

DOCUMENTATION

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39120114

HOSTING A STATIC WEBPAGE IN CLOUD



PROFESSIONAL TRAINING REPORT
at
Sathyabama Institute of Science and Technology
(Deemed to be University)

Submitted in partial fulfillment of the requirements for the award of
Bachelor of Technology in Information Technology

By

P.SIVAPRIYA
REG. NO. 39120114



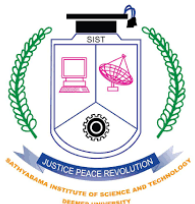
DEPARTMENT OF INFORMATION TECHNOLOGY

SCHOOL OF COMPUTING

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY
JEPPIAAR NAGAR, RAJIV GANDHI SALAI,
CHENNAI – 600119, TAMILNADU

NOVEMBER 2021



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DEPARTMENT OF INFORMATION TECHNOLOGY

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of SIVAPRIYA.P (Reg. No: 39120114) who carried out the project entitled “HOSTING A WEBPAGE IN AWS” under my supervision from June 2021 to November 2021.

Internal Guide

Name of the Guide: DR.V.NIRMAL RANI

Head of the Department:

Submitted for Viva voce Examination held on _____

Internal Examiner

External Examiner



DECLARATION

I, **SIVAPRIYA.P** hereby declare that the project report entitled **HOSTING A WEBPAGE IN AWS** done by me under the guidance of **Dr.V.NIRMAL RANI** is submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering Degree in Computer Science and Engineering.

DATE:

PLACE:

SIGNATURE OF THE CANDIDATE



ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to **Board of Management** of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey my thanks to **Dr. T. Sasikala M.E., Ph.D**, Dean, School of Computing, **Dr. R. Subhashini, M.E., Ph.D. Head of the Department of Information Technology** for providing me necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense of gratitude to my Project Guide **Dr. V.NIRMAL RANI M.E., Ph.D.**, for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express my thanks to all Teaching and Non-teaching staff members of the **Department of Information Technology** who were helpful in many ways for the completion of the project.



TRAINING CERTIFICATE



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NPTEL » Cloud computing

AnnouncementsAbout the CourseAsk a QuestionProgressMentor

Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Text Transcripts

Books

Download Videos

Assignments Solution

Sivapriya P

Date enrolled: 2021-08-28

Email: priyaprincess0605@gmail.com

Name: Sivapriya P

Assessment scores

Assignment 0: -

Week 1 : Assignment 1: -

Week 2 : Assignment 2: -

Week 3 : Assignment 3: 82.0

Week 4 : Assignment 4: 74.0

Week 5 : Assignment 5: 85.0

Week 6 : Assignment 6: 90.0

Week 7 : Assignment 7: 95.0

Week 8 : Assignment 8: 80.0

RESULTS YET TO COME.



Edit with WPS Office

ABSTRACT

FAST Application is Facial Attendance System Technology Application which is an automated attendance system. This system is a prototype model for AI based Attendance System. This system provides a solution using IoT, Microsoft Cognitive Services and JavaScript Frameworks like Angular, Nodejs, Johnny-Five.

Automation is a necessity in the current times as it makes processes more economical and affordable in the long run. It also frees humans from performing banal tasks day in and day out. Once a process is automated the only check that is to be performed is whether it is turned on or not. Automated processes are not prone to errors and even if an error is identified rectification is easy and can be applied system wide without any delay.

Taking attendance is a mundane but necessary task in many academic institutions. In this paper, an alternate and more efficient method of taking attendance is proposed that uses facial recognition and cloud based IoT technology to automate the entire system



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1.1 INTRODUCTION OF CLOUD COMPUTING

The impact of cloud computing on industry and end users would be difficult to overstate: many aspects of everyday life have been transformed by the omnipresence of software that runs on cloud networks. By leveraging cloud computing, startups and businesses are able to optimize costs and increase their offerings without purchasing and managing all the hardware and software. Independent developers are empowered to launch globally-available apps and online services. Researchers can share and analyze data at scales once reserved only for highly-funded projects. And internet users can quickly access software and storage to create, share, and store digital media in quantities that extend far beyond the computing capacity of their personal devices.

Despite the growing presence of cloud computing, its details remain obscure to many. What exactly is the cloud, how does one use it, and what are its benefits for businesses, developers, researchers, government, healthcare practitioners, and students? In this conceptual article, we'll provide a general overview of cloud computing, its history, delivery models, offerings, and risks.

By the end of this article, you should have an understanding of how the cloud can help support business, research, education, and community infrastructure and how to get started using the cloud for your own projects.

