

**COMP 3550**

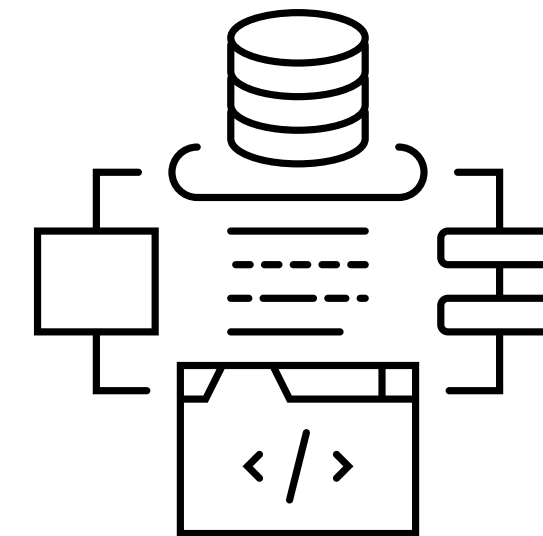
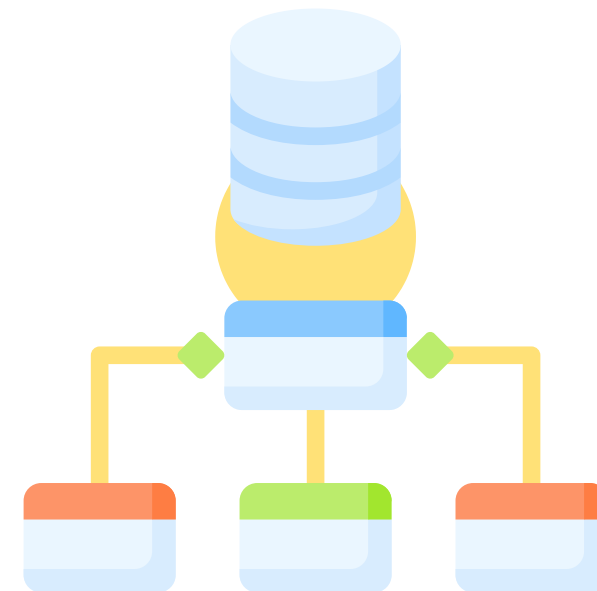
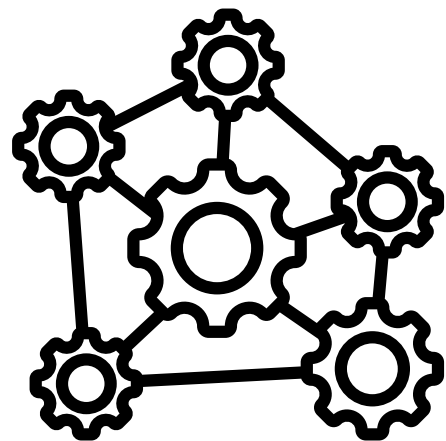
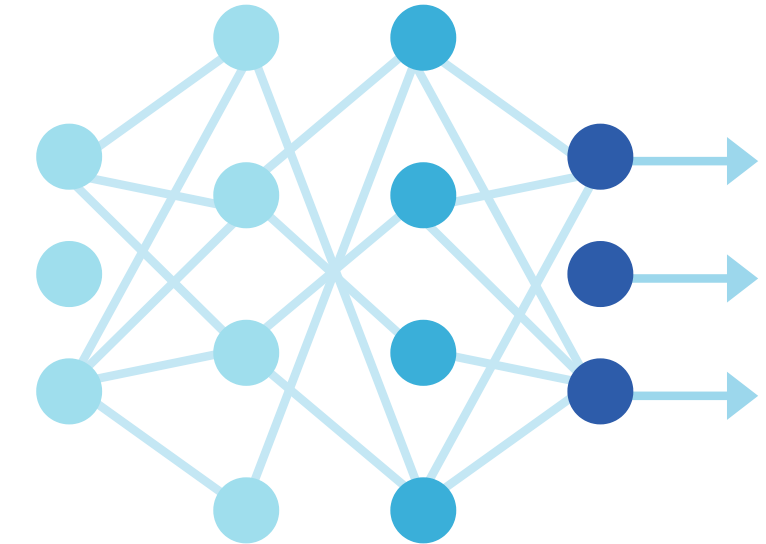
**2.3 — ARCHITECTURE DIAGRAMS  
& SYSTEM BOUNDARIES**

