

Guide to Setting Up a Free-Tier Account on Amazon Web Services (AWS)

The **AWS Free Tier** allows students and beginners to learn cloud computing without paying money (within certain usage limits). It provides access to many AWS services such as **Amazon EC2**, **Amazon S3**, and **Amazon RDS** for free for a limited period or limited usage.

Below is a **simple step-by-step guide** for students.

1. Visit the AWS Website

Open your web browser.

1. Go to the AWS website: <https://aws.amazon.com>
2. Click the “Create an AWS Account” button.

This will start the account registration process.

2. Enter Basic Account Information

Students must provide basic details:

- **Email address**
- **Password**
- **AWS account name** (any name you prefer)

Example

Account Name: *BheshCloudLab*

After entering the details, click **Continue**.

3. Choose Account Type

AWS will ask for the account type:

- **Personal** → Recommended for students
- **Business** → Used by companies

Students should select **Personal Account**.

Then fill in:

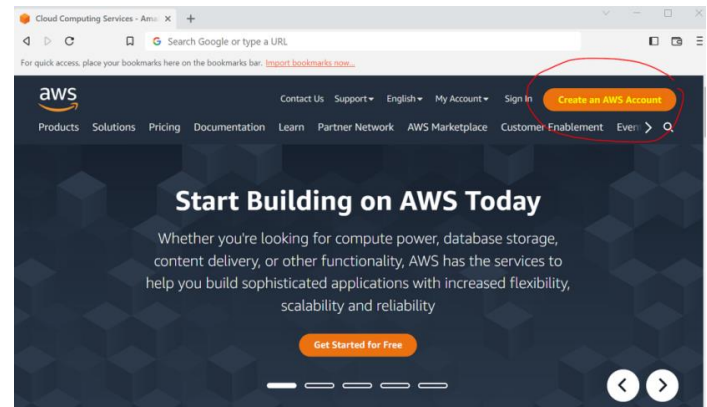
- Full name
- Phone number
- Country/Region
- Address

4. Add Payment Information

Even though it is a **free tier**, AWS requires a **credit or debit card** for identity verification.

Important points:

- AWS will charge a **small temporary verification fee** (usually about \$1).
- The amount is **refunded automatically**.
- If you stay within the free-tier limits, **no cost is charged**.



5. Phone Verification

AWS will verify your phone number.

Steps:

1. Enter your **mobile phone number**.
2. Choose **SMS or Voice verification**.
3. Enter the **verification code** sent to your phone.

6. Select a Support Plan

AWS provides different support plans.

Students should choose: **Basic Support – Free**

This is enough for learning and practice.

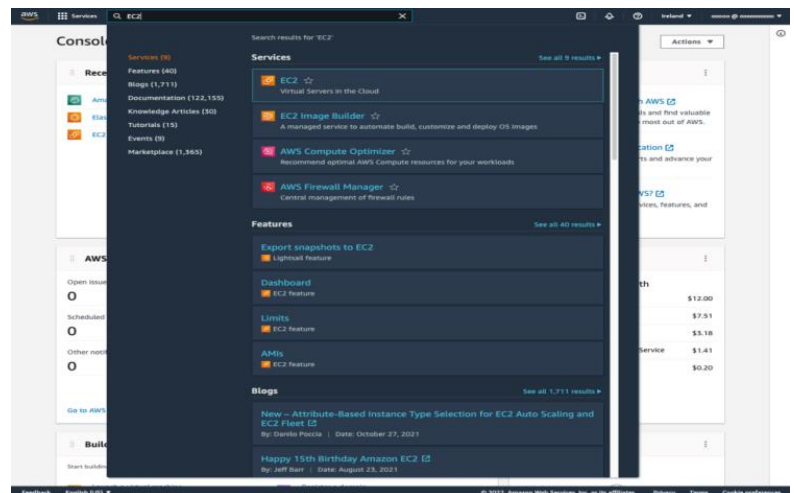
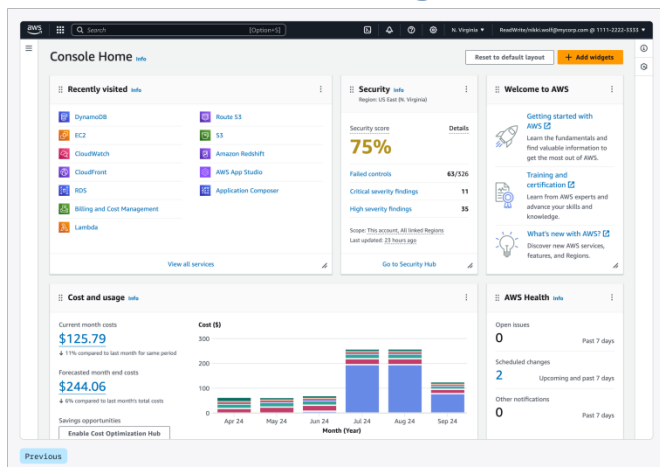
7. Account Activation

After completing registration:

- AWS will **review and activate the account**.
- This usually takes a **few minutes to a few hours**.

Once activated, students can **log in to the AWS Management Console**.

8. Access the AWS Management Console



The **AWS Management Console** is the main dashboard where users manage AWS services.

