

## **Cloud Computing Project1 Report**

**Title:**

**Creating a Virtual Machine on Azure and Hosting a Static Website**

**Submitted by:**

**YELLA REDDY KALUVAI**

**Internship Program:**

**Cloud Computing Internship PROJECT1 – 2025**

**Institution:**

**Amrita Vishwa Vidyapeetham, Coimbatore.**

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## **Abstract :**

This project focuses on launching a Virtual Machine (VM) with Microsoft Azure and hosting a static site developed using HTML and CSS on the set server. The objective is to achieve hands-on experience in the setup of cloud infrastructure and its implementation to real-world applications such as web hosting. The process involves setting up a Linux-based VM, deploying the Apache web server, and hosting a custom static website onto the cloud environment. Domain mapping and SSL installation were also optionally tested to improve the security of the site.

Cloud computing has emerged as a pillar of modern-day IT infrastructure by providing elastic, cost-effective, and highly scalable services. Website hosting through cloud platforms breaks away from the reliance on physical hardware and enables worldwide access.

The end product of this project is a live static website hosted on a cloud virtual machine, demonstrating the real-life use of Infrastructure as a Service (IaaS) in the context of cloud computing.

## **Objective :**

The primary objectives of this project are as follows:

- To understand the process of creating and configuring a Virtual Machine (VM) on the Microsoft Azure cloud platform.
- To learn the deployment of a static website using HTML and CSS by hosting it on a cloud-based server.
- To gain hands-on experience with real-world cloud computing concepts such as remote server access, file deployment, and web server configuration.
- To explore optional advanced steps including the configuration of a custom domain name and SSL certificate for enabling secure HTTPS access.

This project aims to strengthen foundational knowledge in Infrastructure as a Service (IaaS) and demonstrate how cloud services can be leveraged for web hosting and scalable deployment.

## **Introduction**

### **Basics of Cloud Computing**

Cloud computing is the on-demand delivery of computing services—such as servers, storage, databases, networking, software, and analytics—over the internet (“the cloud”) to offer faster innovation, flexible resources, and economies of scale. Instead of owning their own computing infrastructure or data centers, companies can rent access to anything from applications to storage from a cloud service provider.

Cloud computing is typically offered in three main service models:

- **Infrastructure as a Service (IaaS)** – providing virtualized computing resources over the internet.
- **Platform as a Service (PaaS)** – delivering hardware and software tools over the internet.
- **Software as a Service (SaaS)** – delivering software applications over the internet on a subscription basis.

It allows users to scale resources up or down based on demand, pay only for what they use, and eliminate the costs and complexity of owning and maintaining physical servers.

### **What is a Virtual Machine (VM)?**

A Virtual Machine (VM) is a software emulation of a physical computer that runs an operating system and applications just like a physical machine. It is created using virtualization technologies and is hosted on a physical server in a data centre.

Each VM includes its own virtual CPU, memory, storage, and network interface, allowing it to operate independently.

In the context of cloud computing, VMs are critical components of IaaS. Cloud platforms such as Azure, AWS, and Google Cloud allow users to create and configure VMs to run applications, host websites, and test software without the need for physical infrastructure.

### **Why Use Microsoft Azure?**

**Microsoft Azure** is one of the leading cloud platforms, offering a wide range of services across computing, storage, networking, analytics, and artificial intelligence. It is trusted by enterprises, startups, and developers worldwide for building, deploying, and managing applications.

Key benefits of using Azure include:

- **User-friendly Interface:** Azure provides a simple and intuitive portal for managing resources.
- **Scalability:** Easily scale VMs based on demand.

- **Global Reach:** Azure has data centres around the world, ensuring high availability and low latency.
- **Integrated Services:** Seamless integration with databases, storage, AI, and security tools.
- **Free Tier Access:** Microsoft Azure offers a free tier with limited resources, allowing students and developers to experiment and learn.

In this project, Azure was chosen for its robust VM capabilities, support for Linux distributions, and ease of deployment for web-based applications.

### **Benefits of Hosting Websites on Cloud Virtual Machines (VMs)**

Hosting websites on cloud-based Virtual Machines (VMs) offers several advantages compared to traditional on-premise or shared hosting solutions. These benefits include:

- **Scalability:** Cloud VMs can be easily scaled up or down based on traffic and resource requirements. This ensures your website performs well under varying loads without manual hardware upgrades.
- **High Availability:** Cloud platforms like Azure provide infrastructure redundancy and failover options that help ensure your website remains accessible even during hardware or network failures.
- **Global Reach:** With data centers located across the world, cloud providers allow you to host your website closer to your users, improving load times and user experience.
- **Cost Efficiency:** With a pay-as-you-go model, you only pay for the resources you use. This eliminates the need for large upfront investments in hardware and maintenance.
- **Security:** Cloud platforms offer built-in security features, such as firewalls, DDoS protection, and encrypted storage, helping to safeguard your website and data.
- **Customizability:** Unlike shared hosting, a VM provides full control over the server environment. You can configure the OS, web server, and software as needed.
- **Development and Testing Flexibility:** Developers can deploy and test updates in isolated environments on cloud VMs without affecting the live website.

These benefits make cloud VMs an ideal choice for hosting websites in today's dynamic and digital-first landscape.

## **Methodology**

This section outlines the step-by-step approach followed for hosting a **static website using Microsoft Azure Storage Account** instead of a full Virtual Machine and web server stack. Azure Storage provides a lightweight, cost-effective solution for deploying HTML/CSS-based websites without the overhead of managing servers.

### **1. Creating a Microsoft Azure Account**

To get started, a Microsoft Azure Free Tier account was created.

#### **Steps:**

- Visit <https://azure.microsoft.com>
- Click on “**Start Free**” and sign in with an existing Microsoft account.
- Complete the identity verification via phone and a refundable debit/credit card transaction.
- Access the Azure Dashboard from <https://portal.azure.com>

### **2. Create a Virtual Machine (VM)**

- In the Azure Portal, navigate to **Virtual Machines** and click **Create**.
- Choose an OS: **Ubuntu 20.04 LTS** (Linux) or **Windows Server 2019** (Windows).
- Set VM details:
  - Region (e.g., Central India)
  - Size (Free Tier eligible like B1s)
  - Authentication type (Password or SSH key)
  - Allow inbound ports: **HTTP (80)** and **SSH (22)** or **RDP (3389)** for Windows
- Click **Review + Create**, then **Create**

### **3. Connect to the Virtual Machine (VM)**

Once the virtual machine is successfully deployed on Azure, you can connect to it remotely using either **SSH** (for Linux VMs) or **RDP** (Remote Desktop Protocol, for Windows VMs).

❖ **For Linux Virtual Machines: Connecting via SSH**

## **Pre-requisites:**

- Your VM must have **SSH (port 22)** allowed during creation.
- You must have noted down the **public IP address** of the VM.
- Use a terminal (Linux/Mac), **Windows Terminal**, or **PuTTY** (on Windows).

## **Steps:**

1. Open your terminal or SSH client.
2. Type the following command (replace <your-public-ip> with actual IP):
3. If prompted:
  - Type yes to continue connecting (only the first time).
  - Enter the **password** you set during VM creation (if using password-based authentication).