Week 2: Planning Artifacts & Project  
Architecture

# WHY DIAGRAMS MATTER



- Can you imagine going into building a LITERAL BUILDING with no architect? With no plans?
- Aid understanding
- Support onboarding
- Connect team discussions
- Can evolve — not documentation "for the shelf"



# COMMON ARCHITECTURAL LAYERS

- We work with an n-tier architecture
  - more specifically, a 3-tier architecture
- UI / Presentation
- Application / Logic
- Data / Persistence



# BOUNDARIES & RESPONSIBILITY

Where does ScanManager live?

The ScanManager controls methods like numSecondsShowAnimation() or isScanButtonDisabled()?

presentation/ui

logic/business

database/persistence

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# BOUNDARIES & RESPONSIBILITY

What about ScanRingView?

The ScanRingView will house the work for actually displaying the pulsating rings of the scan animation.

presentation/ui

logic/business

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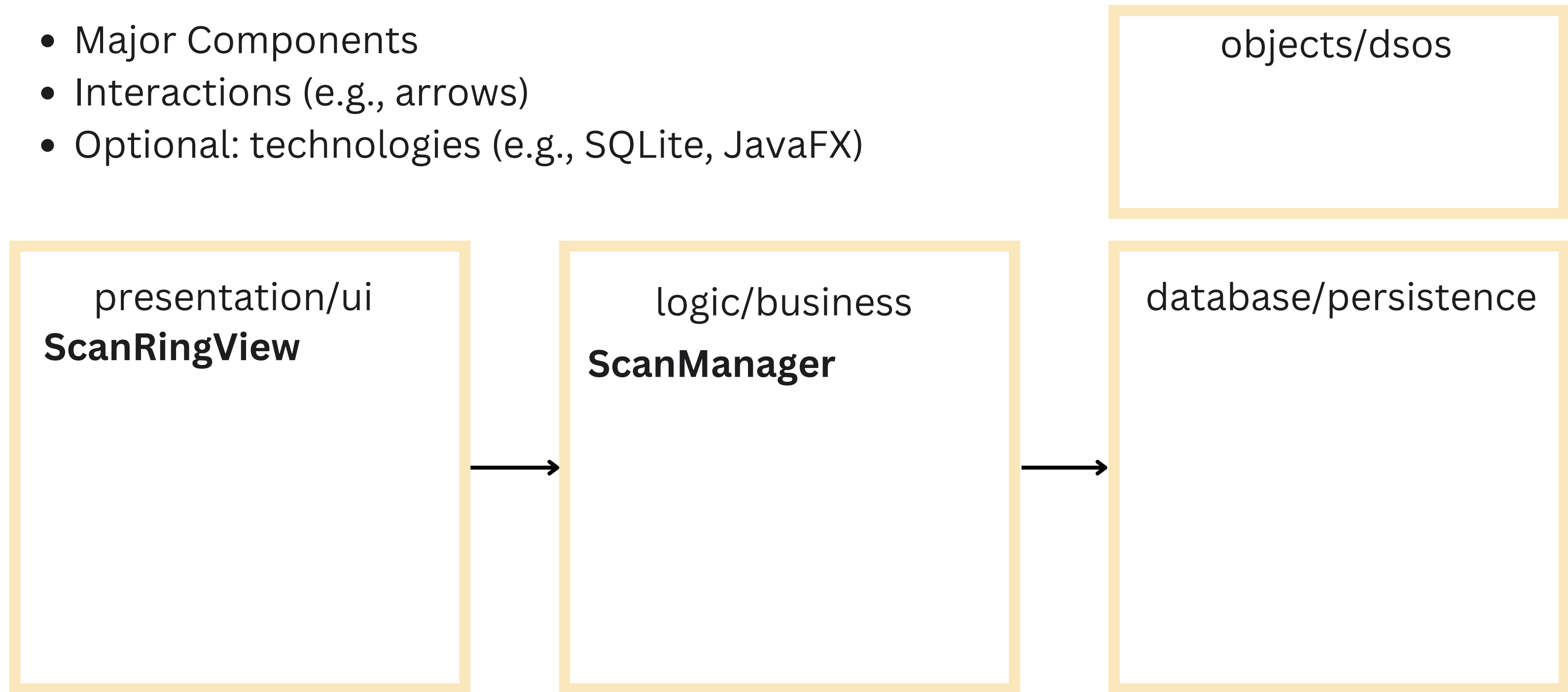
presentation/ui  
**ScanRingView**

