

# Software Architecture II

Arquitectura de Software II



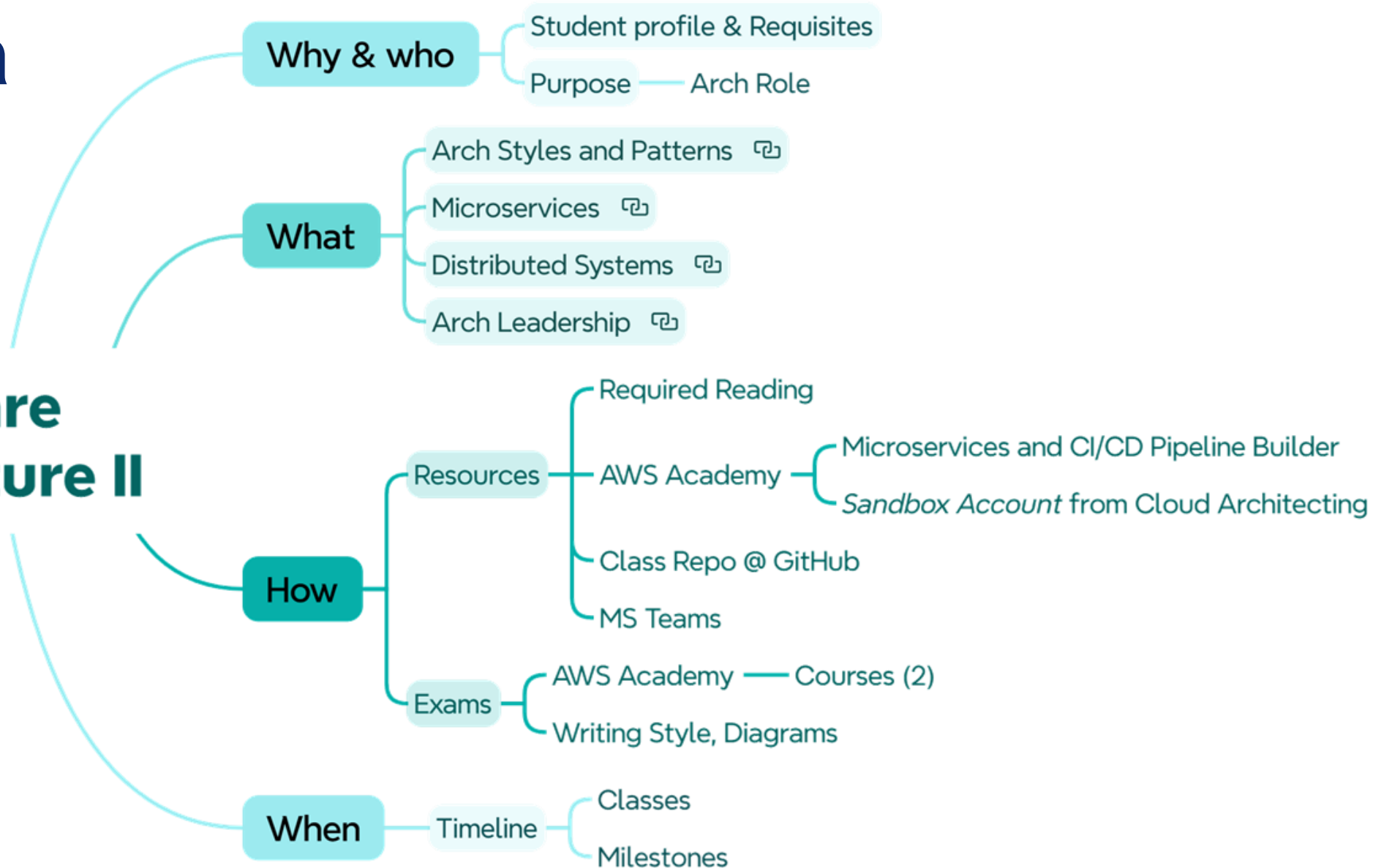
Universidad de  
**La Sabana**

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FACULTAD DE INGENIERÍA

# Agenda

## Software Architecture II



# Why: Student Profile

- Curious and Discipline: Read IT topics on several sources and plan his/her works.
- Dev: AWS Labs use Node, but required knowledge of a modern language (Go, Rust, Clojure, Java, Python).
- Usage of GenAI Tools for specific tasks only.