Once authenticated, you will be logged into the **Ubuntu shell** of your Azure VM and can start executing commands like installing Apache, navigating directories, uploading website files, etc.

## **For Windows Virtual Machines: Connecting via RDP**

### **Pre-requisites:**

- Your VM must have **RDP (port 3389)** allowed during setup.
- A Windows machine with **Remote Desktop Connection (RDP)** installed (built-in in Windows).

## **Steps:**

1. Open the **Azure Portal**, go to your Virtual Machine overview page.
2. Click “**Connect**” → **RDP** from the top menu.
3. A new panel will appear with:
  - **Public IP address**
  - Option to **Download RDP file**
4. Click “Download RDP file” and open it.
5. When prompted, enter:
  - **Username** (e.g., azureuser)
  - **Password** you set while creating the VM
6. Click “**Yes**” if a certificate warning appears.

## **4. Install Web Server**

A web server is required to serve your HTML/CSS files to users accessing your website. Depending on your operating system, you'll install either **Apache (on Linux)** or **IIS (on Windows)**.

### **On Linux (Ubuntu): Installing Apache Web Server**

Apache is a popular open-source HTTP server that is lightweight, easy to install, and ideal for hosting static websites.

#### **Steps:**

##### **1. Update the package lists:**

```
sudo apt update
```

##### **2. Install Apache2:**

```
sudo apt install apache2 -y
```

##### **3. Verify the Apache service is running:**

```
sudo systemctl status apache2
```

You should see a green active (running) status. If not, you can start it manually:

```
sudo systemctl start apache2
```

##### **4. Test Apache Installation:**

- Open a browser and enter your VM's **public IP address** (e.g., <http://20.204.130.101>)
- You should see the **Apache2 Ubuntu Default Page**, indicating that the web server is working.

Apache is now installed and serving content from /var/www/html.

### **On Windows Server: Installing IIS (Internet Information Services)**

IIS is the built-in web server for Windows Server and supports hosting both static and dynamic content.

#### **Steps:**

1. **Log in to your Windows VM via RDP.**
2. **Open Server Manager** (usually opens by default on login).

3. Click on:

Manage → Add Roles and Features

4. In the “**Add Roles and Features Wizard**”:

- Click **Next** through the prompts until you reach “**Server Roles**”.
- **Check the box** for:

Web Server (IIS)

5. Proceed through the rest of the wizard and click **Install**.

6. Once the installation is complete, IIS will be running automatically.

7. **Test IIS Installation:**

- Open a browser on your local machine.
- Visit your VM’s **public IP address** (e.g., <http://20.204.130.101>)
- You should see the **default IIS Welcome page**.

## **5. Develop the Website**

In this step, we will **create the website content** (HTML and CSS) and **transfer** those files to the respective **web directories** on the server to be hosted.

**Step 1: Create Your Website Files**

**Step 2: Transfer Files to the Server**

**For Linux (Ubuntu + Apache):**

**Directory to place files:** /var/www/html/

**Steps:**

1. **Delete the default Apache file:**

```
sudo rm /var/www/html/index.html
```

2. **Create a new index.html file using nano:**

```
sudo nano /var/www/html/index.html
```

- Paste the HTML content.
- Save using Ctrl + O, press Enter, then exit with Ctrl + X.

3. **Create style.css in the same directory:**

```
sudo nano /var/www/html/style.css
```

- Paste the CSS content.
- Save and exit.

#### **4. Verify File Permissions (optional):**

```
sudo chmod 755 /var/www/html/index.html
```

```
sudo chmod 755 /var/www/html/style.css
```

#### **5. Access the Website:**

Open your browser and go to:

<http://<your-public-ip>>

#### **For Windows Server (IIS):**

##### **Directory to place files:**

C:\inetpub\wwwroot\

##### **Steps:**

1. Connect to your VM using **Remote Desktop (RDP)**.
2. Open **File Explorer** and navigate to:  
C:\inetpub\wwwroot\
3. **Delete** the existing iisstart.htm file if present.
4. **Create a new file named** index.html and paste the HTML content.
5. Create a file named style.css and paste the CSS content.
6. Open the VM's **public IP address** in your browser:

<http://<your-public-ip>>

You should now see your custom website in action!

#### **6. Verify Hosting**

Once the static website files (index.html, style.css, etc.) have been placed in the appropriate web directory and the web server is running, it's time to verify whether the website is live and accessible over the internet.

#### **For Linux (Apache on Ubuntu VM):**

1. **Ensure Apache is running:**

```
sudo systemctl status apache2
```

You should see a message indicating that the Apache service is active (running). If not, start it with:

```
sudo systemctl start apache2
```

## 2. Verify in Browser:

- Open any web browser.
- Type the **Public IP address** of your VM in the address bar:

`http://<your-public-ip>`

- Example:

`http://20.204.130.101`

- If the HTML and CSS were set up correctly, your custom website page should be displayed.

## For Windows Server (IIS):

### 1. Ensure IIS is running:

- IIS starts automatically after installation. You can verify this from **Services** or by accessing:

`http://localhost`

within the VM.

### 2. Access the Website:

- Open a browser on your **local machine** and type the VM's **public IP**:

`http://<your-public-ip>`

- The custom HTML page should load, styled using your style.css file.