logic/business  
**ScanManager**

database/persistence

# DIAGRAMS SHOULD SHOW:

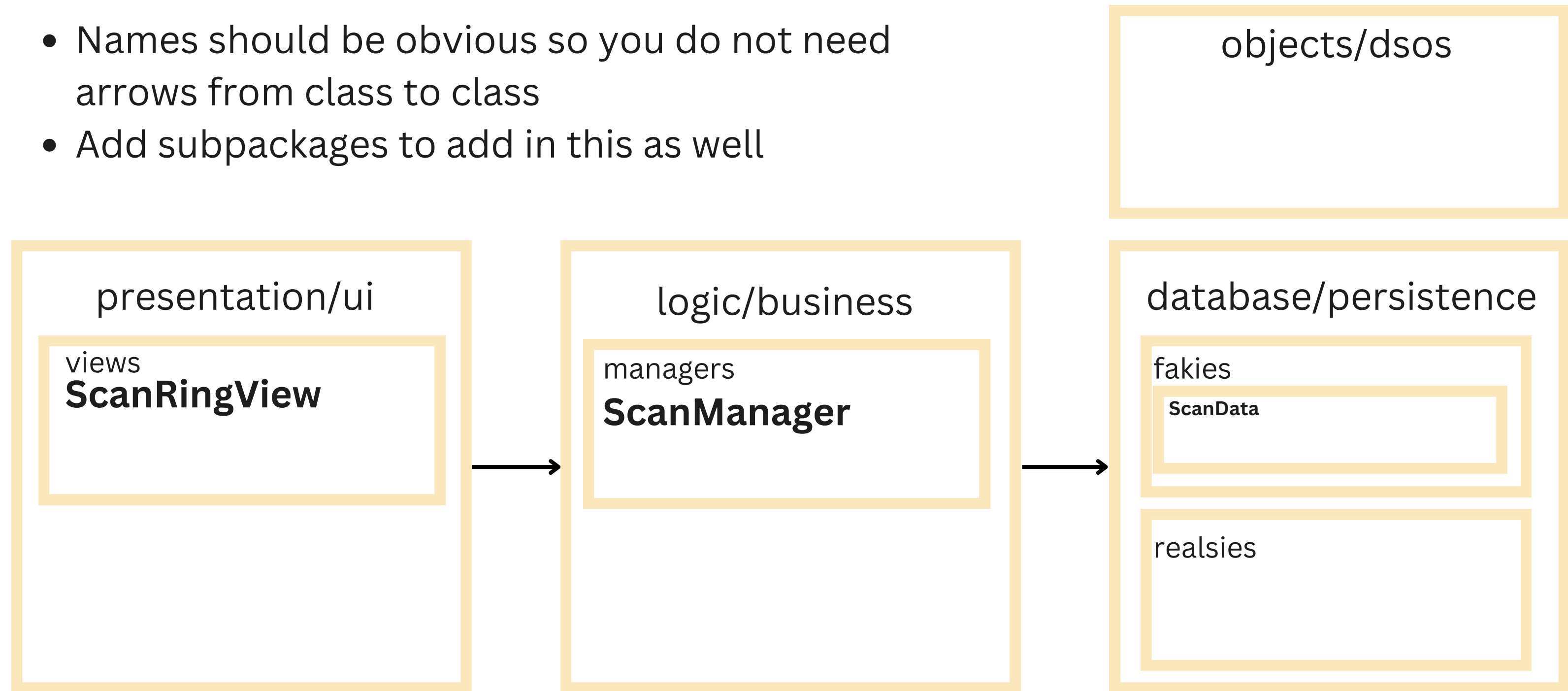
- Major Components
- Interactions (e.g., arrows)
- Optional: technologies (e.g., SQLite, JavaFX)





