

# SWE 103 INTRODUCTION TO SOFTWARE ENGINEERING

## PROJECT 3: Cloud Account Creation

**Due date:** 25.11.2025 Tuesday, in class.

**Goal:** The purpose of this project is to learn how to establish a secure cloud account and environment using either Amazon Web Services (AWS) or Microsoft Azure. This foundational practice will teach you to create, configure and test cloud services efficiently.

### Project Objectives

- To create a new cloud account on AWS or Azure.
- To configure a secure access communication between local computer and cloud services
- To configure and deploy a VM on cloud,
- To monitor activities on cloud services,
- To test the cloud instance (VM) via local shell,
- To learn how to terminate cloud services.

### Checklist of tasks and workload:

1. Creation of a new AWS or Azure cloud account: This item must be done before project presentation and shown in the class.

#### Help:

- Go to <https://aws.amazon.com> Click "Create an AWS Account" or
- Go to <https://azure.microsoft.com> Click "Start Free" or "Create Account"

**Note:** Enable Multi-Factor Authentication (MFA) for root user,

2. Configurations and creation of virtual computer: This item will be done and shown in the class. Note that a virtual computer is called VM on Azure and EC2 instance on AWS.

#### Help:

- Configure communication ports for ssh (port: 22),
- Create ssh keys and save a copy in your local computer,
- Configure instance memory and disk space (stay in free tier),
- Configure instance OS as Linux.

3. Testing: This item will be done in the class,

- Open up a shell in your local computer,
- Use `ssh` tool on your local computer to connect VM or EC2 instance.

4. Monitoring VM or EC2 activities on web page: This item will be shown in the class.
  - Make sure to terminate all services before you leave the page.

### Note:

1. Each student in the group will show item 1 and only project leader will show items 2-4.  
**Note:** Students are responsible for all items, in case of failure another member will take over the project presentation.
2. Practice before coming, all tasks must end in 5 -10 minutes.

**DON'T FORGET TO TERMINATE THE CLOUD SERVICES AND INSTANCES!!!**