## HTML AND CSS Code – web1.html:

```
<!DOCTYPE html>

<html>
  <head>
    <link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
      integrity="sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
      crossorigin="anonymous"/>

    <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYWeW+OrCXAkfkj"
      crossorigin="anonymous"></script>

    <script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"
      integrity="sha384-9/reFTGAW83EW2RDu2S0VKaIzap3H66lZH81PoYlFhbGU+6BZp6G7niu735Sk7lN"
      crossorigin="anonymous"></script>

    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"
      integrity="sha384-B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPlYxofvL8/KUEfYiJOMMV+rV"
      crossorigin="anonymous"></script>

    <script src="https://kit.fontawesome.com/ac42c3b1f7.js"
      crossorigin="anonymous"></script>

    <style>
      @import
        url("https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobster&family=Monoton&family=Open+Sans:ital,wght@0,400;0,700;1,400;1,700&family=Playfair+Display+SC:ital,wght@0,400;0,700;1,700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:ital,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=swap");
    </style>
```

```
.food-munch-logo {
  width: 80px;
  height: 70px;
}

#navItem1 {
```

```
color: #323f4b;
font-family: "Roboto";
}

#navItem2 {
color: #323f4b;
font-family: "Roboto";
}

#navItem3 {
color: #323f4b;
font-family: "Roboto";
}

#navItem4 {
color: #323f4b;
font-family: "Roboto";
}

.banner-section-bg-container {

background-image: url("https://d1tgh8fmlzexmh.cloudfront.net/ccbp-responsive-website/foodmunch-banner-bg.png");
height: 100vh;
background-size: cover;
}

.banner-heading {

color: white;
font-family: "Roboto";
font-size: 45px;
font-weight: 300;
}

.banner-caption {

color: #f5f7fa;
font-family: "Roboto";
font-size: 24px;
}
```

```
font-weight: 300;  
}  
.custom-button {  
color: white;  
background-image: linear-gradient(#d0b200, #a58d00);  
width: 130px;  
height: 45px;  
border-width: 0;  
border-radius: 8px;  
margin-right: 10px;  
}  
.custom-outline-button {  
color: #d0b200;  
background-color: transparent;  
width: 130px;  
height: 45px;  
border-style: solid;  
border-width: 1px;  
border-color: #d0b200;  
border-radius: 8px;  
}  
.wcu-section {  
background-color: #f9fbfe;  
}  
.wcu-section-heading {  
color: #183b56;  
font-family: "Roboto";  
font-size: 28px;  
font-weight: 700;  
}
```

```
.wcu-section-description {  
    color: #5a7184;  
    font-family: "Roboto";  
    font-size: 16px;  
}  
.
```

```
wcu-card {  
    text-align: center;  
    background-color: white;  
    border-style: solid;  
    border-width: 1px;  
    border-color: #e5eaf4;  
    border-radius: 16px;  
}  
.
```

```
wcu-card-image {  
    width: 87px;  
    height: 90px;  
}  
.
```

```
wcu-card-title {  
    color: #323f4b;  
    font-family: "Roboto";  
    font-size: 22px;  
    font-weight: 500;  
    margin-top: 24px;  
}  
.
```

```
wcu-card-description {  
    color: #7b8794;  
    font-family: "Roboto";  
    font-size: 16px;  
}  
.
```

```
offers {
```

```
color: #323f4b;  
font-style: italic;  
font-weight: 600;  
}  
  
.explore-menu-section {  
background-color: white;  
}  
  
.menu-section-heading {  
color: #183b56;  
font-family: "Roboto";  
font-size: 28px;  
font-weight: 700;  
}  
  
.menu-item-image {  
border-radius: 16px;  
}  
  
.menu-card-title {  
color: #323f4b;  
font-family: "Roboto";  
font-size: 18px;  
font-weight: 500;  
margin-top: 24px;  
}  
  
.menu-item-link {  
color: #d0b200;  
font-family: "Roboto";  
font-size: 14px;  
font-weight: 500;  
}  
  
.menu-item-card {
```

```
border-radius: 16px;  
}  
.healthy-food-section {  
background-color: #f9fbfe;  
}  
.healthy-food-section-img {  
width: 270px;  
}  
.healthy-food-section-heading {  
color: #183b56;  
font-family: "Roboto";  
font-size: 28px;  
font-weight: 700;  
}  
.healthy-food-section-description {  
color: #5a7184;  
font-family: "Roboto";  
font-size: 16px;  
}  
.delivery-and-payment-section {  
background-color: white;  
}  
.delivery-and-payment-section-img {  
width: 270px;  
}  
.delivery-and-payment-section-heading {  
color: #183b56;  
font-family: "Roboto";  
font-size: 28px;  
font-weight: 700;
```

```
}

.delivery-and-payment-section-description {
    color: #5a7184;
    font-family: "Roboto";
    font-size: 16px;
}

.payment-card-img {
    width: 50px;
    height: 50px;
    margin-right: 28px;
}

.thanking-customers-section {
    background-image: radial-gradient(#fff8db, #fae38c);
}

.thanking-customers-section-heading {
    color: #183b56;
    font-family: "Roboto";
    font-size: 28px;
    font-weight: 700;
}

.thanking-customers-section-description {
    color: #5a7184;
    font-family: "Roboto";
    font-size: 16px;
}

.thanking-customers-section-img {
    width: 270px;
    margin-bottom: 20px;
}

.thanking-customers-section-modal-title {
```

```
color: #d0b200;
font-weight: 800;
}

.follow-us-section {
background-color: white;
}

.follow-us-section-heading {
text-align: center;
color: #183b56;
font-family: "Roboto";
font-size: 28px;
font-weight: 700;
}

.follow-us-icon-container {
background-color: #faf7e8;
width: 80px;
height: 80px;
border-radius: 40px;
margin: 15px;
padding-top: 22px;
padding-bottom: 14px;
padding-right: 16px;
padding-left: 22px;
}

.icon {
color: #d0b200;
font-size: 35px;
}

.footer-section {
background-color: #0d2436;
```

```
        }

.footer-section-mail-id {
    color: #959ead;
    font-family: "Roboto";
    font-weight: bold;
    font-size: 16px;
    margin-top: 20px;
}

.footer-section-address {
    color: #959ead;
    font-family: "Roboto";
    font-size: 14px;
}

</style>
</head>
<body>

<nav class="navbar navbar-expand-lg navbar-light bg-white fixed-top">
    <div class="container">
        <a class="navbar-brand" href="#">
            
        </a>
        <button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarNavAltMarkup" aria-controls="navbarNavAltMarkup" aria-
expanded="false" aria-label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
```

```
<div class="navbar-nav ml-auto">
  <a class="nav-link active" id="navItem1" href="#wcuSection">
    Why Choose Us?
    <span class="sr-only">(current)</span>
  </a>
  <a class="nav-link" href="#exploreMenuSection" id="navItem2">Explore Menu</a>
  <a class="nav-link" href="#deliveryPaymentSection" id="navItem3">Delivery &
Payment</a>
  <a class="nav-link" href="#followUsSection" id="navItem4">Follow Us</a>
</div>
</div>
</div>
</nav>

<div class="banner-section-bg-container d-flex justify-content-center flex-column">
  <div class="text-center">
    <h1 class="banner-heading mb-3">Get Delicious Food Anytime</h1>
    <p class="banner-caption mb-4">Eat Smart & Healthy</p>
    <button class="custom-button">View Menu</button>
    <button class="custom-outline-button">Order Now</button>
  </div>
</div>

<div class="wcu-section pt-5 pb-5" id="wcuSection">
  <div class="container">
    <div class="row">
      <div class="col-12">
        <h1 class="wcu-section-heading">Why Choose Us?</h1>
        <p class="wcu-section-description">
          We use both original recipes and classic versions of famous food
          items.
        </p>
    </div>
  </div>

```

```
<div class="col-12 col-md-4">
  <div class="wcu-card p-3 mb-3">
    
    <h1 class="wcu-card-title mt-3">Food Service</h1>
    <p class="wcu-card-description">
      Experience fine dining at the comfort of your home. All our
      orders are carefully packed and arranged to give you the nothing
      less than perfect.
    </p>
  </div>
</div>
<div class="col-12 col-md-4">
  <div class="wcu-card p-3 mb-3">
    
    <h1 class="wcu-card-title mt-3">Fresh Food</h1>
    <p class="wcu-card-description">
      The Fresh Food group provides fresh-cut fruits and vegetables
      directly picked from our partner farms and farm houses so that
      you always get them tree to plate.
    </p>
  </div>
</div>
<div class="col-12 col-md-4">
```

```
<div class="wcu-card p-3 mb-3">
  
  <h1 class="wcu-card-title mt-3">Best Offers</h1>
  <p class="wcu-card-description">
    Food Coupons & Offers upto
    <span class="offers">50% OFF</span>
    and Exclusive Promo Codes on All Online Food Orders.
  </p>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
<div class="explore-menu-section pt-5 pb-5" id="exploreMenuSection">
  <div class="container">
    <div class="row">
      <div class="col-12">
        <h1 class="menu-section-heading">Explore Menu</h1>
      </div>
      <div class="col-12 col-md-6 col-lg-3">
        <div class="shadow menu-item-card p-3 mb-3">
          
          <h1 class="menu-card-title">Non-Veg Starters</h1>
```

```
<a href="" class="menu-item-link">
    View All
    <svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right-short" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
        <path
            fill-rule="evenodd"
            d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1 0 .708l-3 3a.5.5 0 0 1 -.708-.708L10.293 8.5H4.5A.5.5 0 0 1 4 8z"
        />
    </svg>
</a>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
    <div class="shadow menu-item-card p-3 mb-3">
        
        <h1 class="menu-card-title">Veg Starters</h1>
        <a href="" class="menu-item-link">
            View All
            <svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right-short" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
                <path
                    fill-rule="evenodd"
                    d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1 0 .708l-3 3a.5.5 0 0 1 -.708-.708L10.293 8.5H4.5A.5.5 0 0 1 4 8z"
                />
            </svg>
        </a>
    </div>
</div>
```

```
</div>

</div>

<div class="col-12 col-md-6 col-lg-3">
  <div class="menu-item-card shadow p-3 mb-3">
    
    <h1 class="menu-card-title">Soups</h1>
    <a href="" class="menu-item-link">
      View All
      <svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right">
        <path
          fill-rule="evenodd"
          d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1
          0 .708l-3 3a.5.5 0 0 1 -.708-.708L10.293 8.5H4.5A.5.5 0 0 1 4 8z"
        />
      </svg>
    </a>
  </div>
</div>

<div class="col-12 col-md-6 col-lg-3">
  <div class="menu-item-card shadow p-3 mb-3">
    
    <h1 class="menu-card-title">Fish & Sea food</h1>
    <a href="" class="menu-item-link">
```

