Major Project Report on

SERVERLESS WEB APPLICATION ON CLOUD

Under Supervision of

Dr. Sachin Sharma

(Associate Prof. Department of Computer Science & Engineering)

By:

Vandit Bhardwaj (2011776)

Archit Gupta (2011698) Sandeep Naugain (2011751)



Department of Computer Science & Engineering Graphic Era (Deemed to be University) Dehradun-248002 (INDIA)

ACKNOWLEDGEMENT

We would like to show our mentor, **Dr. Sachin Sharma** (Associate Prof. Department of Computer Science & Engineering), our sincerest gratitude for giving us an opportunity to hone our skills and use them to work on such an important project. This project will not only enhance our technical skills but also helped us to learn about the trending technological advancements in the field of **Serverless Web Applications on AWS**. We would also like to extend our deepest thanks for considering us capable enough and providing us with much needed copious knowledge and resources.

Thank you for believing in us and trusting us with this project.

Table of Content

- 1. Introduction
 - 1.1. Purpose
 - 1.2. Project Scope
- 2. Overall Description
 - 2.1. Project Perspective
 - 2.2. Project Features
 - 2.3. Operating Environment
 - 2.4. Design and Implementation Constraints
- 3. System Specifications
- 4. About Serverless Application
- 5. References

1. INTRODUCTION

Purpose

It is a file hosting service that offers cloud storage, file synchronization and personal cloud. It brings files together in one central place by creating specific folder on cloud storage. The content of these folders is synchronized to AWS servers.

1.1 Project Scope

The long-term vision for serverless web application is for business users to include various storage space options to fit your team's needs, collaboration and productivity tool and robust data protection including two factor authentications.

2. OVERALL DESCRIPTION

2.1. Project Perspective

Our projects perspective is to provide such an application which can easily manage by people and can perform the data storage task efficiently and accurately.

2.2.Project Features

The project is a combination of various fields of computer science including the concepts of Cloud computing and concepts of AWS.

Web technologies have been used in developing the front end.

2.3. Operating Environment

The operating environment is Windows 10/Ubuntu and the project is developed in php language. The php language comes with some good inbuilt automated libraries.

2.4. Design and Implementations Constraints

Project involves following process

- > Step 1: Sign up/login into your account
- > Step 2: Select upload / Listing files
- > Step 3: Select the files you need to upload
- > Step 4: Upload the files
- Step 5: Uploaded files can be seen in the listing section

DFD DIAGRAM

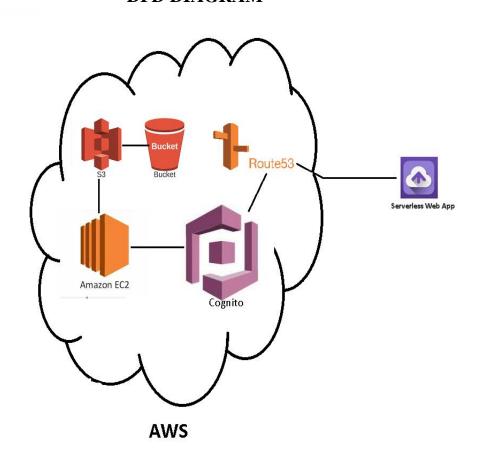


Fig. DFD of Serverless Web App

CONSTRAINTS AND ASSUMPTIONS

One employee who will be using this System must have some knowledge about this algorithm that how it should be used and what more we can do with this.

SYSTEM SPECIFICATIONS AND REQUIREMENTS

3.1 The system we are currently working on provides us with the following specifications:

• RAM : 8192MB RAM

• Operating System : Windows 10 Home Single 64-bit +

4. Serverless Applications

Serverless is the native architecture of the cloud that enables you to shift more of your operational responsibilities to AWS, increasing your agility and innovation. Serverless allows you to build and run applications and services without thinking about servers. It eliminates infrastructure management tasks such as server or cluster provisioning, patching, operating system maintenance, and capacity provisioning. You can build them for nearly any type of application or backend service, and everything required to run and scale your application with high availability is handled for you.

5.References

The following were used to gather and learn all the necessary skills.

- ➤ Introduction to PHP –by Andres's C. Muller (Author), Sarah Guido (Author)
- ➤ https://www.youtube.com/results?search_query=aws+serverless
- ► <u>https://stackoverflow.com/questions/48927251/how-to-integrate-aws-cognito-federated-identities-in-a-production-environment</u>
- https://www.w3schools.com/php