Software Architecture Diagrams

2023-08 @Guzhongren

Agenda

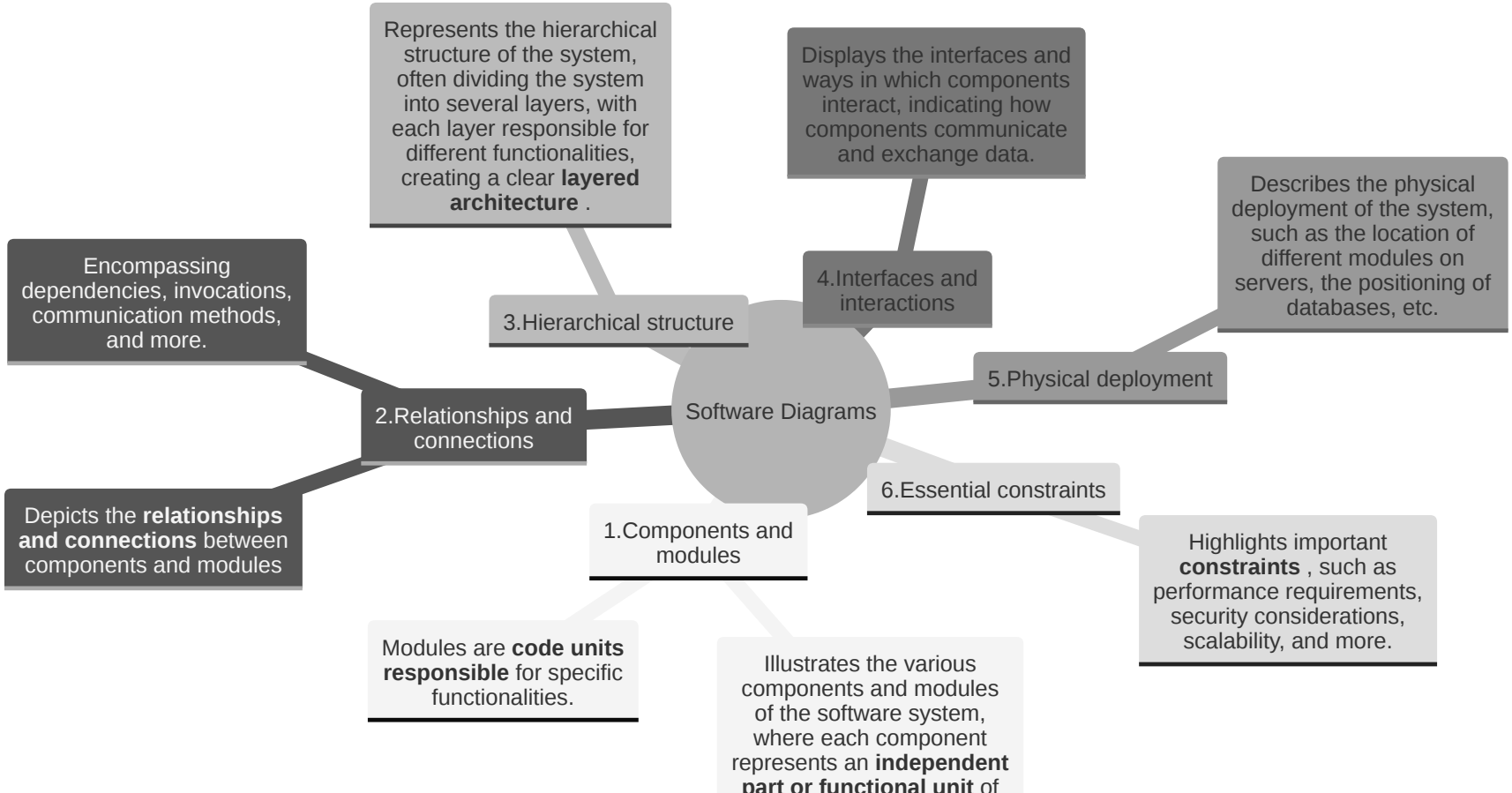
- What
- Why
- How
- Cases
- Q&A

What

What

- A software architecture diagram is a **graphical representation** used to **depict the overall structure of a software system** and **the relationships between its componentsi**.
- It serves as **a crucial tool** in **the software system design** and **development process**, aiding **development teams and stakeholders in gaining a better understanding of the system's organization, the interactions between modules, and the system's operational flow**.