[View All](#)

```
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right"
fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
<path
    fill-rule="evenodd"
    d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1
0 .708l-3 3a.5.5 0 0 1-.708-.708L10.293 8.5H4.5A.5.5 0 0 1 4 8z"
/>
</svg>
</a>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
<div class="menu-item-card shadow p-3 mb-3">

<h1 class="menu-card-title">Main Course</h1>
<a href="" class="menu-item-link">
    View All
    <svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right"
fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
<path
    fill-rule="evenodd"
    d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1
0 .708l-3 3a.5.5 0 0 1-.708-.708L10.293 8.5H4.5A.5.5 0 0 1 4 8z"
/>
</svg>
</a>
</div>
```

```
</div>

<div class="col-12 col-md-6 col-lg-3">
  <div class="menu-item-card shadow p-3 mb-3">
    
    <h1 class="menu-card-title">Noodles</h1>
    <a href="#" class="menu-item-link">
      View All
      <svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right"
fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
        <path
          fill-rule="evenodd"
          d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1
0 .708l-3 3a.5.5 0 0 1 -.708-.708L10.293 8.5H4.5A.5.5 0 0 1 4 8z"
        />
      </svg>
    </a>
  </div>
</div>

<div class="col-12 col-md-6 col-lg-3">
  <div class="menu-item-card shadow p-3 mb-3">
    
    <h1 class="menu-card-title">Salads</h1>
    <a href="#" class="menu-item-link">
      View All
    </a>
  </div>
</div>
```

```
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right"
fill="#d0b200" xmlns="http://www.w3.org/2000/svg">

<path
  fill-rule="evenodd"
  d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1
0 .708l-3 3a.5.5 0 0 1-.708-.708L10.293 8.5H4.5A.5.5 0 0 1 4 8z"

/>
</svg>
</a>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
<div class="menu-item-card shadow p-3 mb-3">

<h1 class="menu-card-title">Desserts</h1>
<a href="" class="menu-item-link">
  View All
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right"
fill="#d0b200" xmlns="http://www.w3.org/2000/svg">

<path
  fill-rule="evenodd"
  d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1
0 .708l-3 3a.5.5 0 0 1-.708-.708L10.293 8.5H4.5A.5.5 0 0 1 4 8z"

/>
</svg>
</a>
</div>
</div>
```

```
</div>
</div>
</div>
<div class="healthy-food-section pt-5 pb-5">
<div class="container">
<div class="row">
<div class="col-12 col-md-5">
<div class="text-center">

</div>
</div>
<div class="col-12 col-md-7">
<h1 class="healthy-food-section-heading">
Fresh, Healthy, Organic, Delicious Fruits
</h1>
<p class="healthy-food-section-description">
Say no to harmful chemicals and go fully organic with our range of
fresh fruits and veggies. Pamper your body and your senses with
the true and unadulterated gifts from mother nature. with the true
and unadulterated gifts from mother nature.
</p>
<button class="custom-button">Watch Video</button>
</div>
</div>
</div>
<div class="delivery-and-payment-section pt-5 pb-5" id="deliveryPaymentSection">
```

```
<div class="container">
  <div class="row">
    <div class="col-12 col-md-5 order-1 order-md-2">
      <div class="text-center">
        
      </div>
    </div>
    <div class="col-12 col-md-7 order-2 order-md-1">
      <h1 class="delivery-and-payment-section-heading">
        Delivery and Payment
      </h1>
      <p class="delivery-and-payment-section-description">
        Enjoy hassle-free payment with the plenitude of payment options
        available for you. Get live tracking and locate your food on a
        live map. It's quite a sight to see your food arrive to your door.
        Plus, you get a 5% discount on every order every time you pay
        online.
      </p>
      <button class="custom-button">Order Now</button>
      <div class="mt-3">
        
        


</div>
</div>
</div>
</div>
</div>
</div>
</div>
<div class="thank-you-section pt-5 pb-5">
<div class="container">
<div class="row">
<div class="col-12 col-md-7 d-flex flex-column justify-content-center">
<h1 class="thank-you-section-heading">
    Thank you for being a valuable customer to us.
</h1>
<p class="thank-you-section-description">
    We have a surprise gift for you
</p>
<div class="d-md-none">
    

</div>

<div>

    <button type="button" class="custom-button" data-toggle="modal" data-
target="#exampleModal">

        Redeem Gift

    </button>

    <div class="modal fade" id="exampleModal" tabindex="-1" aria-
labelledby="exampleModalLabel" aria-hidden="true">

        <div class="modal-dialog mt-5">

            <div class="modal-content">

                <div class="modal-header">

                    <h5 class="modal-title thanking-customers-section-modal-title"
id="exampleModalLabel">

                        Gift Voucher

                    </h5>

                    <button type="button" class="close" data-dismiss="modal" aria-label="Close">

                        <span aria-hidden="true">&times;</span>

                    </button>

                </div>

                <div class="modal-body">

                </div>

                <div class="modal-footer">

                    <button type="button" class="btn btn-secondary" data-dismiss="modal">


```

```
    Close
  </button>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
<div class="col-12 col-md-5 d-none d-md-block">
  
</div>
</div>
</div>
</div>
</div>
</div>
<div class="follow-us-section pt-5 pb-5" id="followUsSection">
  <div class="container">
    <div class="row">
      <div class="col-12">
        <h1 class="follow-us-section-heading">Follow Us</h1>
      </div>
      <div class="col-12">
        <div class="d-flex flex-row justify-content-center">
          <div class="follow-us-icon-container">
            <i class="fab fa-twitter icon"></i>
          </div>
          <div class="follow-us-icon-container">
            <i class="fab fa-instagram icon"></i>
          </div>
        </div>
      </div>
    </div>
  </div>
</div>
```

```
</div>

<div class="follow-us-icon-container">
  <i class="fab fa-facebook icon"></i>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
<div class="footer-section pt-5 pb-5">
  <div class="container">
    <div class="row">
      <div class="col-12 text-center">
        
      <h1 class="footer-section-mail-id">orderfood@foodmunch.com</h1>
      <p class="footer-section-address">
        123 Ayur Vigyan Nagar, New Delhi, India.
      </p>
    </div>
  </div>
</div>
</div>
</body>
</html>
```