1.2 WHAT IS AWS ?



AWS stands for Amazon Web Services. ... AWS for beginners offers database storage options, computing power, content delivery, and networking among other functionalities to help organizations scale up. It allows you to select your desired solutions while you pay for exactly the services you consume only.

2.1 Types of Cloud Computing:

Basically, there are three types of cloud computing and they are:

Public cloud
Private cloud
Hybrid cloud

Public cloud: Third parties buy and run the public clouds; they provide a low cost to each individual client in a “pay as you go” form. All these are controlled by the cloud computing provider and an advantage in it is that they might be larger than a company of the firm’s cloud.

Private cloud: These are made only for a single company or firm. These are two types of private clouds:

On-premise private cloud

Externally hosted private cloud

On-premise private cloud: These are the internal clouds that are hosted with the own data center of an enterprise.

Externally hosted private cloud: These clouds are hosted by an external cloud provider where the providers provide full security.

Hybrid cloud: The hybrid cloud is a combination of both public and private clouds and thus flexibility of a computer is increased.

2.2 Components of cloud computing:

Here the components in the sense refer to the platforms like cloud delivery, usage of the network’s front end back end which together form the cloud computing architecture.

Storage-as-a-service: In this component, we can avail of storage as we do it at the remote site. It is the main component and called disk space on demand.

Database-as-a-service: This acts as a live database and the main aim of this component is to reduce the price of dB by using more software and hardware.

Information-as-a-service: Data that can approach from anywhere is known as information-as-a-service. Internet banking, online news, and much more are included in it.

Process-as-a-service: Combination of different sources like information and services is done in process-as-a-service; it is mainly helpful for mobile networks.



2.3 Advantages Of Cloud Computing:

- *Cloud computing is low in cost and affordable because we get the bills as per the usage.
- *The storage and maintenance of a large amount of information or data are possible.
- *Cloud computing is very flexible.
- *It provides high security.
- *The option of data recovery is available.
- *Data can be managed easily.
- *It has an automatic update option.

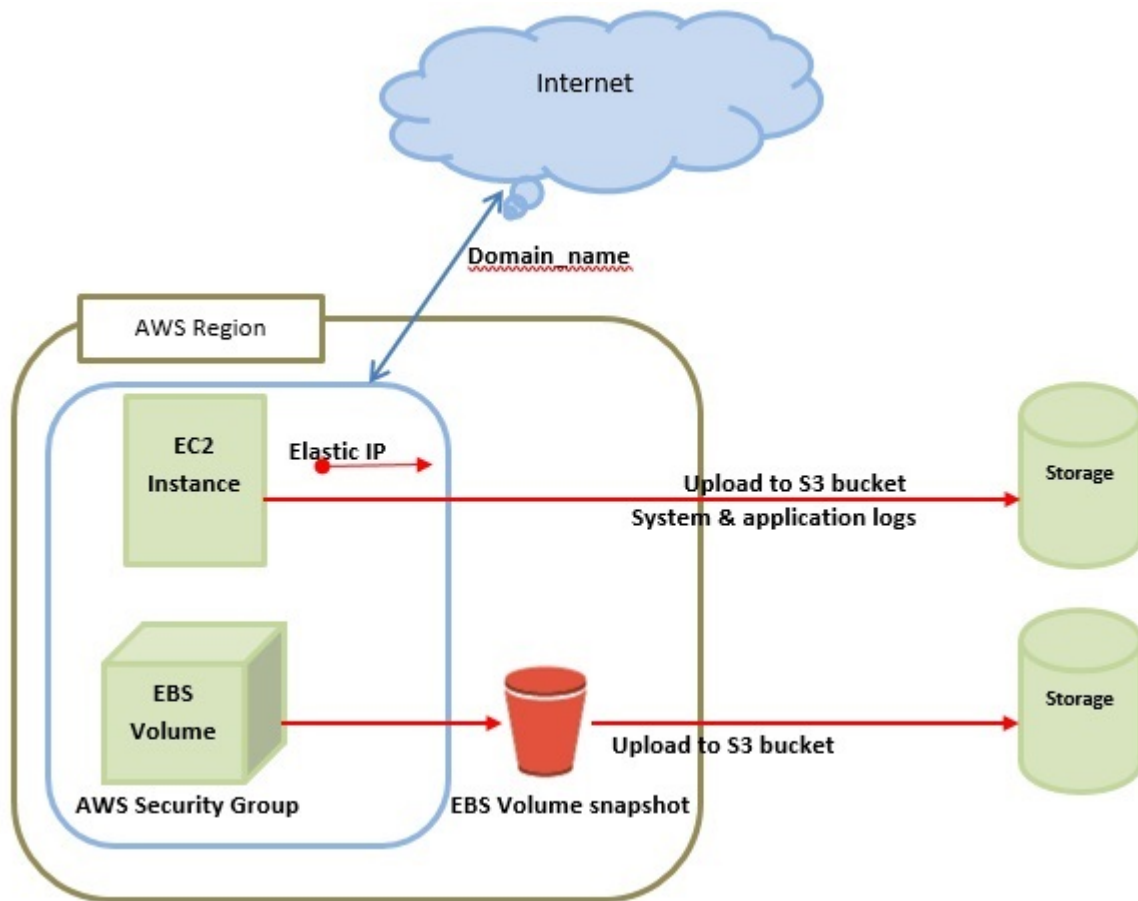
Disadvantages Of Cloud Computing:

