PROJECT OVERVIEW & PLANNING REPORT

- **Project Title : A Red team-Blue team Security Simulation on Microsoft (Major project)**
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1. Overview

This project titled **"Attack, Detect & Secure the Cloud Environment"** is a hands-on cybersecurity implementation conducted on **Microsoft Azure**. The project simulates a real-world enterprise cloud environment and follows a **Red Team vs Blue Team** methodology to identify, detect, and mitigate cyber threats.

The infrastructure consists of multiple Linux-based virtual machines representing internal systems, web-facing services, and a centralized SIEM server.

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2. Objective

The primary objective of this project is to demonstrate the complete cybersecurity lifecycle in a cloud environment by:

- Simulating real-world cyber-attacks
- Detecting malicious activities using SIEM
- Investigating security incidents
- Applying security hardening techniques
- Validating security improvements through re-attack

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3. Project Scope

3.1 In-Scope

- Azure Virtual Machine deployment
- Linux system security assessment
- Network access control evaluation
- Attack simulation and detection
- Security hardening and validation

3.2 Out-of-Scope

- Paid security tools

- Production-grade high availability systems
- Cloud-native paid security services

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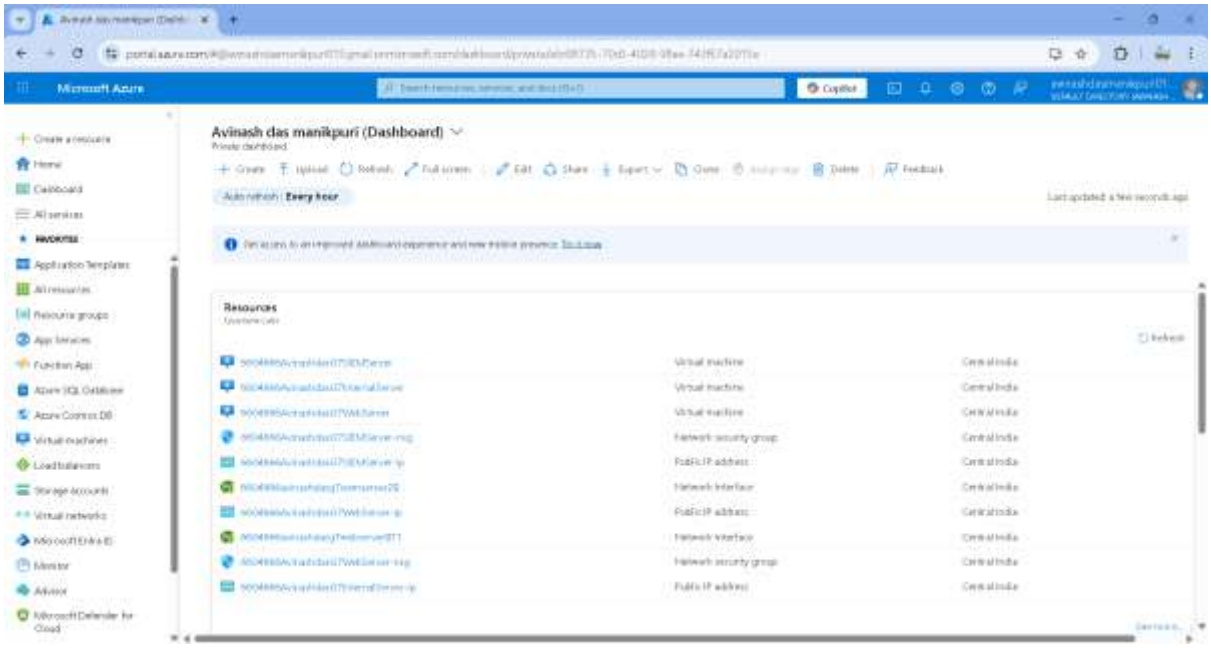
4. Cloud Architecture Overview

The project architecture consists of the following components:

- **VM-Internal** – Internal Linux server
- **VM-Web** – Web server hosting Apache/Nginx
- **VM-SIEM** – Centralized SIEM server (Wazuh)

All systems are deployed within a single Azure Virtual Network.
AZURE DASHBOARD



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5. Tasks to Be Completed

1. Red Team attack simulation
2. Blue Team investigation and detection
3. Security hardening and mitigation
4. Post-hardening re-attack and validation

Screenshot Evidence Table – Project Setup

Screenshot No.	Description	Remarks
1	Azure Resource Group Creation	Account name visible
2	Virtual Machines Overview	All VMs listed
3	Network Configuration	VNet & NSG