## Screenshots

Below are the screenshots demonstrating each major step of the project:

### 1) Created VM

The screenshot shows the Microsoft Azure portal interface. On the left, there's a sidebar with navigation links like Home, static-website (selected), Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, Connect, Networking, Settings, Availability + scale, Security, Backup + disaster recovery, Operations, Monitoring, Automation, Help, and Add or remove favorites by pressing **Ctrl+Shift+F1+F2**. The main content area is titled "static-website" and "Virtual machine". It displays the "Overview" tab with various details: Resource group (Eoodorderingwebsite), Status (Running), Location (Central India), Subscription (Azure for Students), Subscription ID (3d24dB73-9b8f-4420-a147-efffBe440ebf), Tags (Kaluvali yella reddy : TestLearningRestGroup), Operating system (Linux (debian 12)), Size (Standard B1s (1 vcpu, 1 GiB memory)), Public IP address (4.213.100.75), Virtual network/subnet (static-website-vnet/default), DNS name (Not configured), Health state (-), Time created (30/05/2025, 14:03 UTC). Below this, there are tabs for Properties, Monitoring, Capabilities (7), Recommendations (11), and Tutorials. At the bottom, there are sections for Virtual machine (Computer name: static-website) and Networking (Public IP address: 4.213.100.75 (Network interface static-website961)). A red box highlights the entire screenshot.

### 2) Uploading Files

The screenshot shows a terminal window with the following text output:

```
Microsoft Windows [Version 10.0.26100.4202]
(c) Microsoft Corporation. All rights reserved.

C:\Users\yella>ssh SystemAdmin@4.213.100.75
SystemAdmin@4.213.100.75's password:
Linux static-website 6.1.0-37-cloud-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.140-1 (2025-05-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Sat May 31 07:04:49 2025 from 223.185.44.221
SystemAdmin@static-website:~$ cd /var/www/html
SystemAdmin@static-website:/var/www/html$ sudo nano index.html
SystemAdmin@static-website:/var/www/html$ |
```

A red box highlights the entire terminal window.

```
SystemAdmin@static-website ~ + - X
GNU nano 7.2                                     index.html

}
.banner-heading {
  color: white;
  font-family: "Roboto";
  font-size: 45px;
  font-weight: 300;
}
.banner-caption {
  color: #f5f7fa;
  font-family: "Roboto";
  font-size: 24px;
  font-weight: 300;
}
.custom-button {
  color: white;
  background-image: linear-gradient(#d0b200, #a58d00);
  width: 130px;
  height: 45px;
  border-width: 0;
  border-radius: 8px;
  margin-right: 10px;
}
.custom-outline-button {
  color: #d0b200;
  background-color: transparent;
  width: 130px;
  height: 45px;
  border-style: solid;
  border-width: 1px;
  border-color: #d0b200;
  border-radius: 8px;
}
.wcu-section {
  background-color: #f9fbfe;
}
.wcu-section-heading {
  color: #183b56;
}

|
```

```
GNU nano 7.2                                         index.html
}
.wcu-section-heading {
  color: #183b56;
  font-family: "Roboto";
  font-size: 28px;
  font-weight: 700;
}
.wcu-section-description {
  color: #5a738d;
  font-family: "Roboto";
  font-size: 16px;
}
.wcu-card {
  text-align: center;
  background-color: white;
  border-style: solid;
  border-width: 1px;
  border-color: #e5eaf4;
  border-radius: 16px;
}
.wcu-card-image {
  width: 87px;
  height: 98px;
}
.wcu-card-title {
  color: #323f4b;
  font-family: "Roboto";
  font-size: 22px;
  font-weight: 500;
  margin-top: 24px;
}
.wcu-card-description {
  color: #7b879d;
  font-family: "Roboto";
  font-size: 16px;
}
.offers {
}
^G Help          ^O Write Out      ^W Where Is      ^K Cut           ^T Execute      ^C Location      M-U Undo      M-A Set Mark    M-[ To Bracket
^X Exit          ^R Read File       ^L Replace       ^U Paste         ^J Justify      ^I Go To Line    M-E Redo      M-G Copy       M-Q Where Was
```

```
GNU nano 7.2                                         index.html
.offers {
  color: #323f4b;
  font-style: italic;
  font-weight: 600;
}
.explore-menu-section {
  background-color: white;
}
.menu-section-heading {
  color: #183b56;
  font-family: "Roboto";
  font-size: 28px;
  font-weight: 700;
}
.menu-item-image {
  border-radius: 16px;
}
.menu-card-title {
  color: #323f4b;
  font-family: "Roboto";
  font-size: 18px;
  font-weight: 500;
  margin-top: 24px;
}
.menu-item-link {
  color: #d8b200;
  font-family: "Roboto";
  font-size: 14px;
  font-weight: 500;
}
.menu-item-card {
  border-radius: 16px;
}
.healthy-food-section {
  background-color: #f9fbfe;
}
.healthy-food-section-image {
```

```
GNU nano 7.2                                         index.html
.healthy-food-section-img {
    width: 270px;
}
.healthy-food-section-heading {
    color: #183b56;
    font-family: "Roboto";
    font-size: 28px;
    font-weight: 700;
}
.healthy-food-section-description {
    color: #5a7184;
    font-family: "Roboto";
    font-size: 16px;
}
.delivery-and-payment-section {
    background-color: white;
}
.delivery-and-payment-section-img {
    width: 270px;
}
.delivery-and-payment-section-heading {
    color: #183b56;
    font-family: "Roboto";
    font-size: 28px;
    font-weight: 700;
}
.delivery-and-payment-section-description {
    color: #5a7184;
    font-family: "Roboto";
    font-size: 16px;
}
.payment-card-img {
    width: 50px;
    height: 50px;
    margin-right: 28px;
}
.thanking-customers-section {
```

```
^G Help          ^O Write Out     ^W Where Is      ^K Cut           ^T Execute      ^C Location     M-U Undo
^X Exit          ^R Read File      ^R Replace       ^U Paste         ^J Justify      ^I Go To Line   M-E Redo
^A Set Mark      M-G Copy        M-Q Where Was
```

```
GNU nano 7.2                                         index.html
}
.thanking-customers-section {
    background-image: radial-gradient(#fff8db, #fae38c);
}
.thanking-customers-section-heading {
    color: #183b56;
    font-family: "Roboto";
    font-size: 28px;
    font-weight: 700;
}
.thanking-customers-section-description {
    color: #5a7184;
    font-family: "Roboto";
    font-size: 16px;
}
.thanking-customers-section-img {
    width: 270px;
    margin-bottom: 20px;
}
.thanking-customers-section-modal-title {
    color: #d0b200;
    font-weight: 800;
}
.follow-us-section {
    background-color: white;
}
.follow-us-section-heading {
    text-align: center;
    color: #183b56;
    font-family: "Roboto";
    font-size: 28px;
    font-weight: 700;
}
.follow-us-icon-container {
    background-color: #faf7e8;
    width: 80px;
    height: 80px;
```

```
^G Help          ^O Write Out     ^W Where Is      ^K Cut           ^T Execute      ^C Location     M-U Undo
^X Exit          ^R Read File      ^R Replace       ^U Paste         ^J Justify      ^I Go To Line   M-E Redo
^A Set Mark      M-G Copy        M-Q Where Was
```

```
GNU nano 7.2                                         index.html
}
.follow-us-icon-container {
    background-color: #faf7e8;
    width: 80px;
    height: 80px;
    border-radius: 40px;
    margin: 15px;
    padding-top: 22px;
    padding-bottom: 14px;
    padding-right: 16px;
    padding-left: 22px;
}
.icon {
    color: #d0b200;
    font-size: 35px;
}
.footer-section {
    background-color: #0d2436;
}
.footer-section-mail-id {
    color: #959ead;
    font-family: "Roboto";
    font-weight: bold;
    font-size: 16px;
    margin-top: 20px;
}
.footer-section-address {
    color: #959ead;
    font-family: "Roboto";
    font-size: 14px;
}
</style>
</head>
<body>
<nav class="navbar navbar-expand-lg navbar-light bg-white fixed-top">
    <div class="container">
        <a class="navbar-brand" href="#">
|
```

