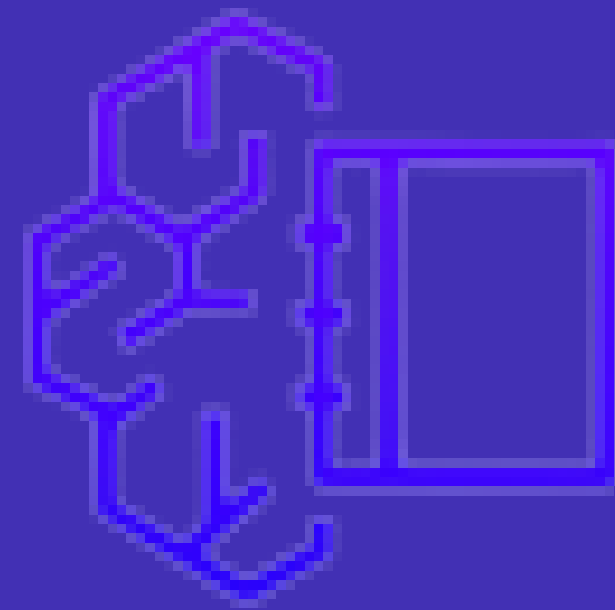




# MLOPS WITH AWS SAGEMAKER

## Session 2



## Agenda

- Sagemaker Studio Overview
- Sagemaker Studio Architecture
- Demo: Sagemaker Projects and MLOPS Template

# RECAP

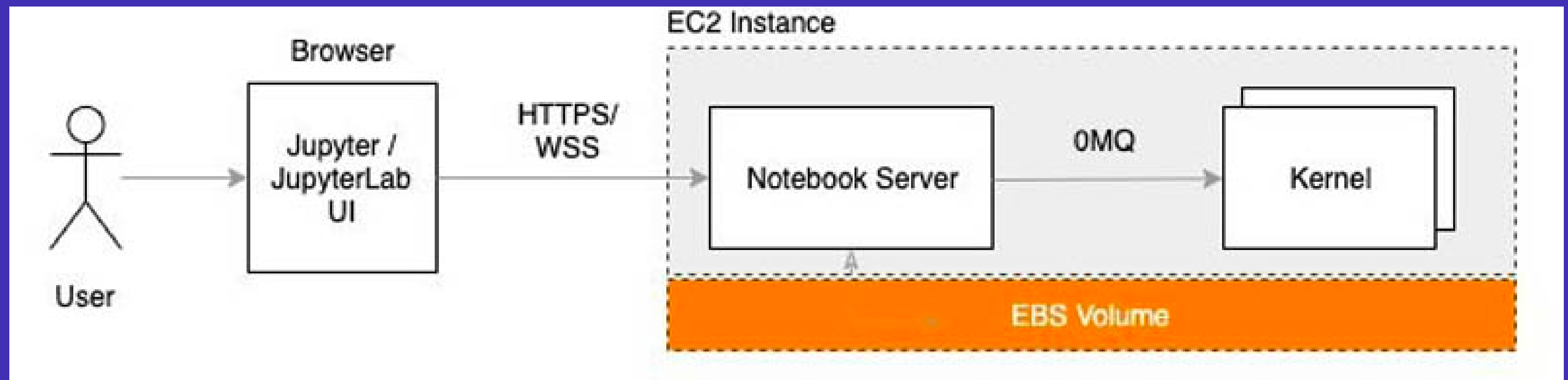
- In previous session, We discuss about what is MLOps, MLOps Challenges, MLOps Benefits.
- HighLevel Overview of AWS Sagemaker.
- Demo -Use the terraform code to Deploy the Sagemaker Studio with User profiles and Spaces.

\* You can find the All Session Presentation and Recordings in GitHub  
<https://github.com/aws-data-usergroup-bangalore/sagemaker-mlops/tree/main>