What Should be Included Typically?



What's the Types and Styles?

Type and Styles	Description	Cases
High-Level Overview Diagram	Provides a bird's-eye view of the entire system, highlighting key components and their interactions.	Use Case Diagram, C4 Model
System Structure Diagram	Illustrates the relationships between components and modules, emphasizing dependencies.	Component Diagram
Sequence Diagram	Depicts the temporal interactions between components, suitable for illustrating the system's operational flow.	Sequence Diagram
Deployment Diagram	Describes the physical deployment of the system, showing how software components are allocated to hardware.	Deployment Diagram
Flowchart	Displays the flow of different steps and decisions in the	BPMN, FlowChart,Jira

Who Should Know It?

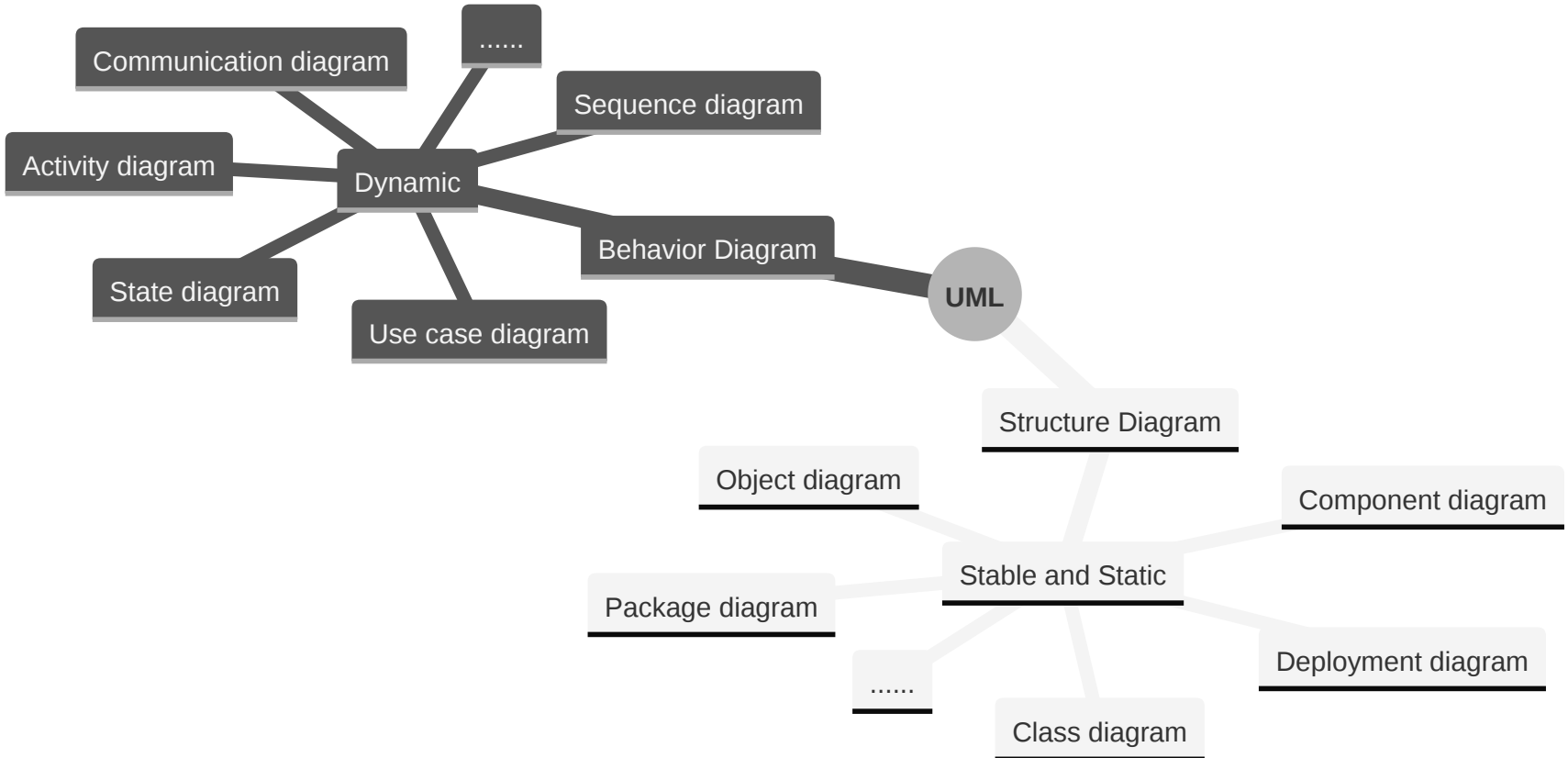
Who Should Know It?