- *Along with the advantages, it also has some disadvantages and they are as follows:
- *One of the disadvantages of cloud computing is that it is risky.
- *It requires a continuous internet connection and has a migration issue.

3.1 AWS BASIC ARCHITECTURE

This is the basic structure of AWS EC2, where EC2 stands for Elastic Compute Cloud. EC2 allow users to use virtual machines of different configurations as per their requirement. It allows various configuration options, mapping of individual server, various pricing options, etc. We will discuss these in detail in AWS Products section. Following is the diagrammatic representation of the architecture.

Note – In the below diagram S3 stands for Simple Storage Service. It allows the users to store and retrieve various types of data using API calls.



3.2 Key Considerations for Web Hosting in AWS

Following are some of the key considerations for web hosting –

No physical network devices needed

In AWS, network devices like firewalls, routers, and load-balancers for AWS applications no longer reside on physical devices and are replaced with software solutions.

Multiple options are available to ensure quality software solutions. For load balancing choose Zeus, HAProxy, Nginx, Pound, etc. For establishing a VPN connection choose OpenVPN, OpenSwan, Vyatta, etc.

No security concerns

AWS provides a more secured model, in which every host is locked down. In Amazon EC2, security groups are designed for each type of host in the architecture, and a large variety of simple and tiered security models can be created to enable minimum access among hosts within your architecture as per requirement.

Availability of data centers

EC2 instances are easily available at most of the availability zones in AWS region and provides model for deploying your application across data centers for both high availability and reliability.



3.3 Types of cloud computing solutions

THE HARDWARE – EC2, LAMBDA, ELASTIC, CONTAINER SERVICE

THE STORAGE – S3, EFS, GLACIER

THE NETWORK – VPC ,ROUTE53, DIRECT CONNECT

THE SECURITY - IAM ,KMS,COGNITO

MANAGEMENT PROCESSES AND TOOLS – CLOUD WATCH, AUTOSCALING,CLOUD FORMATION

TESTING THE PROCESS – CODE STAR,CODE BUILD, CODE PIPELINE

ANALYSIS – ATHENA ,EMR,CLOUD SEARCH.

3:4 CLOUD PROVIDERS:

AWS (ALL SERVICES)

MS AZURE(ALL SERVICES)

IBM CLOUD(ALL SERVICES AND DATABASE)



IMPLEMENTATION:

- I DEVELOPED MY OWN WEBPAGE PURELY WITH HTML AND CSS
 - COLLECTED ALL THE IMAGES ,LINKS ,LOGOS ,STYLE SHEET,AND HTML FILES IN ONE FOLDER
 - I CREATED MY OWN ACCOUNT IN THE CLOUD PROVIDER AMAZON WEB SERVICES
 - TO HOST-LIVE MY WEBPAGE I SELECTED THE STORAGE SERVICES (S3)
 - CREATED A BUCKET IN S3 IN UNIQUE NAME
 - UPLOADED THE FILES AND MADE PUBLIC VIA ACL TO USE ACCESS THE URL WORLDWIDE
 - ENABLED THE STATIC WEBSITE HOSTING
 - GOT THE URL AND OUTPUT

SUMMARY

TO MY POINT OF VIEW CLOUD COMPUTING IS DELIVERY OF STORAGE AND GIVING ACCESS OVER THE INTERNET RATHER THAN PHYSICAL STORAGE DEVICES AND GIVES ON DEMAND COMPUTING SERVICES IN PAY AS YOU GO BASIS WHICH IS BEST IN EVERY WAY

I USED AWS IN FREE TRY FOR ONE YEAR BY CREDITED ONLY 2 BUCKS FROM MY CARD WHICH IS ABSOLUTELY ACCEPTED

VERY EASY TO HOST A STATIC WEBSITE IN AWS IF YOU HAVE A OWN WEBPAGE

CONCLUSION

Cloud computing offers real alternatives to IT departments for improved flexibility and trim down the cost. Markets are developing for the delivery of software applications, platforms, and infrastructure as a service to IT departments over the “cloud”. These services are readily accessible on a pay-per-use basis and offer great alternatives to businesses that need the flexibility to rent infrastructure on a temporary basis or to reduce capital costs.

