Quality Attributes & Software Architecture

Software Project, Lab 4

Agenda

- Recap Questions
- Identify Quality Attributes
- Document Static Perspective
- Document Dynamic Perspective

Questions?

- What are Quality Attributes?
- How are Quality Attributes different from Functional Requirements?
- What is a Static View?
- What is a Dynamic View?

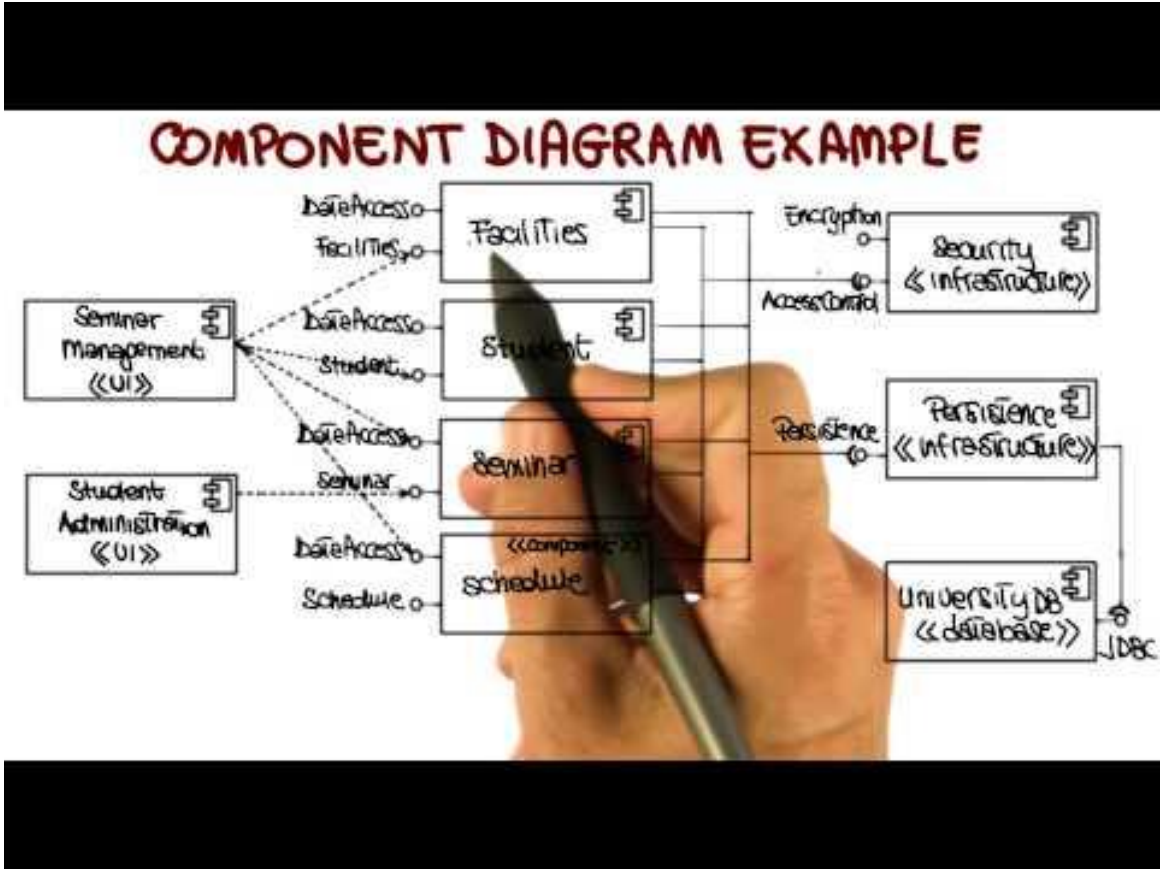
Activity 1 - Quality Attributes

- Go through the **list** and pick 2-3 quality attributes important for your project.
- Describe how you will measure them.

Quality Attribute	Ideas how to achieve
QA: Quality attribute name **Motivation:** Why is it important **Scenario:** What happens, how you respond, and what is the measure for it.	