Everyone

Categories

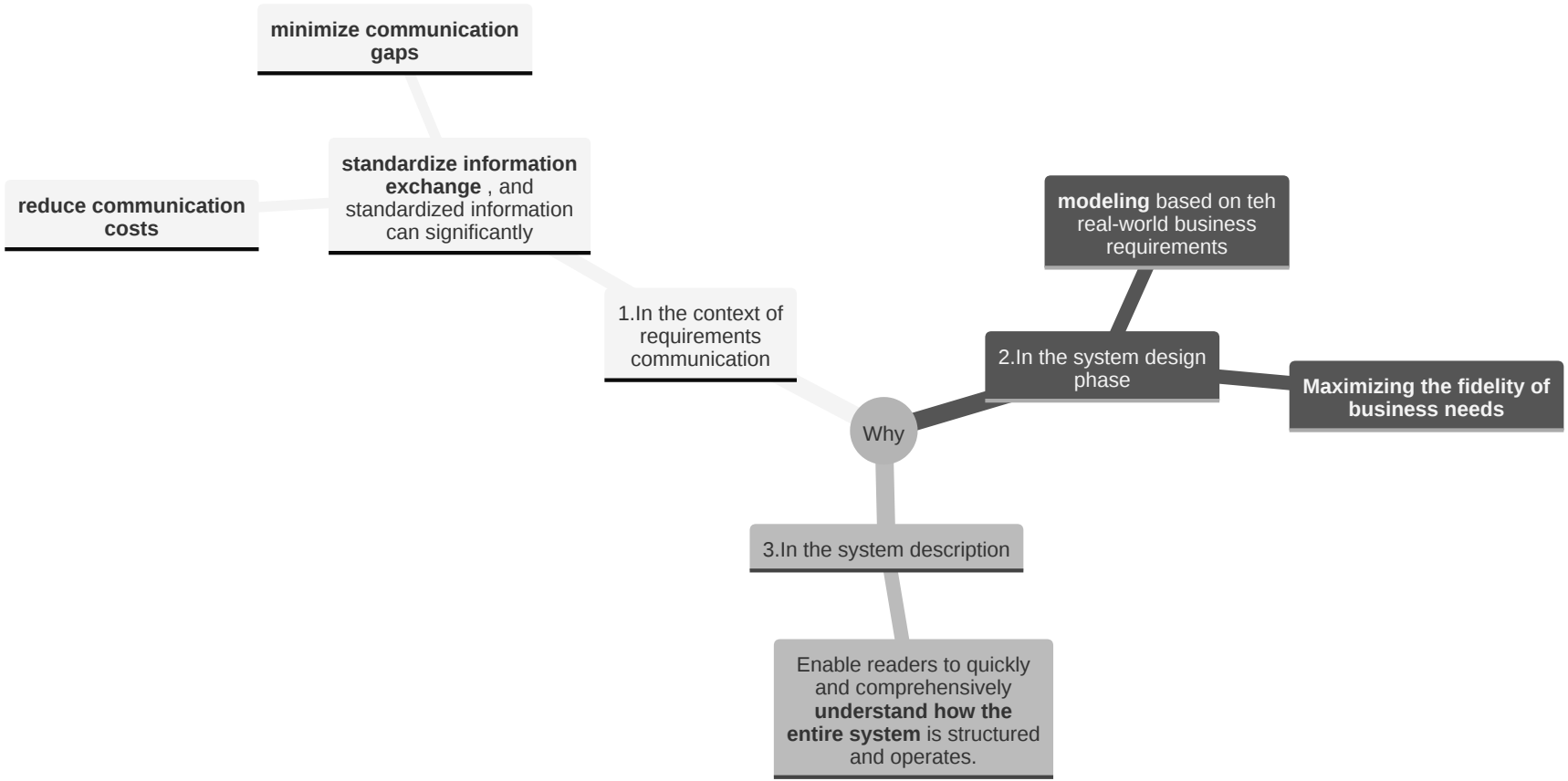
Categories

UML



Why

Why


minimize communication gaps
standardize information exchange , and standardized information can significantly
reduce communication costs
1.In the context of requirements communication
Why
modeling based on teh real-world business requirements
2.In the system design phase
Maximizing the fidelity of business needs
3.In the system description
Enable readers to quickly and comprehensively understand how the entire system is structured and operates.

