The term has some overlap with the concepts of content management systems. It is often viewed as a component of enterprise content management (ECM) systems and related to digital asset management, document imaging, workflow systems and records management systems. Document management systems commonly provide storage, versioning, metadata, security, as well as indexing and retrieval capabilities.

Existing System:

In the existing system, giving rights to the groups and files both were not given. A single history was saved for the project. The file manipulating method was not done in a centralised manner. In the existing system, when the file is being modified the change in version number is done by the particular user. Searching process is mainly done on the file name itself.

Proposed System:

In the proposed system, will have an architecture related to AWS Serverless technologies. This provides several benefits like only pay AWS for usage, easily scales to thousands of concurrent requests, no servers to maintain or manage.

In this system, we will use Amazon S3 for storing all files/documents and CloudFront to host the console, AWS Lambda for document processing, DynamoDB for storing the meta data and API Gateway to serve the RESTful API platform.

Software Tools:

1. VS Code
2. NodeJS
3. NPM
4. AWS S3
5. AWS CloudFront
6. AWS IAM
7. AWS CloudWatch
8. AWS DynamoDB
9. AWS SNS
10. AWS Lambda

Hardware Tools:

1. Laptop
2. Operating System: Windows
3. RAM: 16GB
4. ROM: 8GB
5. Fast Internet Connectivity

Applications:

1. Unlimited Tagging and Versioning
2. Document Processing through subscribing to Document Events
3. Cloud-Native Architecture