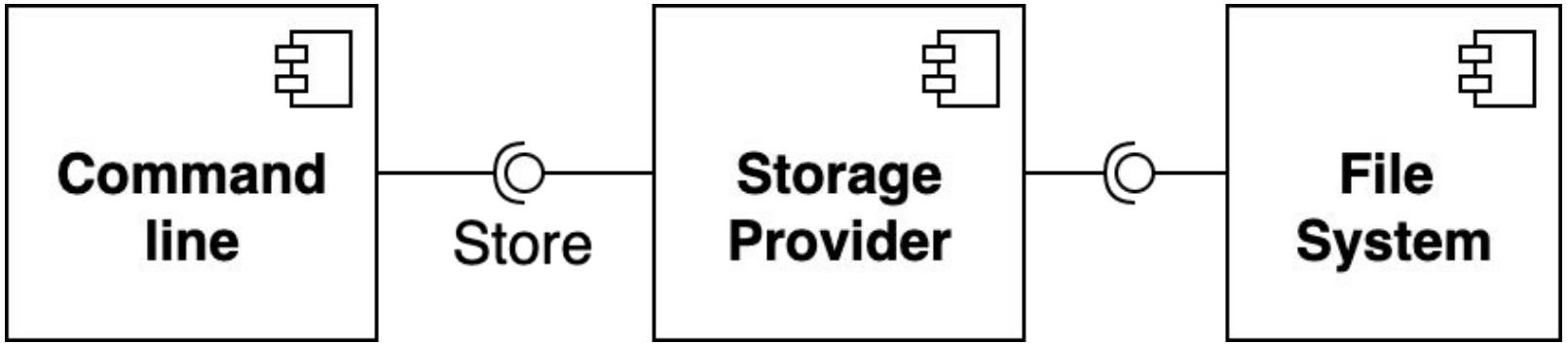
Static Perspective:
UML Component Diagram

Static Perspective: UML Component Diagram



Static Perspective: UML Component Diagram

Steps:
1) Outline components.
2) Show “uses” between components through “lollipop” connectors.



Example

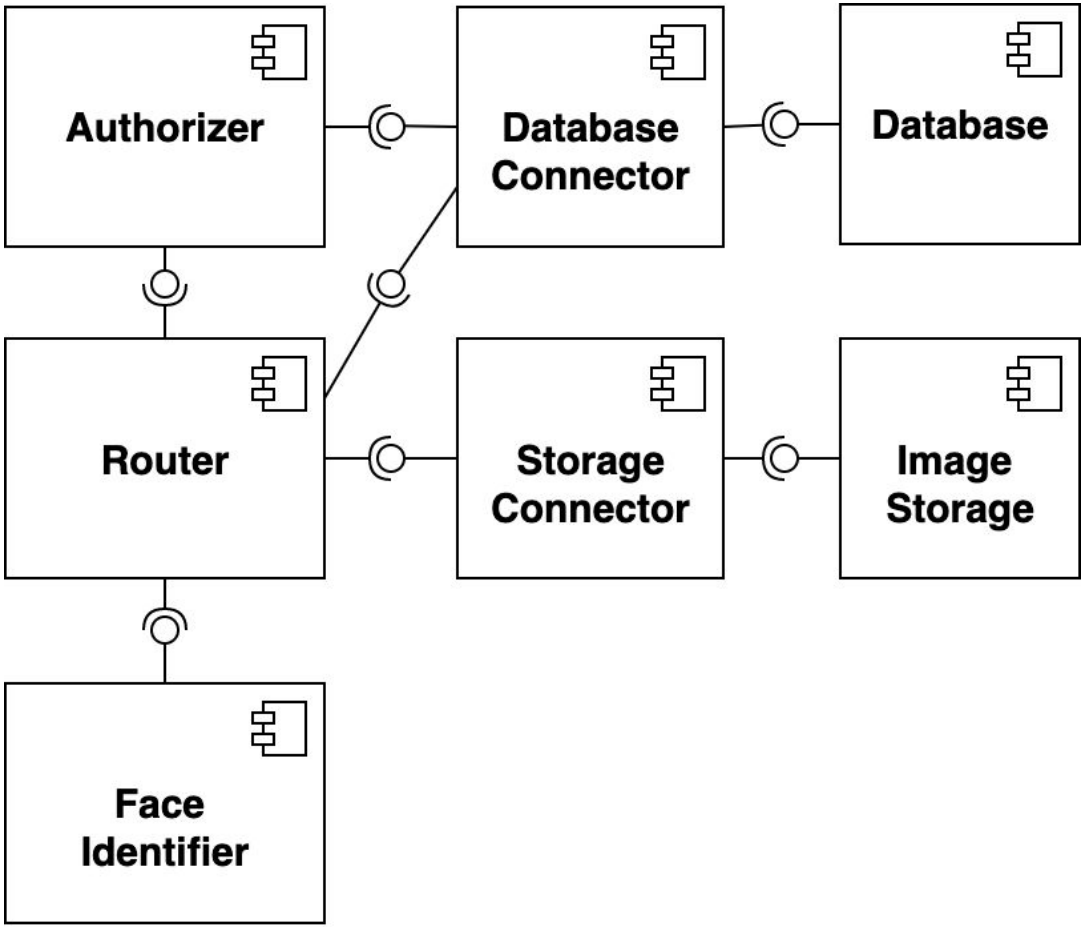
Try to achieve:

