Introduction to Software Architecture

Get familiar with the basics of software architecture and design concepts

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Chapter 3

Customers End Users

Logical View → Development View

Developers Managers

Scenarios

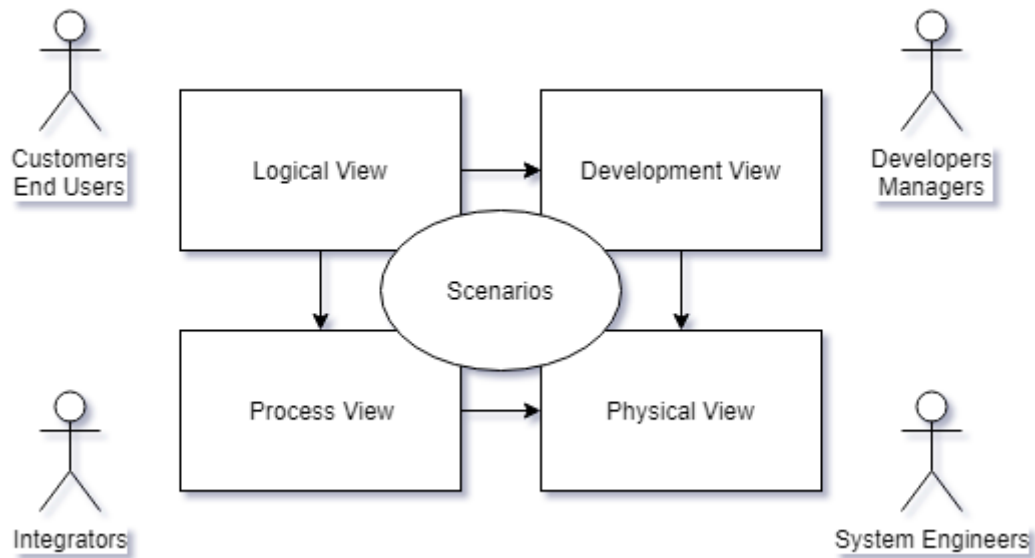Integrators

Process View → Physical View

System Engineers

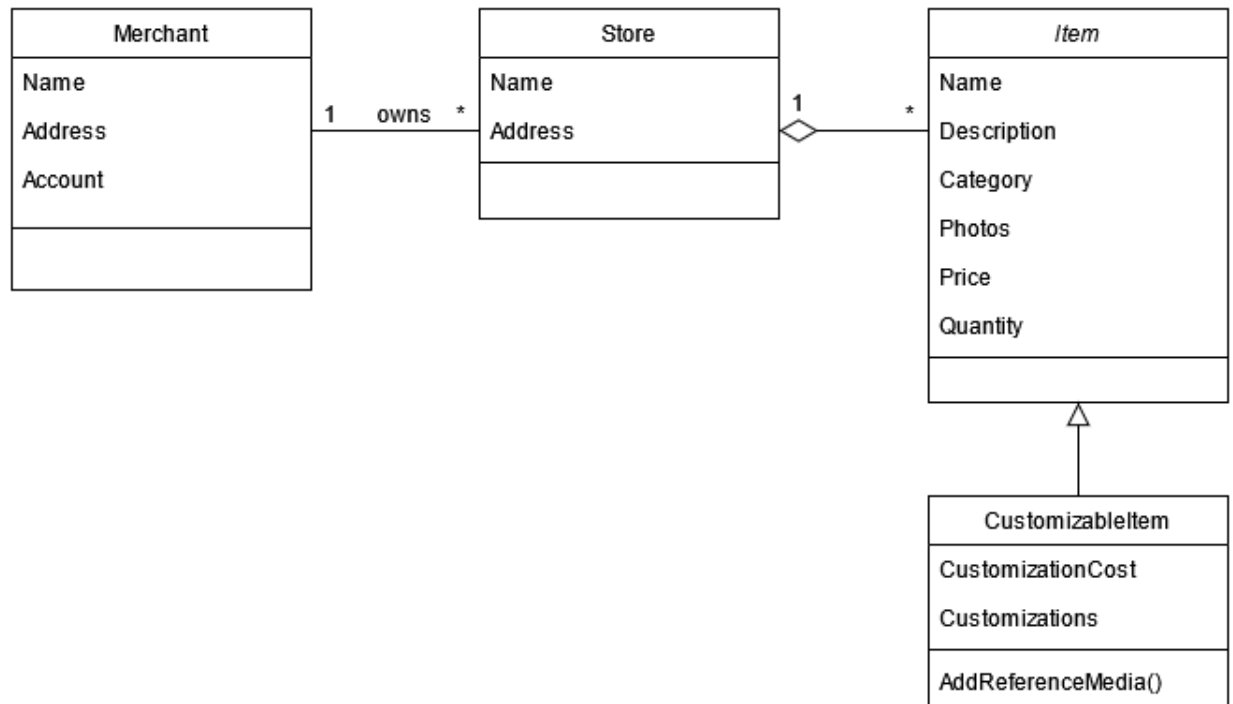**Figure 3.1 – An overview of the 4+1 model**

