

## CORE CONCEPTS:

### ***DIRECTED ACYCLIC GRAPH***

#### ***Web Server UI - View***

Graph View | Task Instance Details View | Task Logs View | Code View

#### 1 DAG - Defines the workflow

- SimpleDAG
- DynamicDAG
- ParallelDAG
- GroupDAG
- TriggerDAG

#### 2 Operators - Define the Task

- Action
- Transfer
- Sensors

#### 3 Providers

- Connections to other data pipelines

#### 4 Hooks

- Abstracts Interactions With External Services

#### 5 DAG Scheduling - Schedulers

- Start - Interval - End
- Created a DagRun

#### 6 Connections

- Data source or a system

#### 7 Micro Pipelines

- Flexible and scalable framework

#### 8 Dataset

- Encapsulated data produced or consumed by a task.

## 9 Grouping - [ SubDAGs , Task Groups ]

Parallelize and optimize the execution of tasks

## 10 Task Instance [ Ti ]

Monitor and manage the execution of tasks

## 11 Xcom Variables

Tasks within a DAG to exchange data and information

## 12 Branching

Create conditional workflows

## 13 PLUGINS - Creating Custom Components

Extend the functionality of Airflow

## 14 Trigger Rules

Triggered based on the state of its upstream tasks

### **BACKEND :**

## 15 Webserver

Web-based user interface for interacting with Airflow

## 16 Scheduler

Schedule Task based on DAG schedule and dependencies.

## 17 Executer

Defines tasks in the DAG

## 18 Queue

Stores the tasks that are ready to be executed

## 19 Worker

Pulls tasks from the queue for execution

## 20 Flower

A web-based monitoring interface