Modular design

Loose coupling: Few “use-relations”

High cohesion: Sensible distribution of responsibilities

Replaceable modules

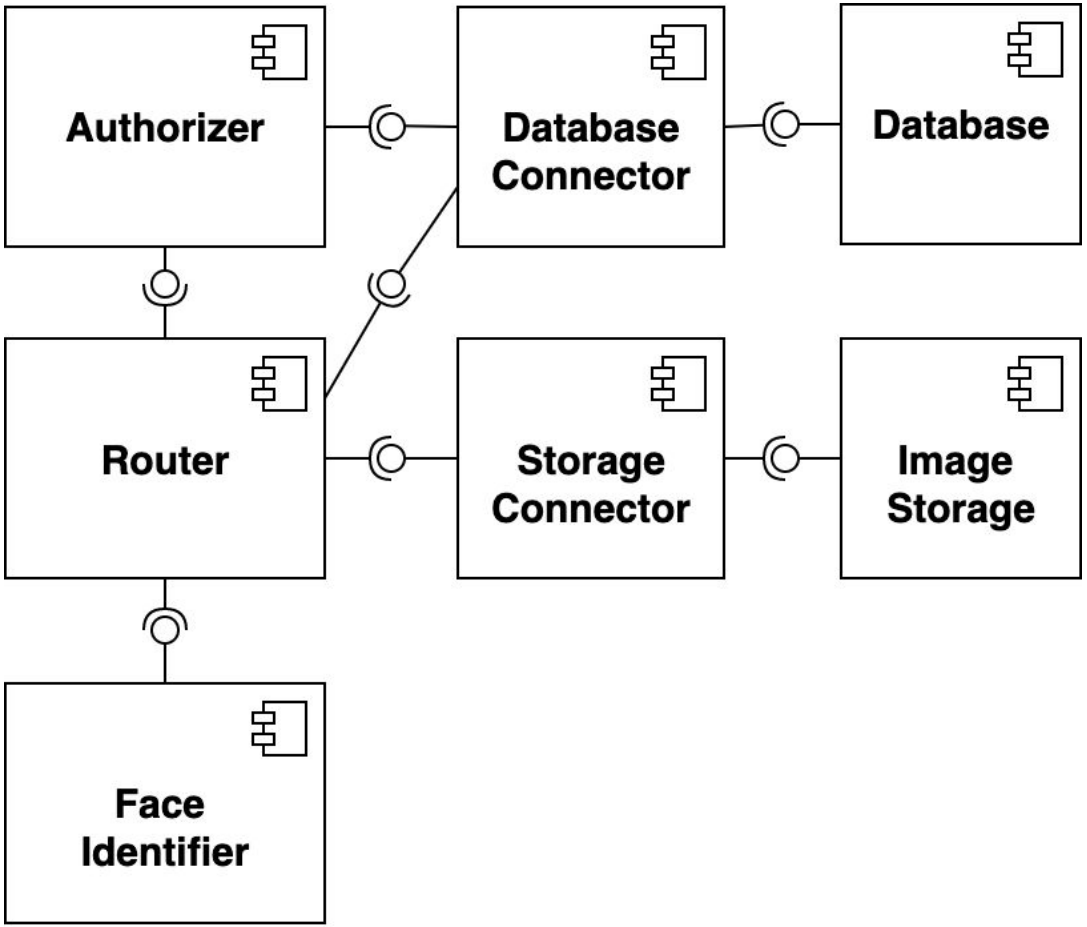


Activity 2 - Static View

