

# CS 327E Class 11

April 22, 2019

# Announcements

## **Milestone 13:**

- What: Group Presentations.
- When: Week of May 6th. M-F 6pm - 8:00pm.
- Where: TBD.
- Ask: Email me your preferred times by **this Friday**.

1) In Airflow, a workflow is modeled as a \_\_\_\_\_ ?

- A. Undirected Cyclic Graph
- B. Directed Acyclic Graph
- C. Directed Graph

2) How is a DAG defined in Airflow?

- A. Standard SQL file
- B. Jinja template file
- C. Standard Python file

### 3) How is a task executed in Airflow?

- A. The unit of work is executed by a **single** `Operator`
- B. The unit of work is executed by **multiple** `Operators`
- C. The unit of work is executed by a `SubDag`

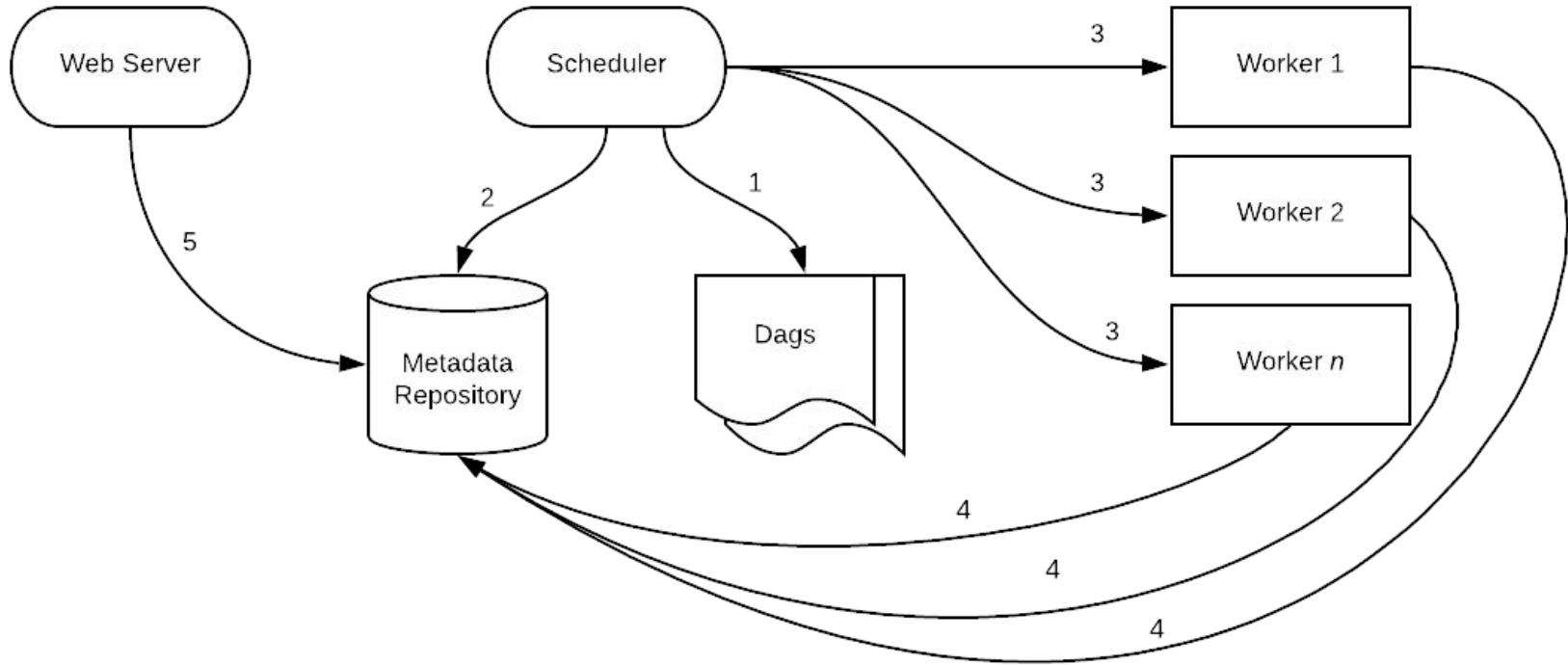
4) What does the statement  $t1 \gg t2$  mean where  $t1$  and  $t2$  each represent a task?

- A.  $t1$  runs first and  $t2$  runs second
- B.  $t2$  runs first and  $t1$  runs second
- C.  $t1$  and  $t2$  do not have an ordering

5) A trigger rule specifies the conditions under which the tasks can \_\_\_\_\_.

- A. execute
- B. sleep
- C. succeed
- D. fail

# Life of a DAG Run





# Basic Commands

```
airflow list_dags
```

```
airflow list_tasks <dag> --tree
```

```
airflow test <dag> <task> <date>
```

```
airflow backfill <dag> -s <start_date> -e <end_date>
```

```
airflow clear <dag> -s <start_date> -e <end_date>
```

# Installation Procedure

<https://github.com/cs327e-spring2019/snippets/wiki/Airflow-Setup-Guide>

# Hands-on Exercise

```
git clone https://github.com/cs327e-spring2019/snippets.git
```

or

```
git pull origin master to pull down the latest code
```

## Relevant Files:

```
simple_workflow1.py - simple_workflow3.py
```

```
college_workflow1.py - college_workflow3.py
```

# Milestone 11

<http://www.cs.utexas.edu/~scohen/milestones/Milestone11.pdf>