# DIAGRAMS SHOULD SHOW:

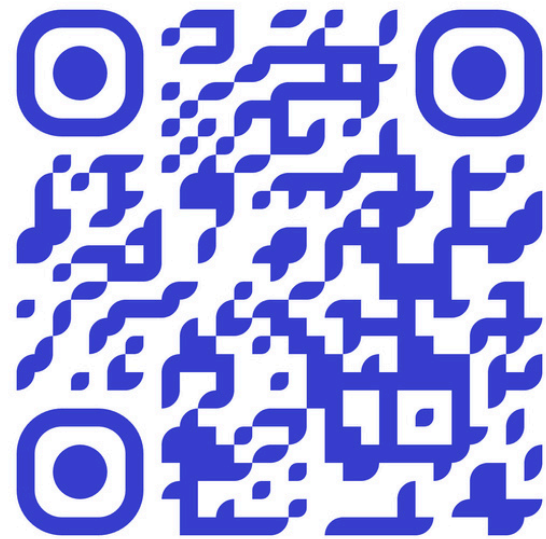
- Names should be obvious so you do not need arrows from class to class
- Add subpackages to add in this as well



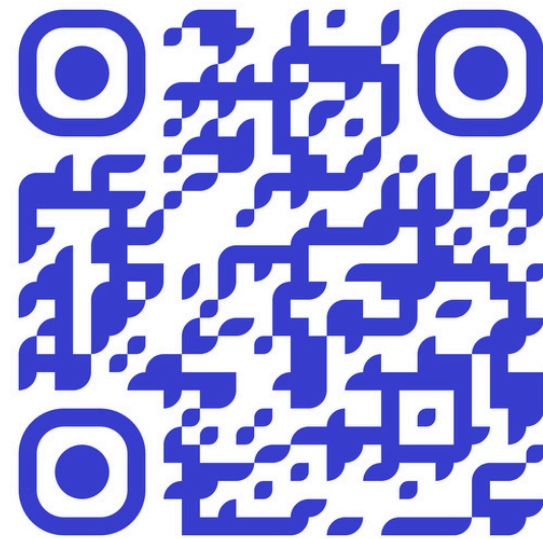
# SIMPLE TOOLS TO USE

*I don't care as