^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark M-[ To Bracket  
^X Exit ^R Read File ^A Replace ^U Paste ^J Justify ^G Go To Line M-E Redo M-G Copy M-Q Where Was

```
GNU nano 7.2                                         index.html
</style>
</head>
<body>
<nav class="navbar navbar-expand-lg navbar-light bg-white fixed-top">
    <div class="container">
        <a class="navbar-brand" href="#">
            
        <a href="#">Food Munch</a>
        <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarNavAltMarkup" aria-controls="navbarNavAltMarkup" aria-expanded="false" aria-label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
            <div class="navbar-nav ml-auto">
                <a class="nav-link active" id="navItem1" href="#wcuSection">
                    Why Choose Us?
                    <span class="sr-only">(current)</span>
                </a>
                <a class="nav-link" href="#exploreMenuSection" id="navItem2">Explore Menu</a>
                <a class="nav-link" href="#deliveryPaymentSection" id="navItem3">Delivery & Payment</a>
                <a class="nav-link" href="#followUsSection" id="navItem4">Follow Us</a>
            </div>
        </div>
    </div>
</nav>
<div class="banner-section-bg-container d-flex justify-content-center flex-column">
    <div class="text-center">
        <h1 class="banner-heading mb-3">Get Delicious Food Anytime</h1>
        <p class="banner-caption mb-4">Eat Smart & Healthy</p>
        <button class="custom-button">View Menus</button>
        <button class="custom-outline-button">Order Now</button>
    </div>
</div>
<div class="wcu-section pt-5 pb-5" id="wcuSection">
    <div class="container">
```

^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark M-[ To Bracket  
^X Exit ^R Read File ^A Replace ^U Paste ^J Justify ^G Go To Line M-E Redo M-G Copy M-Q Where Was

```
GNU nano 7.2 index.html
<div class="wcu-section pt-5 pb-5" id="wcuSection">
  <div class="container">
    <div class="row">
      <div class="col-12">
        <h1 class="wcu-section-heading">Why Choose Us?</h1>
        <p class="wcu-section-description">
          We use both original recipes and classic versions of famous food items.
        </p>
      </div>
      <div class="col-12 col-md-4">
        <div class="wcu-card p-3 mb-3">
          
          <h1 class="wcu-card-title mt-3">Food Service</h1>
          <p class="wcu-card-description">
            Experience fine dining at the comfort of your home. All our orders are carefully packed and arranged to give you the nothing less than perfect.
          </p>
        </div>
      </div>
      <div class="col-12 col-md-4">
        <div class="wcu-card p-3 mb-3">
          
          <h1 class="wcu-card-title mt-3">Fresh Food</h1>
          <p class="wcu-card-description">
            The Fresh Food group provides fresh-cut fruits and vegetables directly picked from our partner farms and farm houses so that you always get them tree to plate.
          </p>
        </div>
      </div>
    </div>
  </div>
```

```
GNU nano 7.2 index.html
</div>
<div class="col-12 col-md-4">
  <div class="wcu-card p-3 mb-3">
    
    <h1 class="wcu-card-title mt-3">Best Offers</h1>
    <p class="wcu-card-description">
      Food Coupons & Offers upto
      <span class="offers">50% OFF</span>
      and Exclusive Promo Codes on All Online Food Orders.
    </p>
  </div>
</div>
</div>
<div class="explore-menu-section pt-5 pb-5" id="exploreMenuSection">
  <div class="container">
    <div class="row">
      <div class="col-12">
        <h1 class="menu-section-heading">Explore Menu</h1>
      </div>
      <div class="col-12 col-md-6 col-lg-3">
        <div class="shadow menu-item-card p-3 mb-3">
          
          <h1 class="menu-card-title">Non-Veg Starters</h1>
          <a href="#" class="menu-item-link">
            View All
            <svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right-short" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
              <path
                fill-rule="evenodd"
                d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3.3a.5.5 0 0 1 0 .708l-3.3a.5.5 0 0 1 -.708-.708L10.293 8.5H4.5A.5.5 0 0 1 0 8z"/>
            </svg>
          </a>
        </div>
      </div>
    </div>
  </div>
```

GNU nano 7.2 index.html

```
</>
</svg>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
<div class="shadow menu-item-card p-3 mb-3">

<h1 class="menu-card-title">Veg Starters</h1>
<a href="#" class="menu-item-link">
View All
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
<path
fill-rule="evenodd"
d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1 0 .708l-3 3a.5.5 0 0 1 -.708-.708l10.293 8.5H4.5A.5.5 0 0
/>
</svg>
</a>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
<div class="menu-item-card shadow p-3 mb-3">

<h1 class="menu-card-title">Soups</h1>
<a href="#" class="menu-item-link">
View All
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
<path
fill-rule="evenodd"
d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1 0 .708l-3 3a.5.5 0 0 1 -.708-.708l10.293 8.5H4.5A.5.5 0 0
/>
</svg>
</a>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
<div class="menu-item-card shadow p-3 mb-3">

<h1 class="menu-card-title">Fish & Sea food</h1>
<a href="#" class="menu-item-link">
View All
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
<path
fill-rule="evenodd"
d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1 0 .708l-3 3a.5.5 0 0 1 -.708-.708l10.293 8.5H4.5A.5.5 0 0
/>
</svg>
</a>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
<div class="menu-item-card shadow p-3 mb-3">

<h1 class="menu-card-title">Main Course</h1>
<a href="#" class="menu-item-link">
View All
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
<path
fill-rule="evenodd"
d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1 0 .708l-3 3a.5.5 0 0 1 -.708-.708l10.293 8.5H4.5A.5.5 0 0
/>
</svg>
</a>
</div>
</div>
```