Produce the static perspective of your project's architecture using UML
Component Diagram

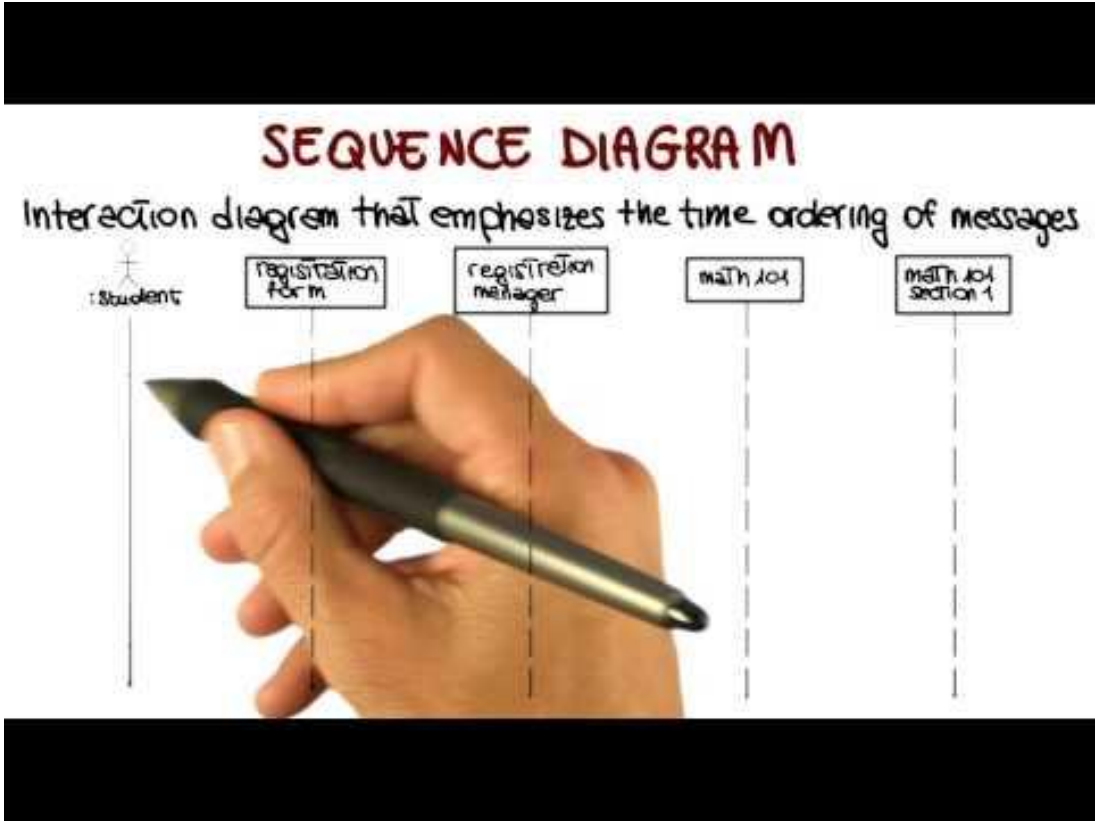
Limitations of Static View

- What meanings does the static view convey?
- What you cannot describe using it?