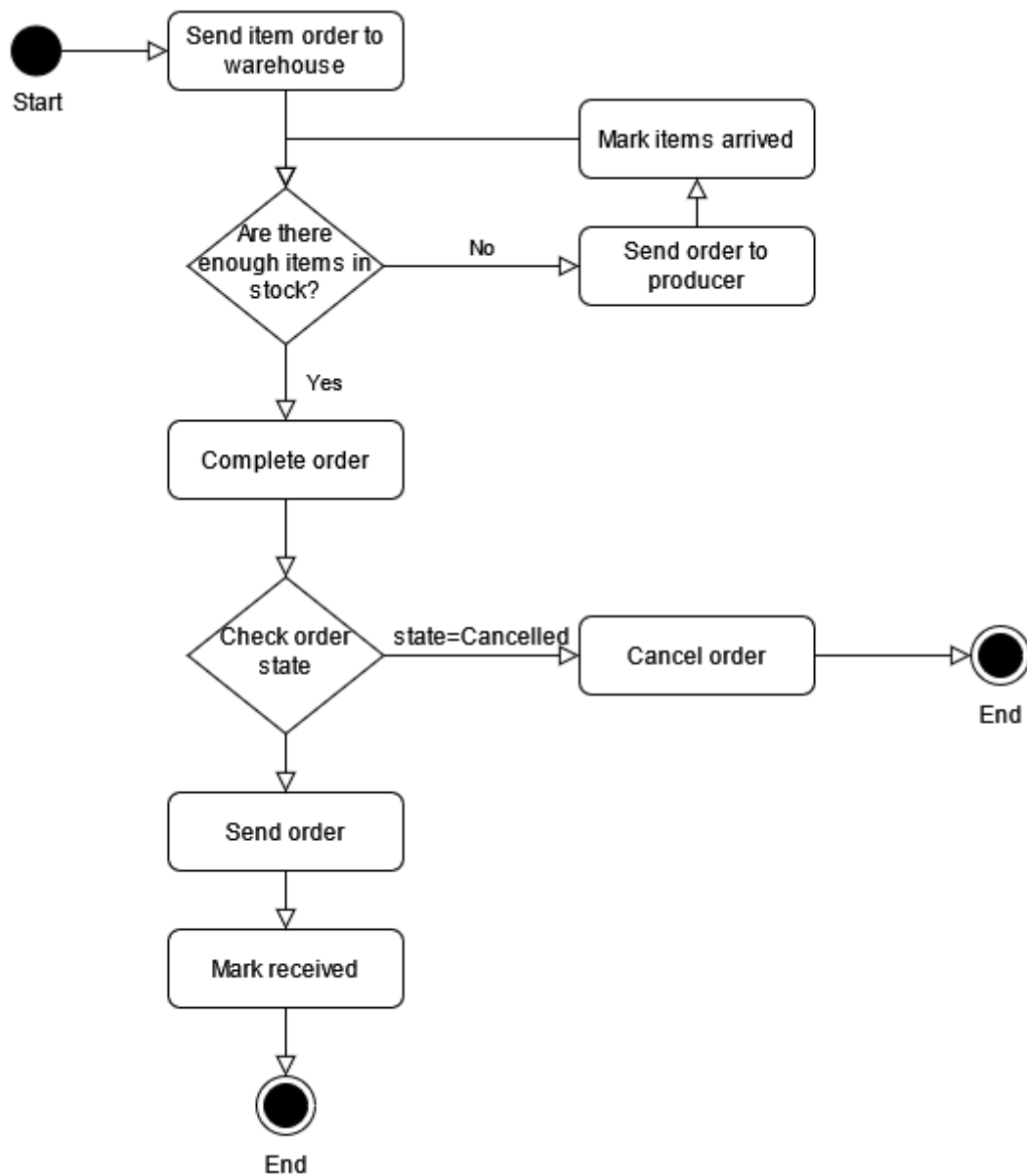**Figure 3.2 – Class diagrams can be used to show what types we plan to have, along with their relations**