## Prerequisites:

- Cloud: Knowledge on AWS. Course on this MSc (Arquitecturas en la Nube). Focus on ECS, CodePipeline and CodeDeploy (Asynch Class).
- Docker: Usage of CLI. Course on this MSc (Arquitectura de Software I).
- Database: Knowledge on NoSQL DB Design. Course on this MSc (Diseño y Optimización de Bases de Datos).

# Why: Architecture Role

Toy Soldiers - Sargent !

Persona preocupada -To be easy  
life for the next *Pachito*!

DaVinci - Ambiguity !

- To set responsibilities of an architect role.
- To apply proven (industry) methods to solve problems.
- To learn how to make good things (best practices), possible things (constraints) and control exceptions (antipatterns).

Empirical Path:

Majors on: Computer Science, Electronics, Engineering, Economics, etc.

Start from Developers, Infrastructure, Operations, Security, etc.

Experience from Development Companies, IT Specialized Outsourcing.

Academic Path:

Software Engineering, Requirements Engineering

Software Architecture, Enterprise Architecture

# What

- Estilos y Patrones Arquitectonicos
  - Microservicios
  - Sistemas Distribuidos
  - Liderazgo
- Grafico de diferentes diagramas, detalle hacia gran diagrama
  - Un solo diagrama
  - Un solo diagrama
  - Una persona con estrellita

## How: Resources



**Note:** Take advantage of AWS Academy promos

01

**AWS Academy**



02

**Class Repo@GitHub**



03

**MS Teams**



04

**Unisabana e-Learning**



# How: Required Reading

- Estilos y Patrones Arquitectonicos
- Microservicios
- Sistemas Distribuidos
- Liderazgo
- Libros: SAIp, FoSA, Azure
- Libros: MFowler, Richardson, FoSA, Azure, AWS,
- Libros: Kleppman, SAIp, AWS; Hadoop
- Libros: SAIp, FoSA, Richards-Katas,

# How: Exams

Item	%	Deadlines	Type	On
Arch Styles and Patterns	20	3 <sup>rd</sup> Class	Doc	Email/Uni e-learning
Microservices	50	5 <sup>th</sup> Class	Doc & Lab	AWS Academy & Uni e-Learning
Distributed Systems	15	Last Class	Doc & Lab	AWS Academy & Uni e-Learning
Arch Leadership	15	Last Class	Docs (2)	Email/Uni e-learning

**Proposals to run scripts for labs: Mondays, Thursdays or Fridays.**  
**One of the options at 5 pm.**

AWS Academy issues: Create support the ticket directly and keep inform the professor. AWS Academy will need all screenshots.

Unisabana e-Learning issues: Review with University Point-of-Contact, the IT support.

Extra Time with regular process **only**: Review with University Point-of-Contact, the procedure and evidences.

Take care of the end date for Courses on AWS Academy to take advantage of the promos and labs.



# AWS Academy

- Pipelines for Task 2
- Sandbox from previous Course for Task 3
- Take care of these courses has an end date: Vouchers and labs.

# Preferred style

Simplicity

Well-Structured

Well-Structured

Mindmaps

Context Maps

Lists

# When: Timeline

\* Review updated dates  
on Repo@GitHub.

Class #	Date	AWS Module	Milestone
1	11 <sup>th</sup> – March	1, 2, 3	
2	18 <sup>th</sup> – March	4, 5, 6	
3	25 <sup>th</sup> – March	7, 8	1 <sup>st</sup> – April: Deadline for Mod. 1-8
4	8 <sup>th</sup> – April	9, 10, 11	
5	15 <sup>th</sup> – April	12, 13, 14	
6	29 <sup>th</sup> – April	15, 16, 17	29 <sup>th</sup> – April: Deadline for Mod. 9-17



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## **CONTACTO**

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