How

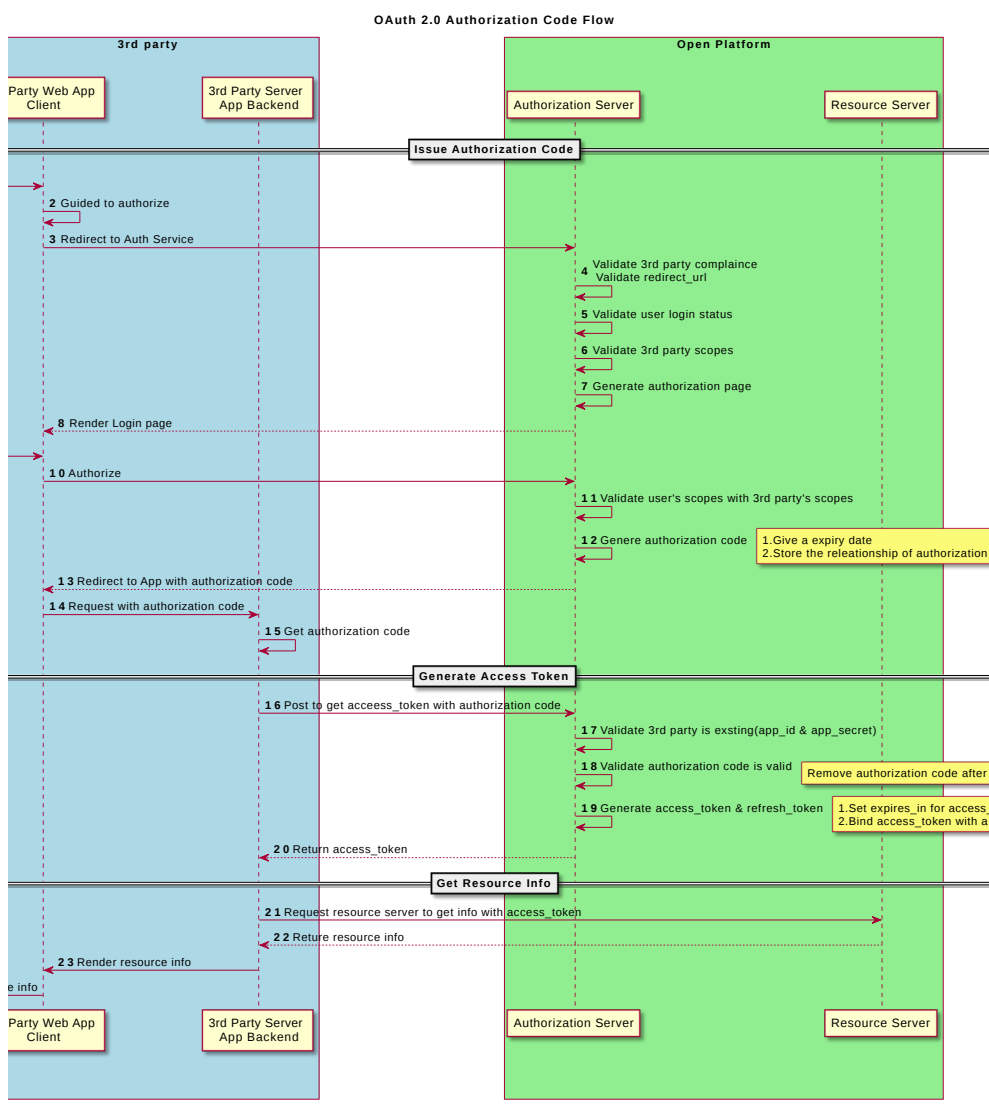
How

Tools

- PlantUML
- DrawIO
- Excalidraw
- …

Everything Should Be As Code

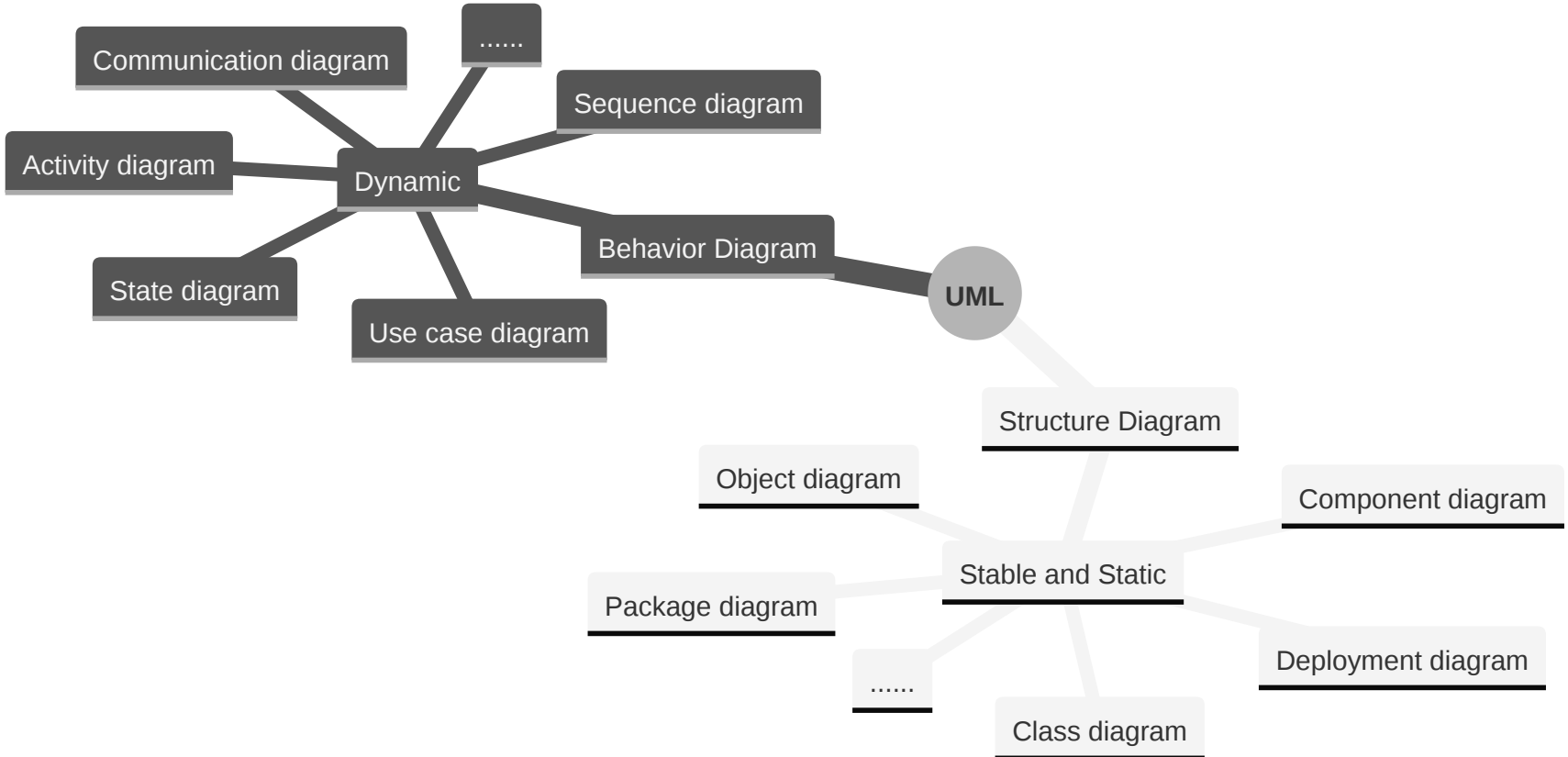
- Auto layout, saving time
- Common/default style, no ambiguity
- Version control
- ...



Cases

Cases

Give us your cases accourding to UML



Q & A