


(Big) Data Engineering In Depth

From Beginner to Professional

Mostafa Alaa Mohamed

Senior Big Data Engineer

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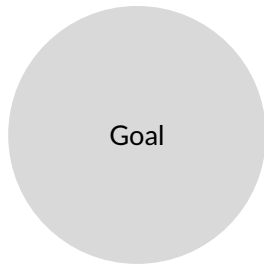
 mustafa.alaa.mohamed@gmail.com

¹Big Data & Analytics Department, Epam Systems

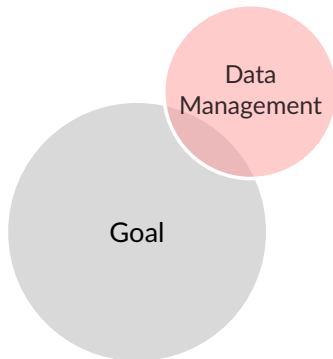
The Definitive Guide to Big Data Engineering Tasks

Course Introduction

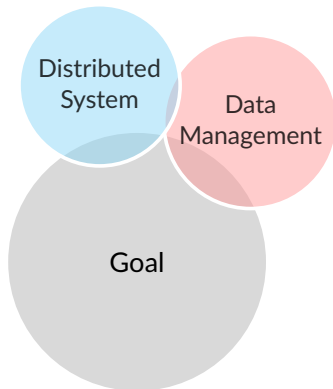
Course Target



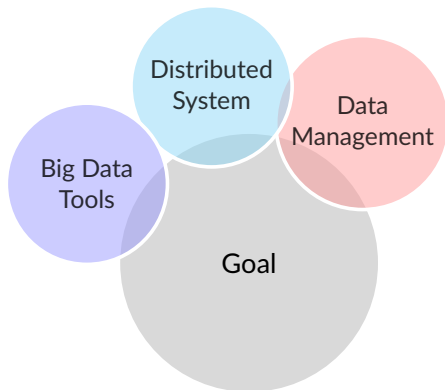
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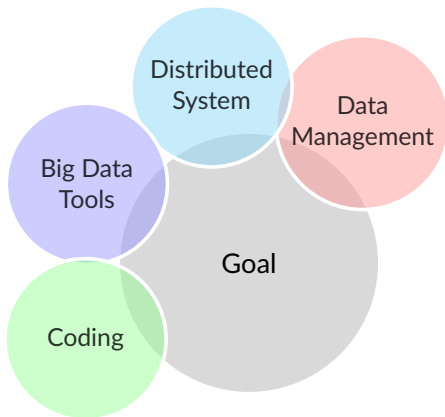
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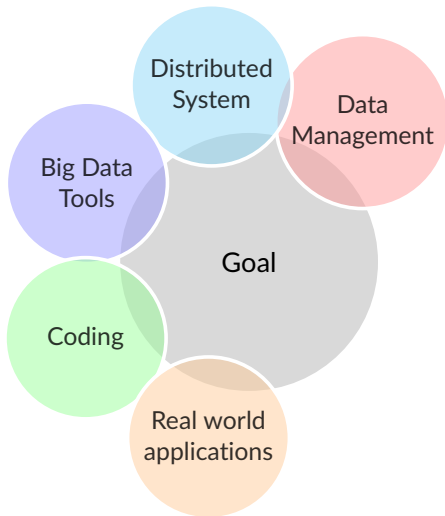
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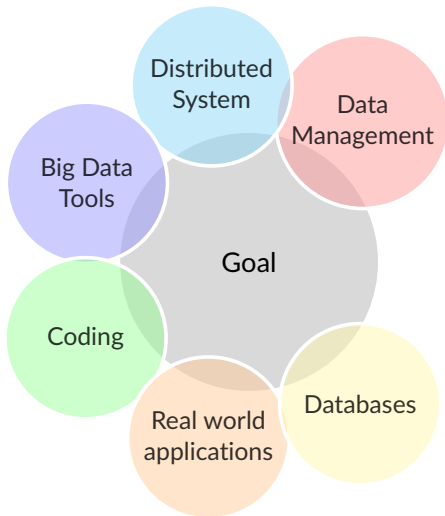
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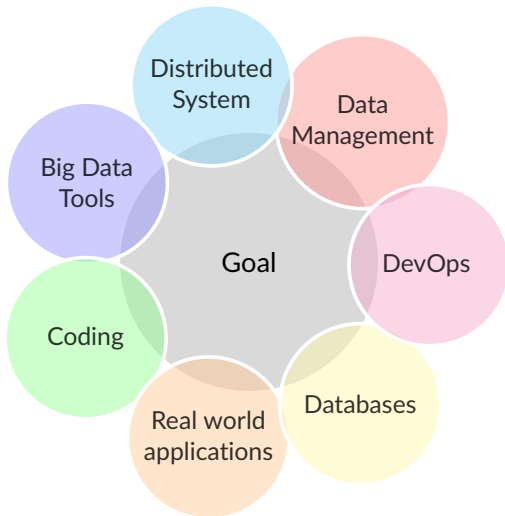
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Learning Objectives and Audience

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- Understanding of the DevOps tools and functions in data life-cycle ([Appx. H](#)).

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- Business or entrepreneur who needs to get more information about how to build or manage a data product.

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- Join online meetings or discussions.

Chapter Dependencies

Chapters Dependencies

🔔 You MUST finish the red chapters first

🔔 Finish colored groups before moving to the next group.