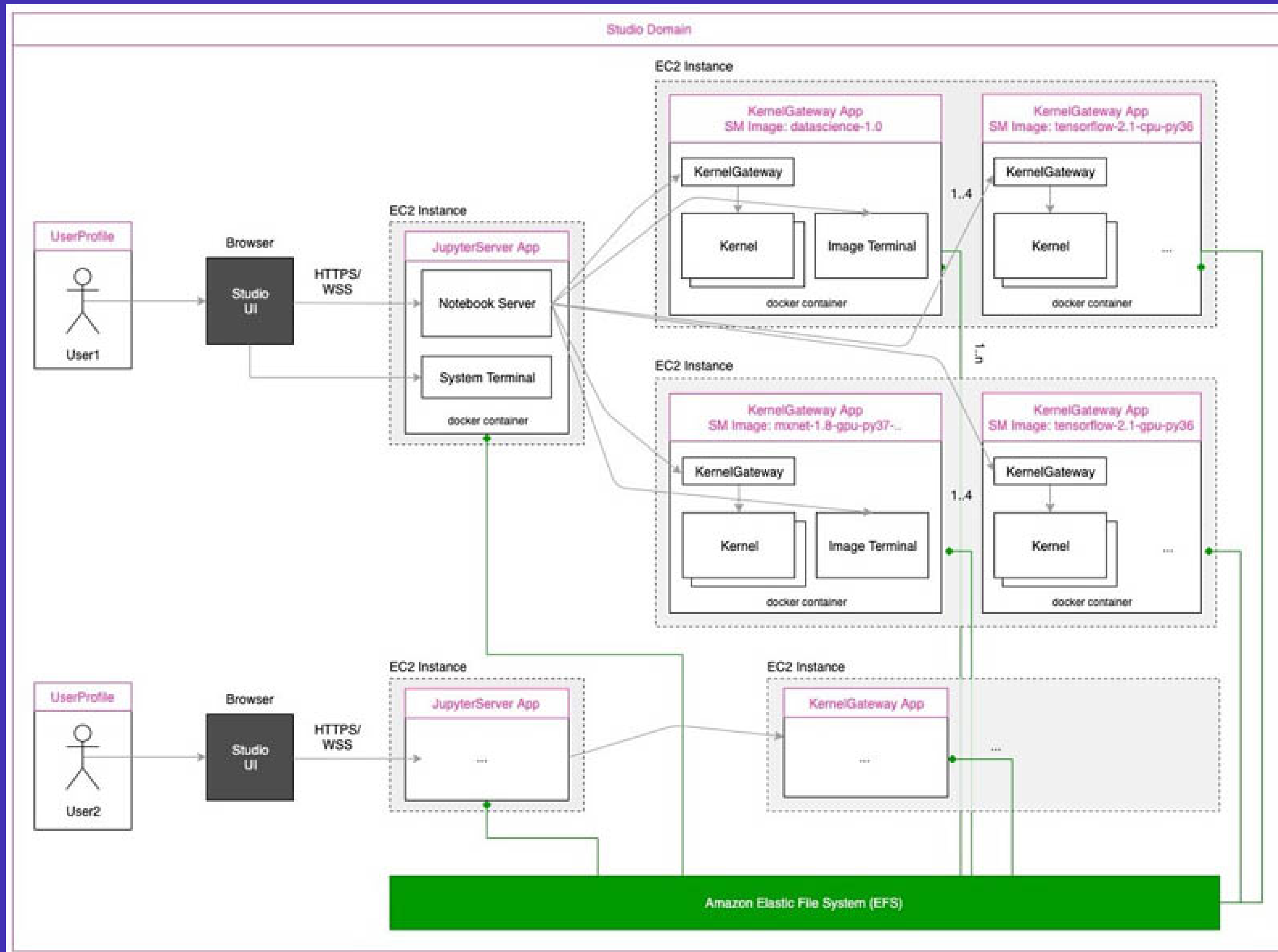
# SAGEMAKER STUDIO OVERVIEW

- It is like "One ring to rule them all". It facilitate MLOps lifecycle from Data to Deployment. This improve productivity of Data Scientist.
- Amazon SageMaker Studio is the first fully integrated development environment (IDE) for machine learning (ML). It provides a single, web-based visual interface where you can perform all ML development steps, including preparing data and building, training, and deploying models.
- You can simply migrate your notebook running in JupyterLab environment to Studio.
- Quickly move between steps of the ML lifecycle to fine-tune your models. Replay training experiments, tune model features and other inputs, and compare results, without leaving SageMaker Studio.
- You can do single click deployment of Model from Sagemaker Studio Jumpstart / Foundation Model