Steps:

1. Go to <https://console.aws.amazon.com>
2. Sign in using your **email and password**.
3. The console will show a list of AWS services.

From here students can start using services like:

- **Amazon EC2** – virtual servers
- **Amazon S3** – cloud storage

- **AWS Lambda** – serverless computing

9. Understand AWS Free Tier Limits

The AWS Free Tier includes limited free usage for **12 months**.

Examples:

Service	Free Tier Limit
EC2	750 hours per month
S3	5 GB storage
RDS	750 hours per month
Lambda	1 million requests

If usage exceeds these limits, **charges may apply**.

10. Tips for Students to Avoid Charges

To stay within the free tier:

- Always **stop or terminate EC2 instances** when not using them.
- Monitor usage in the **Billing Dashboard**.
- Use **free-tier eligible services only**.
- Delete unused resources.

Set Up Cloud Storage on Amazon Web Services S3 and Upload a File

Amazon S3 (Simple Storage Service) is a cloud storage service used to store files such as documents, images, videos, and backups. Files stored in S3 are called **objects**, and they are stored inside containers called **buckets**.

Below is a **simple step-by-step guide for students** to create S3 storage, upload a file, and access it.

1. Log in to AWS Console

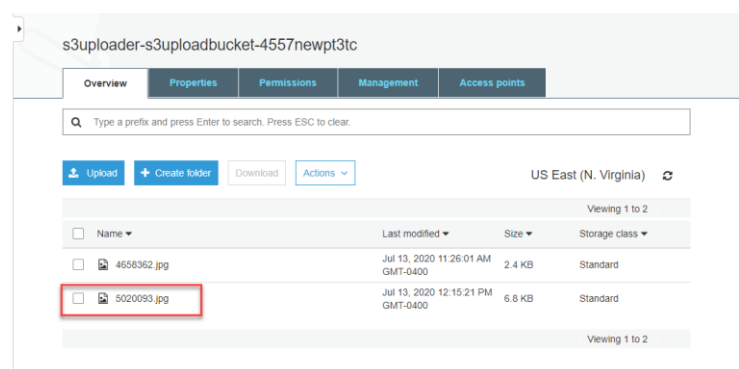
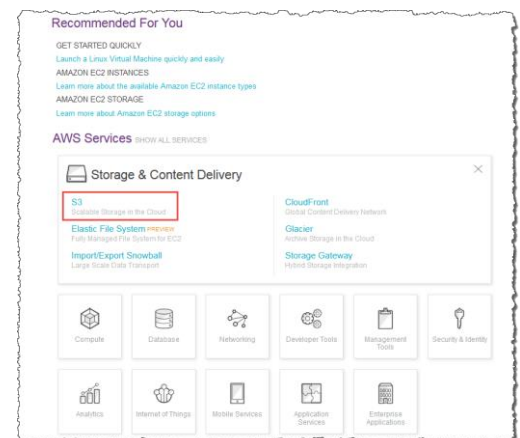
1. Open your browser.
2. Go to <https://console.aws.amazon.com>.
3. Sign in with your AWS account.
4. In the search bar, type **S3** and open **Amazon S3**.

You will see the **S3 dashboard**.

2. Create an S3 Bucket

A **bucket** is like a folder where your files will be stored.

Steps:



1. Click **Create bucket**.
2. Enter a **unique bucket name** (example: `bhesh-cloud-storage`).
3. Choose a **Region** (example: Asia Pacific – Mumbai).
4. Keep other settings as default.
5. Click **Create bucket**.

Now your cloud storage bucket is ready.

3. Upload a File to the Bucket

1. Click the **bucket name** you created.
2. Click **Upload**.
3. Click **Add files**.
4. Select a file from your computer (example:
 - o `example.txt`
 - o `photo.jpg`
5. Click **Upload**.

The file will now appear in the **Objects list**.

4. Access the File Through a Browser

By default, files are **private**, so they cannot be accessed publicly.

To access them through a browser:

1. Click the uploaded **file name**.
2. Click **Permissions**.
3. Choose **Make public** (or update bucket policy).
4. Copy the **Object URL**.

Example URL format:

```
https://bucket-name.s3.amazonaws.com/file-name
```

Paste this link in a browser to open the file.

Example:

```
https://bhesh-cloud-storage.s3.amazonaws.com/example.txt
```

5. Access the File Using API / CLI

Students can also access S3 using **AWS CLI**.

Example command to upload a file:

```
aws s3 cp example.txt s3://bhesh-cloud-storage/
```

Command to download a file:

```
aws s3 cp s3://bhesh-cloud-storage/example.txt .
```

Command to list files in a bucket:

```
aws s3 ls s3://bhesh-cloud-storage
```

This method is commonly used in **automation and programming**.

6. Example Use Case

Example scenario:

A student creates an S3 bucket to store:

- Project documents
- Images for a website
- Backup files

The files can then be accessed through:

- **Web browser**
- **Mobile apps**
- **APIs**

7. Important Tips for Students

- Use **unique bucket names** (they must be globally unique).
- Avoid making sensitive files **public**.
- Delete unused files to stay within the **free tier**.
- Monitor storage usage in the **AWS Billing dashboard**.