Ch.01 Introduction

Ch.02 Data Management

Ch.03 Distributed Systems

Ch.04 Hadoop and MR

Ch.05 FN and Scala

Ch.06 Spark

Ch.07 Big Data Application

Ch.08 Massging Systems

Ch.09 Data Orchestration

Ch.10 NoSql

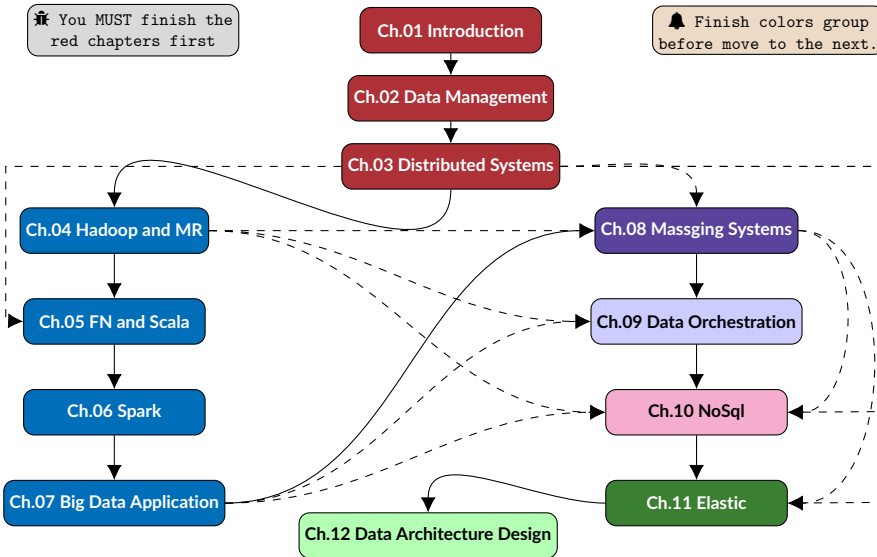
Ch.11 Elastic

Ch.12 Data Architecture Design

Chapter Dependencies (Jump Out Path)

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Assignments, Labs, and Text Books

Remark

- Full project code.

Assignments and Labs

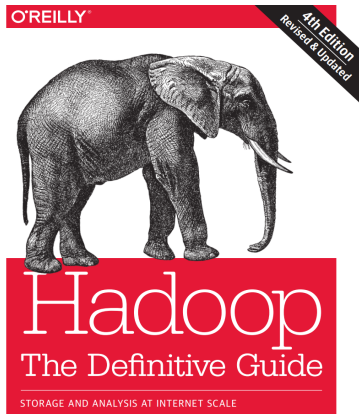
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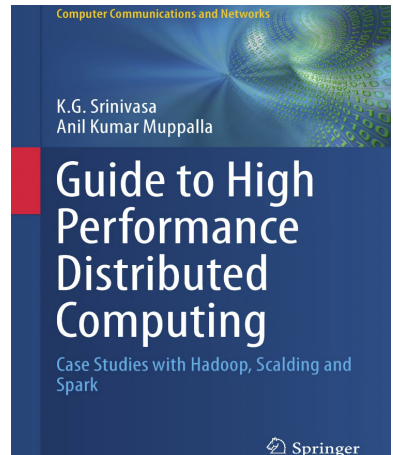
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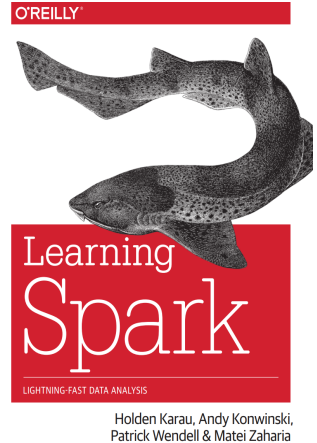
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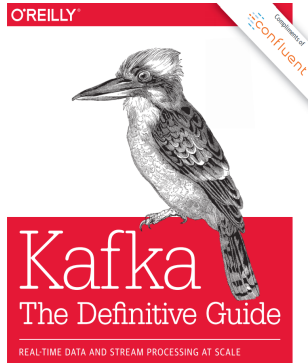
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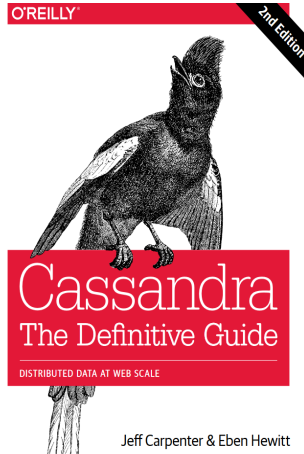
Tom White



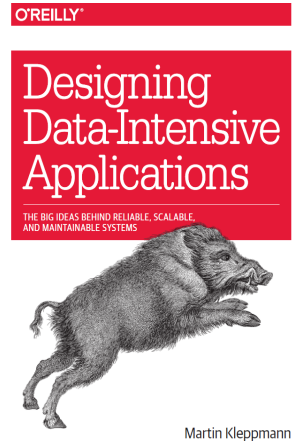




Neha Narkhede,
Gwen Shapira & Todd Palino



Jeff Carpenter & Eben Hewitt



Martin Kleppmann

Videos classification

- First 5 sec for every video contains a classification for this video as the following:

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 - Just listening (You can listen anywhere walking, driving, etc).

Videos classification

Watching Method / Audience	Computer	Mobile/Tablet	Just listening
Developer	●		
DevOps			●
Business		●	

Figure: Video classification

The green circle ● means short video.

The blue circle ● means medium video.

The red circle ● means long video

Ugly but important

- User stories or technical discussions are not related to any of my current work or my previous companies.

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- User stories or technical discussions are not related to any of my current work or my previous companies.
- I am working at EPAM Systems. My company approved me for doing this online course public but the materials are not reviewed or assessed by my company. It is on my responsibilities.