



Course Structure

The plan



Section 1: Course Introduction

- Important Prerequisites
- Course Objectives
- Course Structure
- Who I am
- Development Environment



Section 2: First Approach to Airflow

- Introduction
- Why use Airflow?
- What is Airflow?
- How Airflow Works?
- [Practice] Installing Airflow
- [Practice] Quick tour of the UI
- [Practice] Quick tour of the CLI
- Recap



Section 3: Coding Your First Workflow

- Introduction
- What is a DAG?
 - [Practice] Time to code your first DAG
- What is an Operator?
 - [Practice] Let's use Operators
- Operator Relationships and Bitshift Composition
 - [Practice] Adding dependencies
- How the Scheduler Works?
 - [Practice] A Quick Play With Backfill and Catchup
- What is a Workflow?
- Recap



Section 4: Databases and Executors

- Introduction
- Sequential Executor with SQLite (Standalone Mode)
- Local Executor with PostgreSQL (Pseudo-Distributed Mode)
 - [Practice] Configure a DAG with Local Executor and PostgreSQL
- Celery Executor with PostgreSQL and RabbitMQ (Distributed Mode)
 - [Practice] Configure a DAG with Celery Executor, PostgreSQL and RabbitMQ
- Recap



Section 5: Advanced Concepts

- Introduction
- Minimising Repetitive Patterns With SubDAGs
 - [Practice] Minimising a DAG with SubDAGs
- How to Interact With External Sources Using Hooks?
 - [Practice] Get Results From PostgreSQL Using Hooks
- How to Share Data Between Your Tasks With XCOMs?
 - [Practice] Share Your First Messages Using XCOMs
- How to Execute Tasks According To Criteria Using Branching
 - [Practice] Make Your First Conditional Tasks
- Recap



Section 6: Customising Your Apache Airflow Installation With Plugins

- Introduction
- Adding Functionalities to Apache Airflow
 - [Practice] Creating a Hook to Interact With Elasticsearch
 - [Practice] Creating a Transfer Operator PostgresqlToElasticsearch
 - [Practice] Adding a View to Apache Airflow UI
- Recap