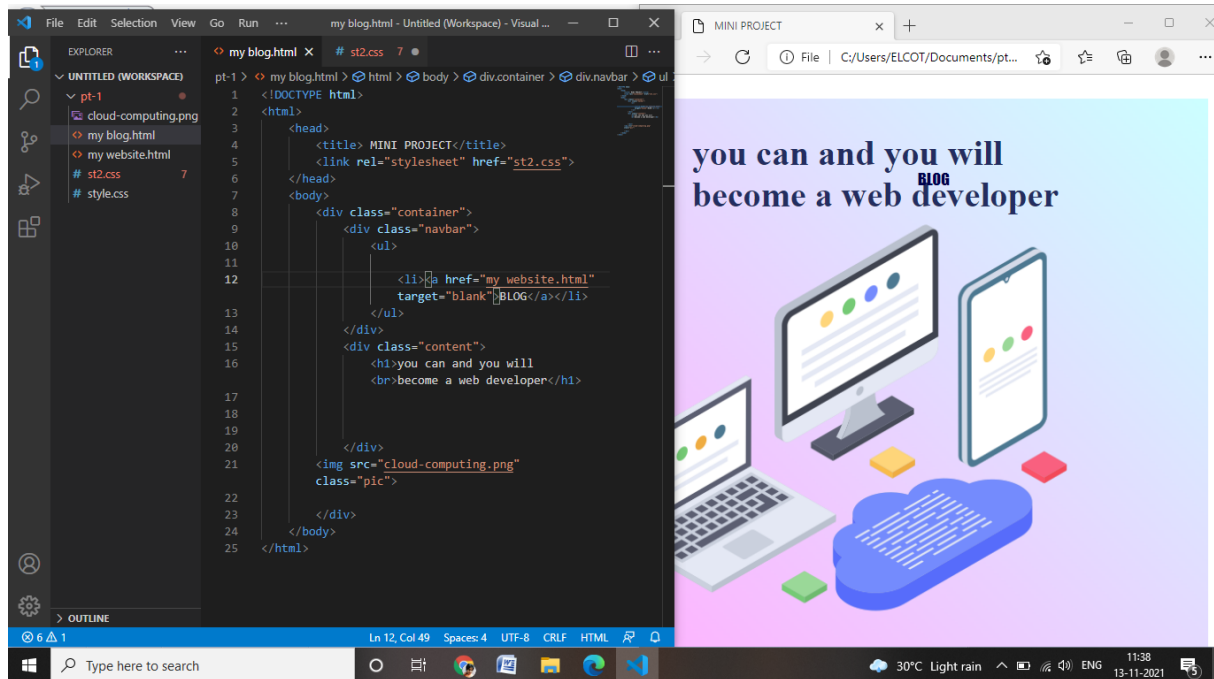
References

- 1) Architectural Strategies for Cloud Computing, august _cloud_computing.pdf[2]
Wikipedia, ‘Cloud Computing’ – available at[3] Mladen A. Vouk ‘Cloud Computing – Issues, Research and Implementations
- 2) YOUTUBE VIDEOS AND NPTEL LECTURES
- 3) MY OWN WORDS AND EXPERIENCE
- 4) SUBJECT NOTES AND USED WEBSITE PICTURES