# SAGEMAKER NOTEBOOK



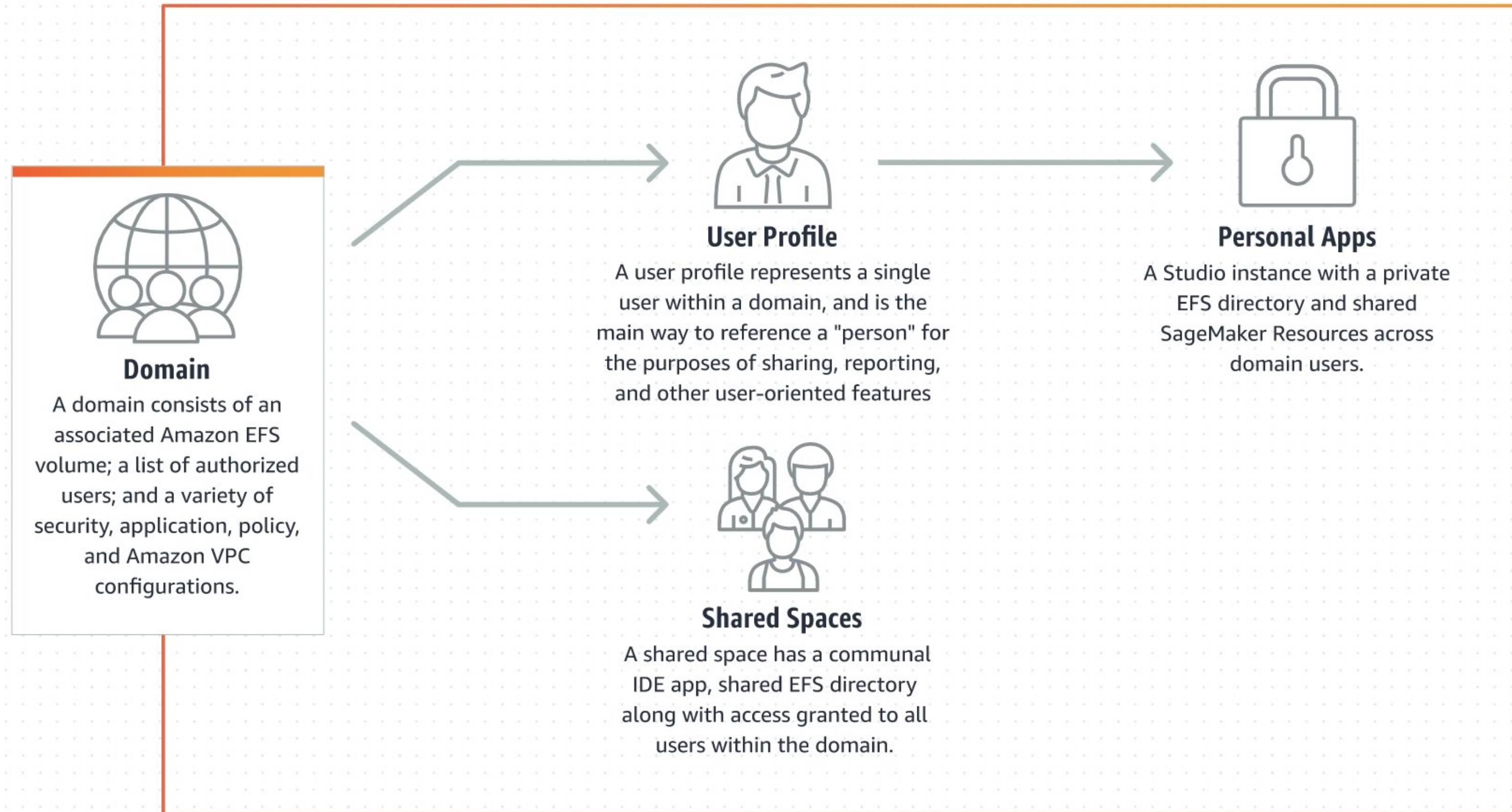
# SAGEMAKER STUDIO ARCHITECTURE



Let us Understand -

- Domain
- User Profile
- Spaces
- IAM and VPC Integration
- Apps-Jupyter and Kernel Gateway

# SAGEMAKER STUDIO - SPACES





# SAGEMAKER STUDIO - PROJECTS

- SageMaker Projects help organizations set up and standardize developer environments for data scientists and CI/CD systems for MLOps engineers. Projects also help organizations set up dependency management, code repository management, build reproducibility, and artifact sharing.
- SageMaker Projects provides a set of templates for organizations that want to quickly get started with ML workflows and CI/CD. The templates include projects that use AWS-native services for CI/CD, such as AWS CodeBuild, AWS CodePipeline, and AWS CodeCommit.

# Demo - Sagemaker

# MLOps Template