long as it looks nice and I can read it*

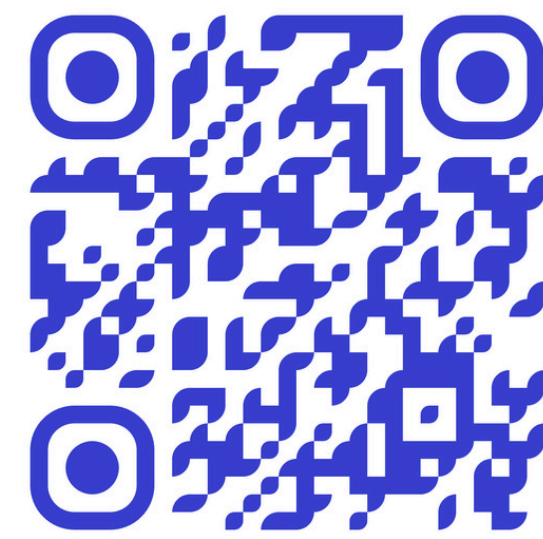
Draw.io



LucidChart

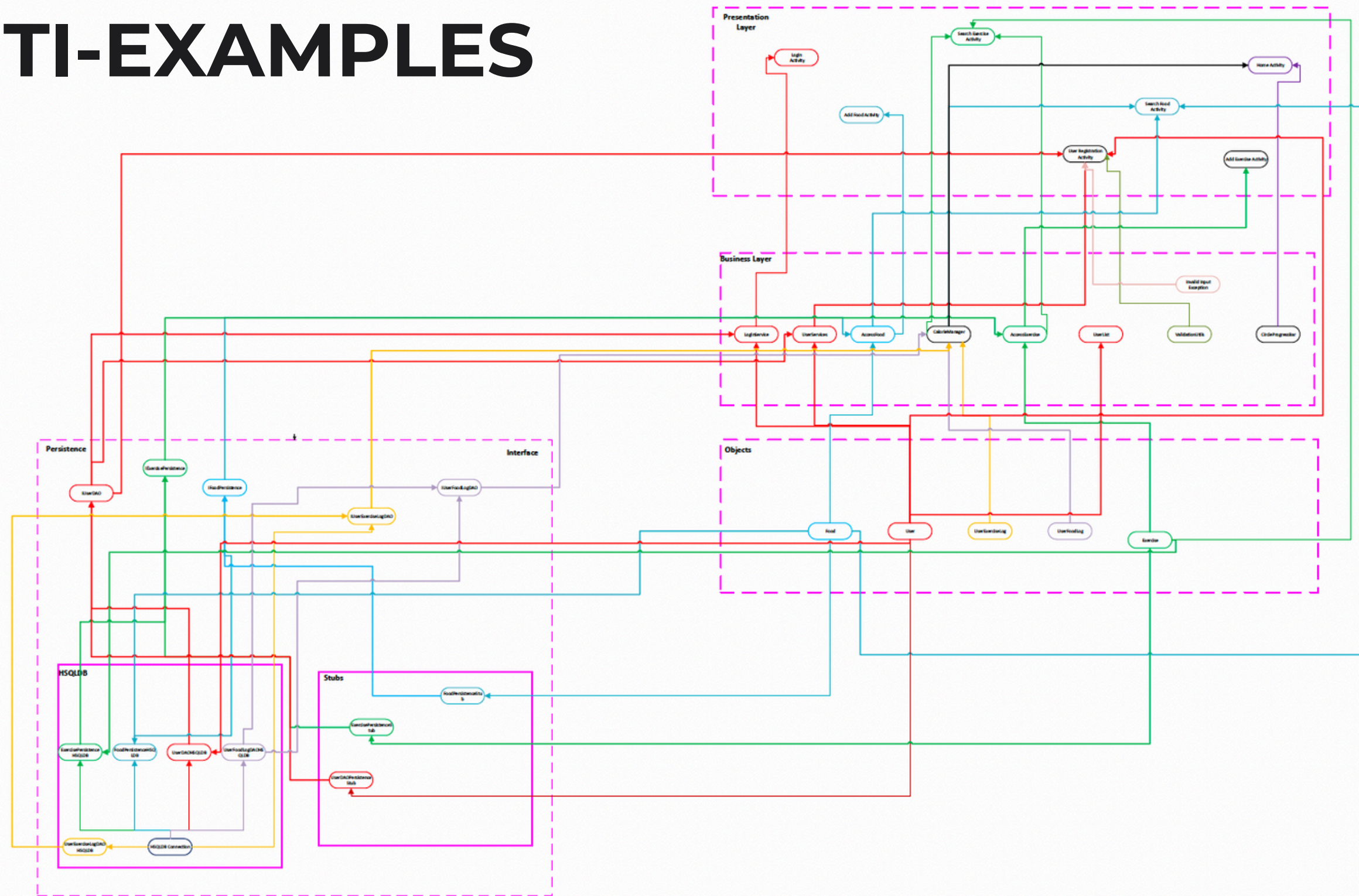


MermaidChart

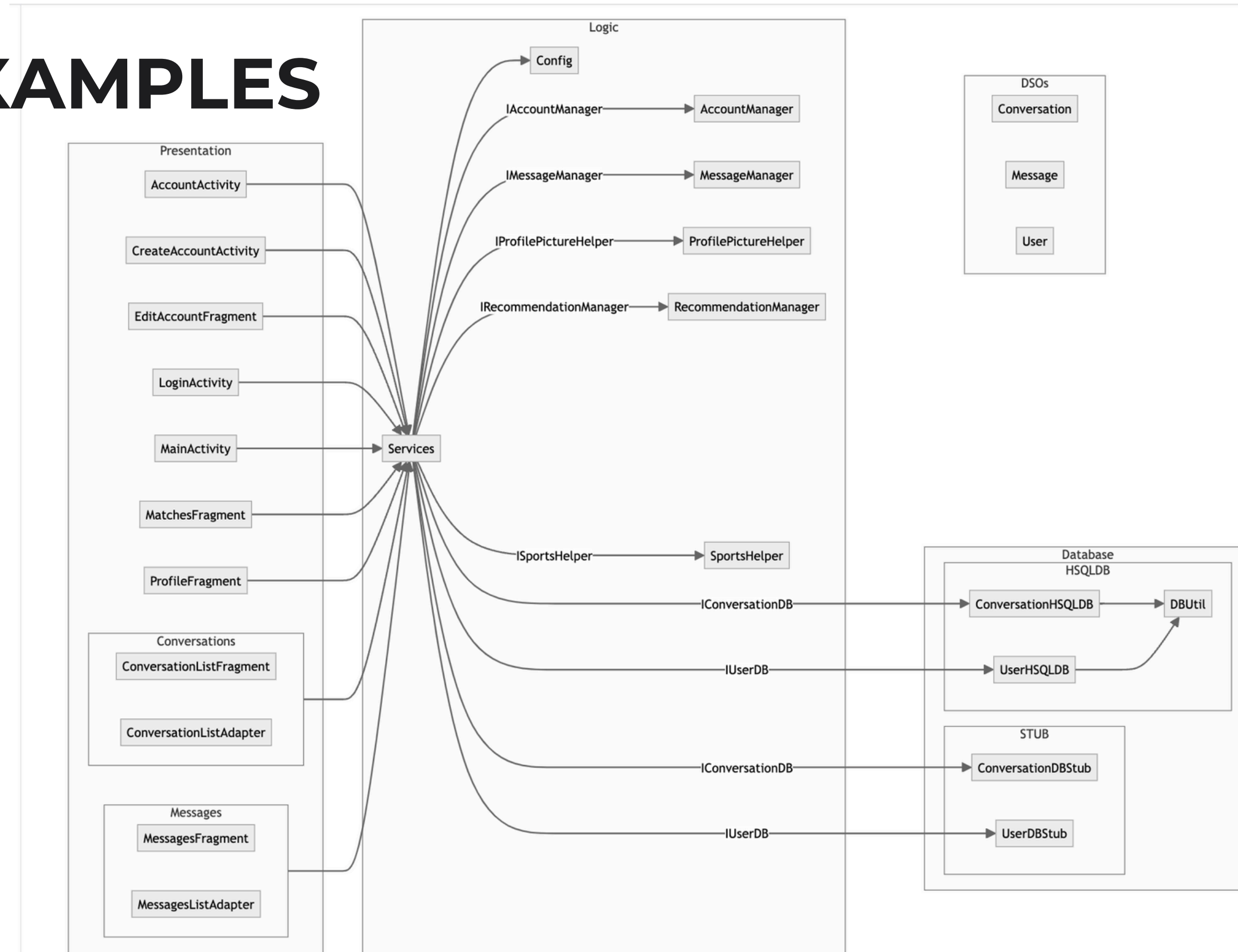




# ANTI-EXAMPLES



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# PAUSE & REFLECT

Consider your current group project and sketch your initial system diagram with 3–5 labeled boxes and arrows.

Bring it to class and compare with your teammates.

Are you all on the same page or do you have some things to talk about?