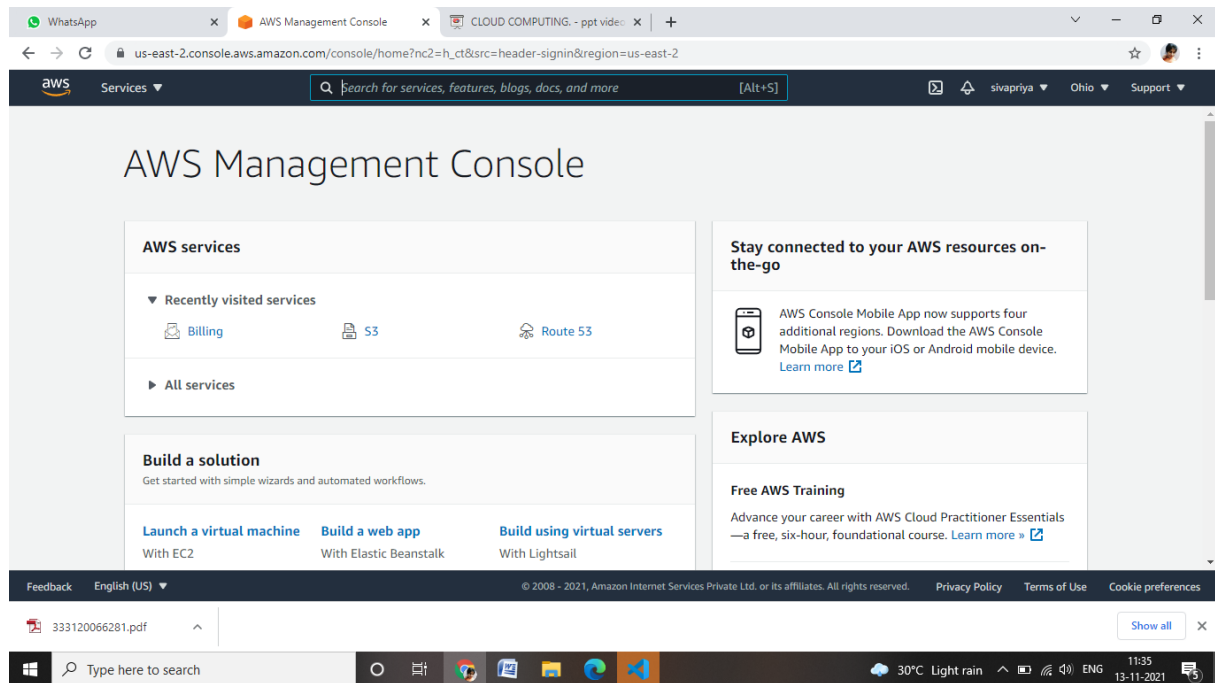


SCREENSHOTS

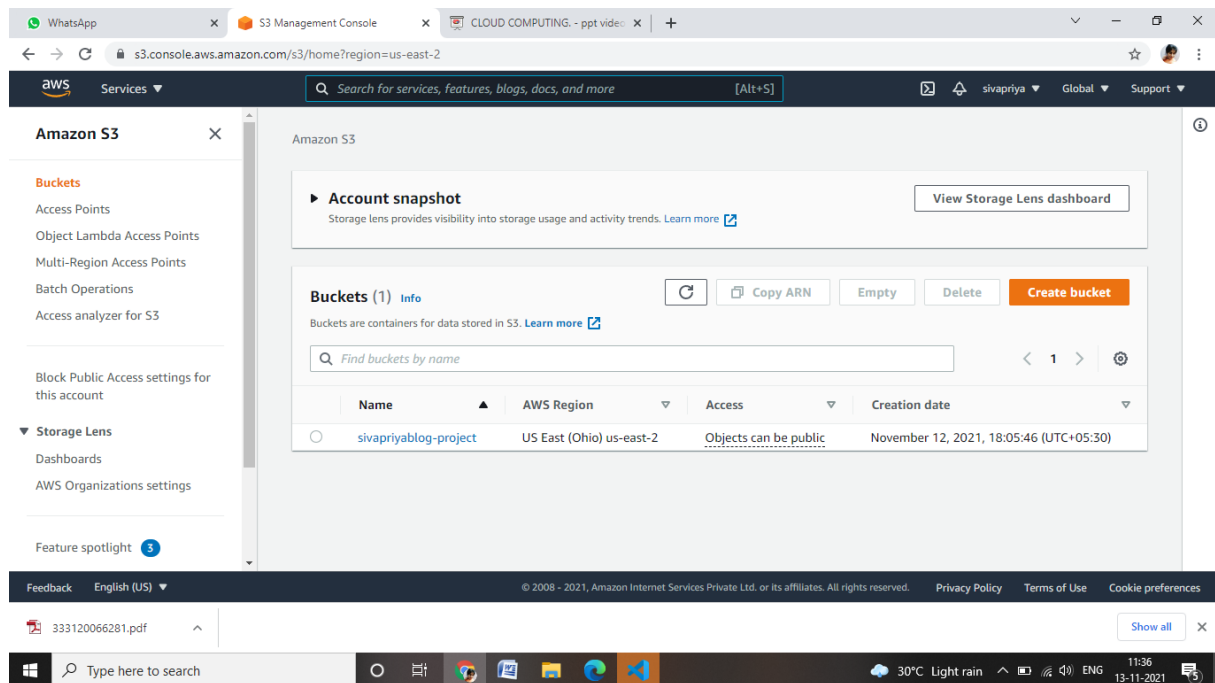
