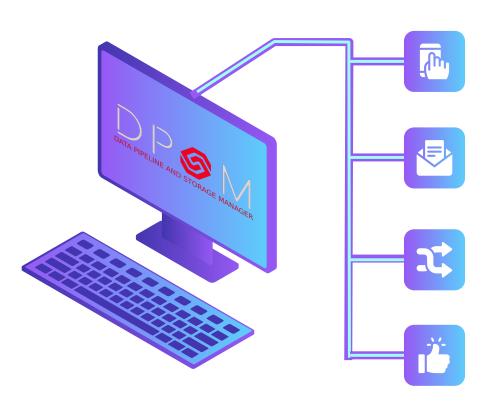


# Data Pipeline and Storage Manager



# **Project Description**



### Goal

Develop a cloud-native pipelining (CNP) service that facilitates the analysis and management of project data.

## **Storge**

The loaded raw data is stored in a storage bucket, the insights gained from the raw data are stored in a database.

### Manage

Request a data pipeline and raw data, and then load the data into the pipeline.

### Show

The end user is provided with a frontend to upload the data, and to access and analyse the stored data.

# **Project Architecture**

### **Web Frontend** Server + MongoDB Angular frontend Server as Secret Store Accepts user input, file MongoDB as Result and uploads and downloads Object store **Apache Airflow S3 Bucket** Amazon S3 Bucket are Holds the data pipelines used for File storage Executes them and sends results back to the server

# **Project Requirement**

### **Frontend**

- Allows data upload and pipeline selection
- Users can upload data, search, control pipeline status

### **Backend**

- Orchestrates software components
- Handles data flow
- Access control storage/handling

# **Data Pipeline**

- Supports various data types, prioritizing CSV and compound files
- Different ETL solutions for different data types

**DPSM** 



# Live Demo



Thank you!