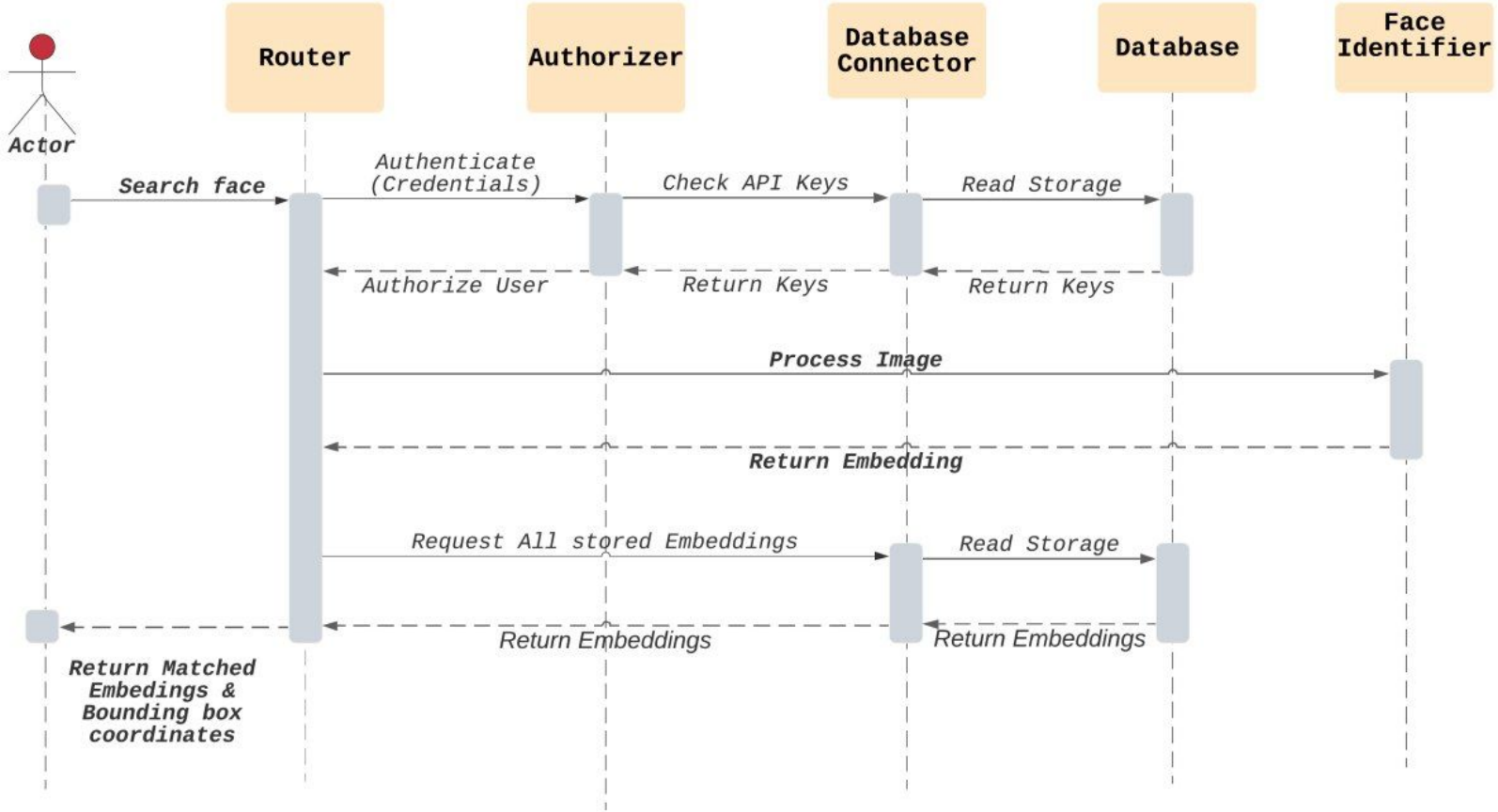


Dynamic Perspective: UML Sequence Diagram

Sequence Diagram



UML Sequence Diagram: “Search gallery” request



Activity 3 - Dynamic View

Draw a sequence diagram for a common non-trivial request in your project

Now you can exhale and relax :)

Thank you!