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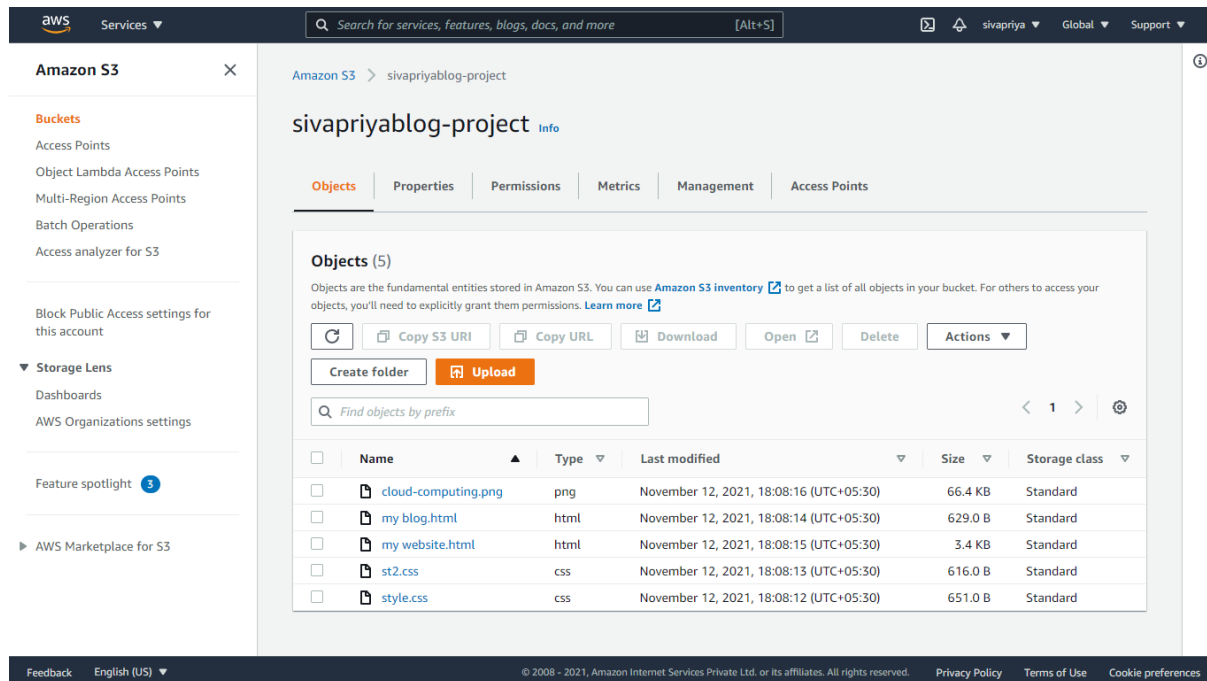
CREATED A OWN WEBPAGE IN HTML AND CSS