GNU nano 7.2 index.html

```
</>
</svg>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
<div class="shadow menu-item-card p-3 mb-3">

<h1 class="menu-card-title">Veg Starters</h1>
<a href="#" class="menu-item-link">
View All
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
<path
fill-rule="evenodd"
d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1 0 .708l-3 3a.5.5 0 0 1 -.708-.708l10.293 8.5H4.5A.5.5 0 0
/>
</svg>
</a>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
<div class="menu-item-card shadow p-3 mb-3">

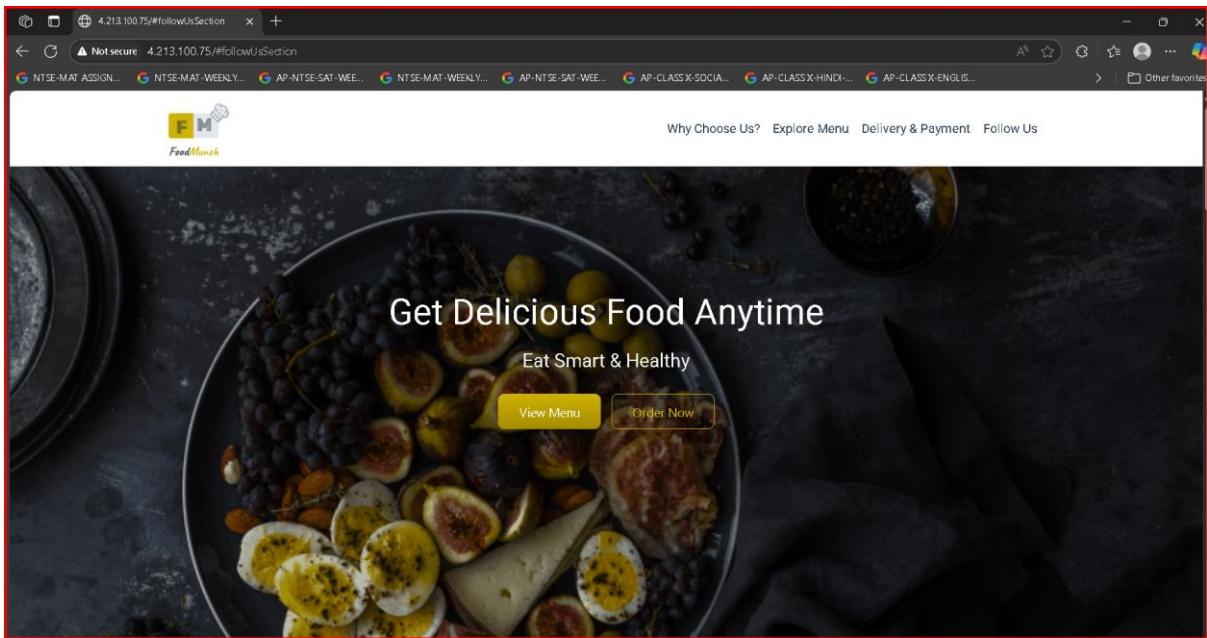
<h1 class="menu-card-title">Soups</h1>
<a href="#" class="menu-item-link">
View All
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
<path
fill-rule="evenodd"
d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1 0 .708l-3 3a.5.5 0 0 1 -.708-.708l10.293 8.5H4.5A.5.5 0 0
/>
</svg>
</a>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
<div class="menu-item-card shadow p-3 mb-3">

<h1 class="menu-card-title">Fish & Sea food</h1>
<a href="#" class="menu-item-link">
View All
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
<path
fill-rule="evenodd"
d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1 0 .708l-3 3a.5.5 0 0 1 -.708-.708l10.293 8.5H4.5A.5.5 0 0
/>
</svg>
</a>
</div>
</div>
<div class="col-12 col-md-6 col-lg-3">
<div class="menu-item-card shadow p-3 mb-3">

<h1 class="menu-card-title">Main Course</h1>
<a href="#" class="menu-item-link">
View All
<svg width="16px" height="16px" viewBox="0 0 16 16" class="bi bi-arrow-right" fill="#d0b200" xmlns="http://www.w3.org/2000/svg">
<path
fill-rule="evenodd"
d="M4 8a.5.5 0 0 1 .5-.5h5.793L8.146 5.354a.5.5 0 1 1 .708-.708l3 3a.5.5 0 0 1 0 .708l-3 3a.5.5 0 0 1 -.708-.708l10.293 8.5H4.5A.5.5 0 0
/>
</svg>
</a>
</div>
</div>
```

^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location ^M-U Undo ^M-A Set Mark ^N-] To Bracket  
^X Exit ^R Read File ^R Replace ^U Paste ^J Justify ^G Go To Line ^M-E Redo ^M-G Copy ^Q Where Was

3) Reach the IP 4.213.100.75 :



A screenshot of the "Why Choose Us?" section of the FoodMunch website. The URL in the address bar is 4.213.100.75/#followUsSection. The page has a white background with three main sections: 1. "Food Service": An icon of a chef's hat, with text about experiencing fine dining at home. 2. "Fresh Food": An icon of a basket of vegetables, with text about fresh produce from partner farms. 3. "Best Offers": An icon of a price tag, with text about food coupons and promo codes. At the bottom of the page, there is a "Explore Menu" button and a row of small images representing different food categories.

4.213.100.75/#followUsSection

Not secure 4.213.100.75/#followUsSection

G NTSE-MAT ASSIGN... G NTSE-MAT-WEEKLY... G AP-NTSE-SAT-WEE... G NTSE-MAT-WEEKLY... G AP-NTSE-SAT-WEE... G AP-CLASS-X-SOCIA... G AP-CLASS-X-HINDI... G AP-CLASS-X-ENGLIS... Other favori

FoodMunch

Why Choose Us? Explore Menu Delivery & Payment Follow Us

### Explore Menu



Non-Veg Starters

[View All →](#)



Veg Starters

[View All →](#)



Soups

[View All →](#)



Fish & Sea food

[View All →](#)



Main Course

[View All →](#)



Noodles

[View All →](#)



Salads

[View All →](#)



Desserts

[View All →](#)

4.213.100.75/#followUsSection

Not secure 4.213.100.75/#followUsSection

G NTSE-MAT ASSIGN... G NTSE-MAT-WEEKLY... G AP-NTSE-SAT-WEE... G NTSE-MAT-WEEKLY... G AP-NTSE-SAT-WEE... G AP-CLASS-X-SOCIA... G AP-CLASS-X-HINDI... G AP-CLASS-X-ENGLIS... Other favori

FoodMunch

Why Choose Us? Explore Menu Delivery & Payment Follow Us



Main Course

[View All →](#)



Noodles

[View All →](#)



Salads

[View All →](#)



Desserts

[View All →](#)



Fresh, Healthy, Organic, Delicious Fruits

Say no to harmful chemicals and go fully organic with our range of fresh fruits and veggies. Pamper your body and your senses with the true and unadulterated gifts from mother nature, with the true and unadulterated gifts from mother nature.

[Watch Video](#)

4.213.100.75/#followUsSection

Not secure 4.213.100.75/#followUsSection

NTSE-MAT-ASSIGN... NTSE-MAT-WEEKLY... AP-NTSE-SAT-WEE... NTSE-MAT-WEEKLY... AP-NTSE-SAT-WEE... AP-CLASS-X-SOCIA... AP-CLASS-X-HINDI... AP-CLASS-X-ENGLIS...

