Guru Nanak Dev Engineering College

Ludhiana

Department Of Information Technology

Project Synopsis

For Minor Project

Batch 2018-2022

Session Jan-June 2021

Subject Of Project : DEPLOYING AN END TO END WEBSITE ON AMAZON WEB SERVICES(A.W.S)

Submitted By :

Piyush Gupta(1805536)

Piyush Mehta(1805537)

Asees Khurana(1805496)

Contents

Project Synopsis

May 13, 2021

1 Introduction

Covidbase is a project developed in this hard time of corona virus to help people. This project is based on medical field. The main motive behind making this project is to get data about people who was positive or never had corona before, persons who are vaccinated can upload vaccination.jpg in it for more information. In this project the main technology used is Amazon Web Services(A.W.S).

1.1 Tools Used :

1. Amazon Web Services

   Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud platform, offering over 200 fully featured services from data centers globally. Millions of customers—including the fastest-growing startups, largest enterprises, and leading government agencies—are using AWS to lower costs, become more agile, and innovate faster. AWS is a broadly adopted cloud platform that offers several on-demand operations like compute power, database storage, content delivery, etc., to help corporates scale and grow.

2. Applications of AWS
   AWS enables businesses to build a number of sophisticated applications. Organizations of every industry and of every size, can run every imaginable use case on AWS. Here are some of the most common applications of AWS:

   Storage and Backup One of the reasons why many businesses use AWS is because it offers multiple types of storage to choose from and is easily accessible as well. It can be used for storage and file indexing as well as to run critical business applications.

   Websites Businesses can host their websites on the AWS cloud, similar to other web applications.

   Gaming There is a lot of computing power needed to run gaming applications. AWS makes it easier to provide the best online gaming experience to gamers across the world.

   Mobile, Web and Social Applications A feature that separates AWS from other cloud services is its capability to launch and scale mobile, e-commerce, and SaaS applications. API-driven code on AWS can enable companies to build uncompromisingly scalable applications without requiring any OS and other systems.

2 Objective

Project objectives are what you plan to achieve by the end of your project.

2.1 Objective 1 :

People will connect to website and give their persona details and covid status vaccination report.

2.2 Objective 2 :

The data given by people can later be analysed so that we can know about how many got vaccinated.

2.3 Objective 3 :

- From the data we can know who had faced covid once or many times so that it can be further classified and used for other case studies.

2.4 Objective 4 :

From the data we can know who has never faced corona till now and can analyse the data.

3 Feasibility Study

3.1 Feasibility of Project :

This project we are showing the use of different aws services and later we can study the facts about covid report or status of different people. the project can be accessed easily by people by sharing a link where they have to fill data and submit.

3.2 Significance of Project :

When people will fill data about their covid report and vaccination status we will get data about them we can study it further and came to know about covid status of our known ones.

4 Methodology/ Planning of work

- Planning of frontend of website in html and connecting it to website made using flask in python
- Planning of getting a free domain from website named freenom
- Planning of use of AWS services such as EC2, RDS, ROUTE 53, S3 etc
- Using EC2 for getting a ubuntu server on AWS
- Using RDS for database made in MySQL
- Using ROUTE 53 service by AWS for creating a hosted zone.
- Using S3 for storing vaccination report in any format.

5 Facilities required for proposed work

Hardware :
A normal configuration pc/laptop and a good internet connection
Software :
We will use different services by aws given below:

5.1 Amazon Simple Storage Service (Amazon S3) :

Amazon Simple Storage Service (Amazon S3) is an object storage service that offers industry-leading scalability, data availability, security, and performance. This means customers of all sizes and industries can use it to store and protect any amount of data for a range of use cases, such as data lakes, websites, mobile applications, backup and restore, archive, enterprise applications, IoT devices, and big data analytics. Amazon S3 provides easy-to-use management features so you can organize your data and configure finely-tuned access controls to meet your specific business, organizational, and compliance requirements. Amazon S3 is designed for 99.999999999 percent (11 9's) of durability, and stores data for millions of applications for companies all around the world.

5.2 Amazon Relational Database Service (Amazon RDS) :

Amazon Relational Database Service (Amazon RDS) makes it easy to set up, operate, and scale a relational database in the cloud. It provides cost-efficient and resizable capacity while automating time-consuming administration tasks such as hardware provisioning, database setup, patching and backups. It frees you to focus on your applications so you can give them the fast performance, high availability, security and compatibility they need.

5.3 ROUTE 53 :

Amazon Route 53 is a highly available and scalable cloud Domain Name System (DNS) web service. It is designed to give developers and businesses an extremely reliable and cost effective way to route end users to Internet applications by translating names like www.example.com into the numeric IP addresses like 192.0.2.1 that computers use to connect to each other. Amazon Route 53 is fully compliant with IPv6 as well.

5.4 Amazon Elastic Compute Cloud (Amazon EC2)-SERVER :

Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides secure, re-sizable compute capacity in the cloud. It is designed to make web-scale cloud computing easier for developers. Amazon EC2's simple web service interface allows you to obtain and configure capacity with minimal friction. It provides you with complete control of your computing resources and lets you run on Amazon's proven computing environment.

WE WILL USE SOME OTHER SERVICES ALSO

5.5 Github- central repository :

GitHub, Inc. is a provider of Internet hosting for software development and version control using Git. It offers the distributed version control and source code management functionality of Git, plus its own features

5.6 Freenom- for domain :

Freenom is a free domain provider from where we got our freedomain with nameservers which can be used to connect to amazon route 53 services.

6 References

• https://docs.aws.amazon.com/ec2/index.html
(From AWS website in year May 2021)
• https://docs.aws.amazon.com/rds/index.html
(From AWS website in year May 2021)^
• https://docs.aws.amazon.com/s3/index.html
(From AWS website in year May 2021)^
• https://dev.to/hieplpvip/get-a-free-domain-with-freenom-and-cloudflarek1j
(From AWS website in year May 2021)^
• https://www.simplilearn.com/tutorials/aws-tutorial/what-is-aws
(From Simplilearn website in year May 2021)