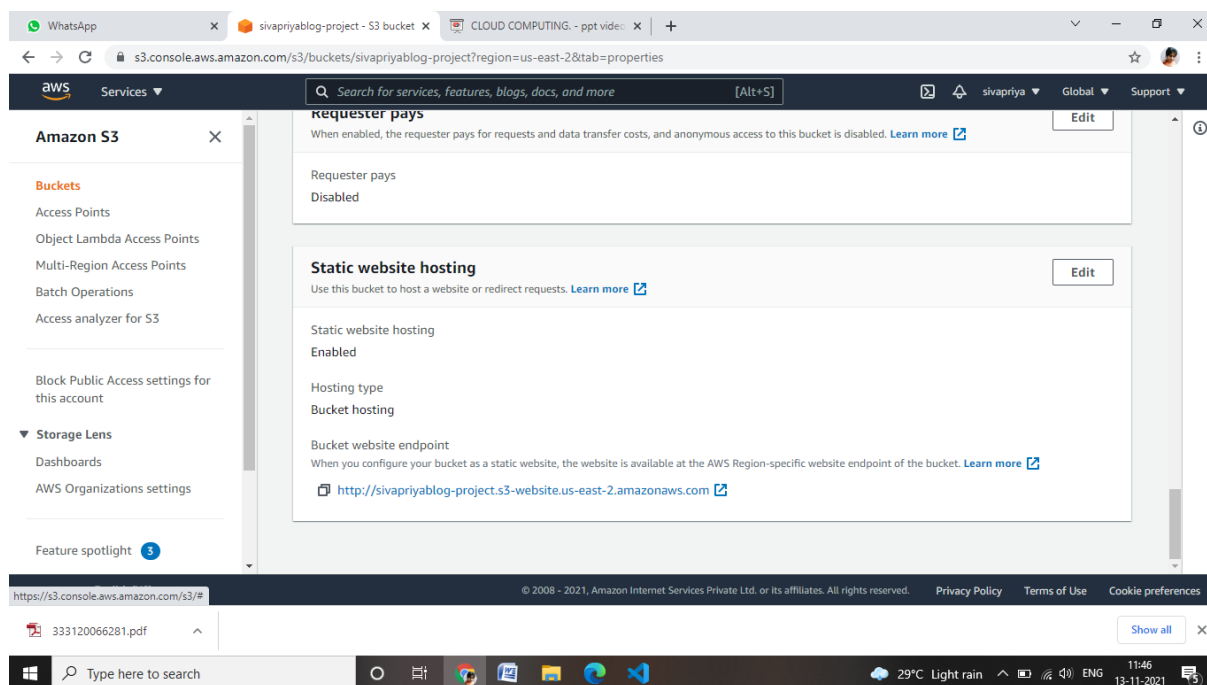
2. CREATED A ACCOUNT IN AWS



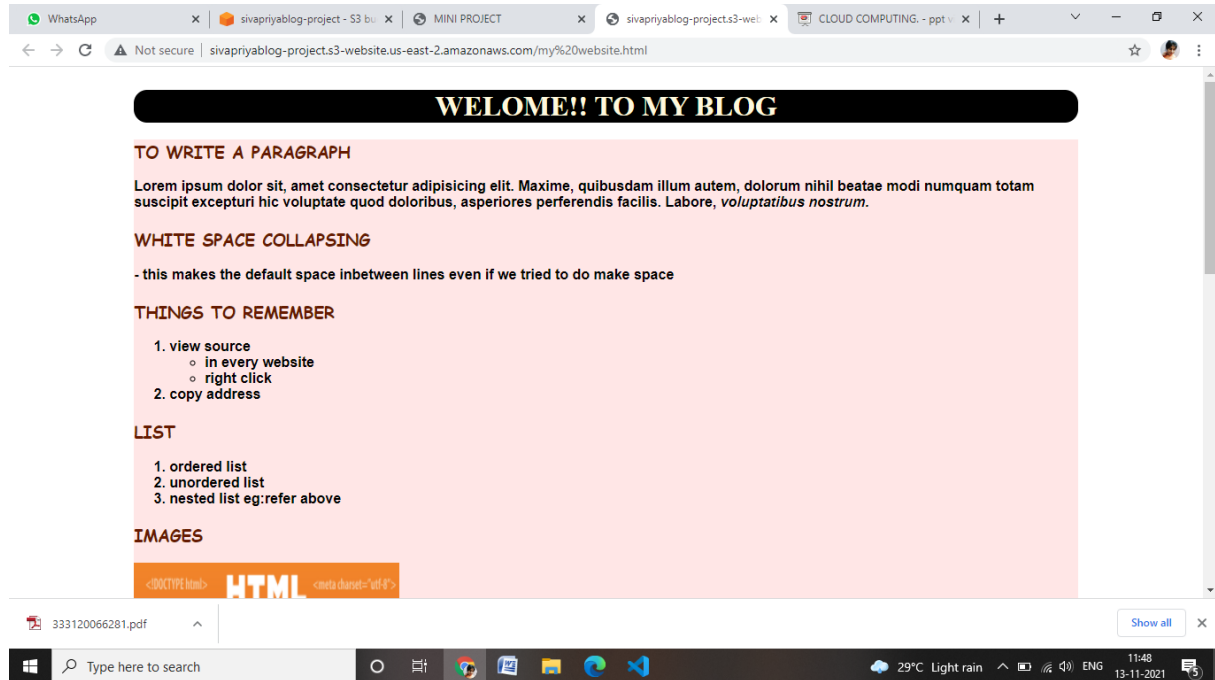
3. S3 STORAGE PAGE AND CREATED A BUCKET



4.UPLOADED THE WORK PAGES AND MADE PUBLIC ACL



5. ENABLED THE STATIC WEB HOSTING AND GOT URL



6. GOT ACCESS FROM THE URL

URL LINK OF MY PROJECT: <http://sivapriyablog-project.s3-website.us-east-2.amazonaws.com/>