Why Choose Us? Explore Menu Delivery & Payment Follow Us

**Delivery and Payment**

Enjoy hassle-free payment with the plenitude of payment options available for you. Get live tracking and locate your food on a live map. It's quite a sight to see your food arrive to your door. Plus, you get a 5% discount on every order every time you pay online.

Order Now

VISA MasterCard PayPal AMERICAN EXPRESS

**25% OFF** SHOP NOW

**Thank you for being a valuable customer to us.**

We have a surprise gift for you

Redeem Gift



4.213.100.75/#followUsSection

Not secure 4.213.100.75/#followUsSection

NTSE-MAT-ASSIGN... NTSE-MAT-WEEKLY... AP-NTSE-SAT-WEE... NTSE-MAT-WEEKLY... AP-NTSE-SAT-WEE... AP-CLASS-X-SOCIA... AP-CLASS-X-HINDI... AP-CLASS-X-ENGLIS...

Why Choose Us? Explore Menu Delivery & Payment Follow Us

**Thank you for being a valuable customer to us.**

We have a surprise gift for you

Redeem Gift



**Follow Us**



4.213.100.75/#FollowUsSection

Not secure 4.213.100.75/#FollowUsSection

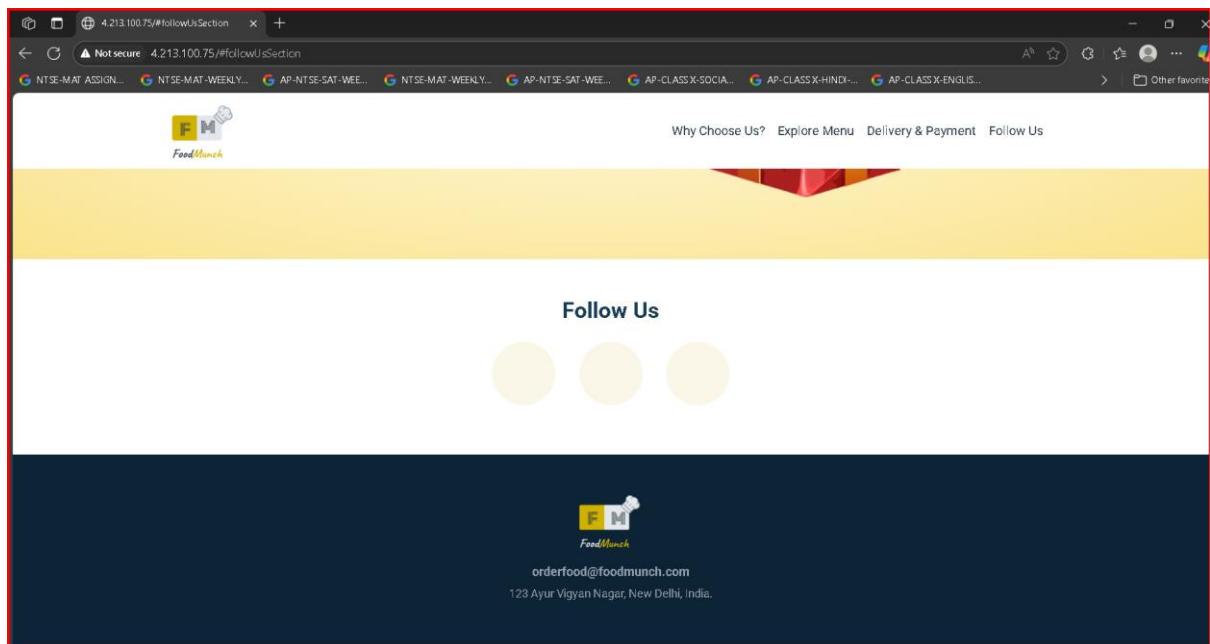
NTSE-MAT-ASSIGN... NTSE-MAT-WEEKLY... AP-NTSE-SAT-WEE... NTSE-MAT-WEEKLY... AP-NTSE-SAT-WEE... AP-CLASS-X-SOCIA... AP-CLASS-X-HINDI... AP-CLASS-X-ENGLIS...

Why Choose Us? Explore Menu Delivery & Payment Follow Us

**Follow Us**

FoodMunch

orderfood@foodmunch.com  
123 Ayur Vigyan Nagar, New Delhi, India.



## Conclusion

This project provided a comprehensive hands-on experience with Microsoft Azure, covering two major deployment strategies for static websites: using Azure Storage Accounts and Virtual Machines (VMs). It demonstrated how to host a basic HTML and CSS website on the cloud, both through a PaaS (Platform as a Service) model using Blob Storage and an IaaS (Infrastructure as a Service) model using a self-managed Ubuntu VM.

The VM-based method allowed the manual configuration of an Apache server, while the Storage Account approach offered faster, serverless hosting. Overall, this project helped bridge theoretical cloud computing knowledge with practical implementation, highlighting Azure's flexibility in supporting various hosting approaches.

### What I Learned :

- How to create and configure a Microsoft Azure account with a free subscription.
- How to launch and set up a Virtual Machine on Azure with a public IP.
- Installing and managing a web server (Apache on Ubuntu) and deploying static HTML/CSS content.
- How to use Azure Storage Accounts to enable static website hosting without provisioning a server.
- How to upload website files using the \$web container in blob storage.
- Understanding public access, endpoint URLs, and secure HTTPS connections via Azure.
- (Optional) Configuring a custom domain using Freenom and securing the site using Certbot and Let's Encrypt.

### Challenges Faced

- Navigating the Azure portal and understanding the differences between VM-based and storage-based hosting.
- SSH/RDP access issues and port configuration when connecting to VMs.
- Adjusting directory permissions in Ubuntu to allow Apache access.
- Ensuring correct MIME types and file structure when uploading to the \$web container.
- Dealing with DNS propagation delays while setting up the custom domain.
- Learning Certbot usage for SSL setup required extra research and experimentation.

### Benefits of Azure-based Deployment:

- Two deployment models: Choice between complete control with a VM or ease-of-use with static blob hosting.
- No maintenance needed in storage-based model — serverless and cost-efficient.

- Built-in HTTPS support with storage accounts and options for SSL on VMs.
- Highly scalable and globally distributed hosting with Azure's Content Delivery Network (CDN).
- Seamless integration with GitHub, DevOps, and CI/CD tools for automatic updates.
- Educational value: A real-world learning experience on how web apps are deployed in production.

### Real-World Use Cases of Static Hosting :

- Personal portfolios or student profiles hosted online.
- Product landing pages or digital marketing sites.
- Documentation websites for open-source projects.
- Hosting the frontend of Single Page Applications (SPAs) like React or Angular.
- Quickly deploying Minimum Viable Products (MVPs) or prototypes for demos.

### References :

1. Microsoft Azure Documentation

<https://learn.microsoft.com/en-us/azure/>

2. Apache HTTP Server Documentation

<https://httpd.apache.org/docs/>

3. W3Schools HTML/CSS Tutorials

[ohhttps://www.w3schools.com/html/](https://www.w3schools.com/html/)

[ohhttps://www.w3schools.com/css/](https://www.w3schools.com/css/)

4. Certbot SSL Installation Guide

<https://certbot.eff.org/instructions>

5. Freenom - Free Domain Registration

<https://www.freenom.com/>