SOURCE CODE

HTML:

```
<!DOCTYPE html>
<html>
  <link rel="stylesheet" type="text/css" href="style.css">

  <head>
    <br>
    <h1>WELCOME!! TO MY BLOG</h1>
  </head>

  <body>
    <div class="container">
      <p1>
        <div class="c1"></div>
        <h3>to write a paragraph</h3>
        <STRONG>Lorem ipsum</STRONG> dolor sit, amet consectetur adipisicing elit. Maxime, quibusdam illum
        autem, dolorum nihil beatae modi numquam totam suscipit excepturi hic voluptate quod doloribus, asperiores
        perferendis facilis. Labore,<em> voluptatibus nostrum.</em>
      </p1>
    </body>
    <h3>
      WHITE SPACE COLLAPSING</h3>-- this makes the default space inbetween lines even if we tried to do make
      space
    <h3>things to remember</h3>
    <ol>
      <li>view source</li>
      <ul>
        <li>in every website</li>
        <li>right click</li>
      </ul>
      <li>copy address</li>
    </ol>
    <h3>list</h3>
    <ol>
      <li>ordered list</li>
      <li>unordered list</li>
      <li>nested list eg:refer above</li>
    </ol>
    <h3>images</h3>
    <br>
    <p2>if you want offline images to load in website use img src ="folder name/image name.extension"</p2>
    <h3>link</h3>
    <a href="https://www.tutorialstonight.com/html-tags-list-with-examples.php"target="_blank">
      <h4>tags and refer link</h4>
    </a>
    <h3>table</h3>
    <table>
      <tr>
        <th>S.NO</th>
```



```

        <th>NAME</th>
        <th>RELATION</th>
    </tr>
    <tr>
        <td>1</td>
        <td>perumal</td>
        <td>father</td>
    </tr>
    <tr>
        <td>2</td>
        <td>sangeetha</td>
        <td>mother</td>
    </tr>
    <tr>
        <td>
            3
        </td>
        <td>mukesh</td>
        <td>brother</td>
    </tr>
</table>
<h3>form</h3>
<form>
    <div>
        <label>NAME</label>
        <input type="text"placeholder="priya" >
    </div>
    <br>

    <label>PH</label>
    <input type="number"placeholder="12345"><br><br>

    <label>DEPT</label>
    <select>name="dept">
        <option value="it">IT</option>
        <option value="cse">CSE</option>
        <option value="ece">ECE</option>
        <option value="mech">MECH</option>

    </select>
    <br>
    <br>
    <input type="submit">
</form>
<h3>script</h3>
<ol>
    <li>superscript</li>
    <p3>
        <strong>
            eg:2<sup>4</sup>
        </strong>
    </p3>
    <li>subscript</li>
    <p4><strong>eg:oxygen=o<sub>2</sub></strong></p4>
</ol>
</div>
<div class="s1">
    <h2> Thank You</h2>

```



```

    <p> copyright&copy; mail id:priyaprincess0605@gmail.com</p>
  </div>

</body>
</html>

```

```

<!DOCTYPE html>
<html>
  <head>
    <title> MINI PROJECT</title>
    <link rel="stylesheet" href="st2.css">
  </head>
  <body>
    <div class="container">
      <div class="navbar">
        <ul>

          <li><a href="my website.html" target="blank">BLOG</a></li>
        </ul>
      </div>
      <div class="content">
        <h1>you can and you will <br>become a web developer</h1>

        </div>
        

      </div>
    </body>
  </html>

```

CSS

```

body{
  .container{
    margin:auto;
    width: 80%;
    background-color: #ffe6e6;
    font-weight: bolder;
    font-family: Arial, Helvetica, sans-serif;
  }
  h3{
    font-family: cursive;
    color: #661a00;
    text-transform: uppercase;
  }
  h1{

    color: cornsilk;
    text-align-last: center;
    margin:10px,5px,10px,5px;

```



```

background-color: black;
width: 80%;
margin: auto;
border-radius: 15px;
}
.s1{
background-color: black;
text-align-last: center;
color: rgb(248, 245, 241);
width: 80%;
margin: auto;
}
body{}
.container{

background: linear-gradient(45deg,#ffb3ff, #ccffff);
height: 100vh;
width: 100%;

}
.navbar ul li {
display: inline-block;
font-size: 18px;
font-family: fantasy;
right: 300PX;
bottom: 80%;

position: absolute;

}
.navbar a{
border top: 50%;
color:#00004d;
text-decoration: none;
}
.content h1{
font-size: 40px;
color:#232d60;
padding-top: 6%;
padding-left: 8%;

}
.pic{
height: 80%;
position: absolute;
bottom: 0;
right: 160px;
}

```



```

body{
.container{

    background: linear-gradient(45deg,#ffb3ff, #ccffff);
    height: 100vh;
    width: 100%;

    }
.navbar ul li {
    display: inline-block;
    font-size: 18px;
    font-family: fantasy;
    right: 300PX;
    bottom: 80%;

    position: absolute;

}

.navbar a{
    border top: 50%;
    color:#00004d;
    text-decoration: none;
}
.content h1{
    font-size: 40px;
    color:#232d60;
    padding-top: 6%;
    padding-left: 8%;

}

.pic{
    height: 80%;
    position: absolute;
    bottom: 0;
    right: 160px;
}

```

ARIGATHO GOSAIMAS- THANK YOU☺