Figure 3.3 – Activity diagrams are graphical representations of workflows and processes
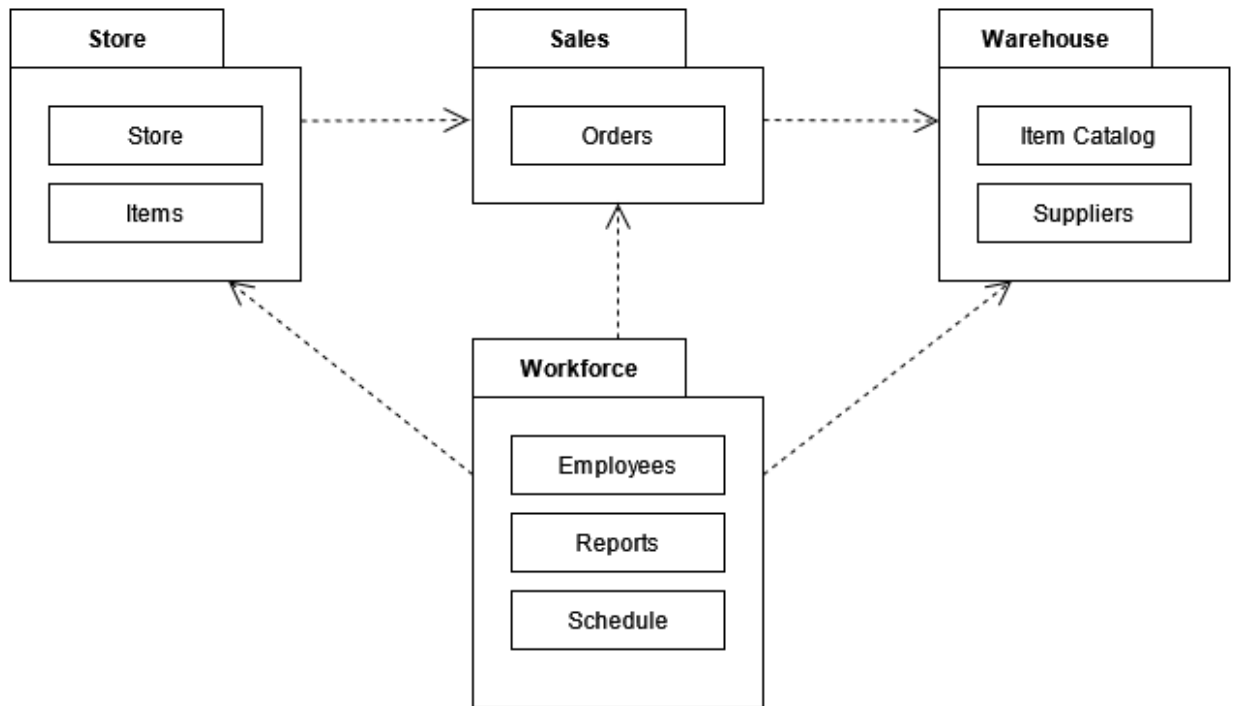
Figure 3.4 – Package diagrams can show the parts of a system from a higher perspective, as well as dependencies or relations between specific components
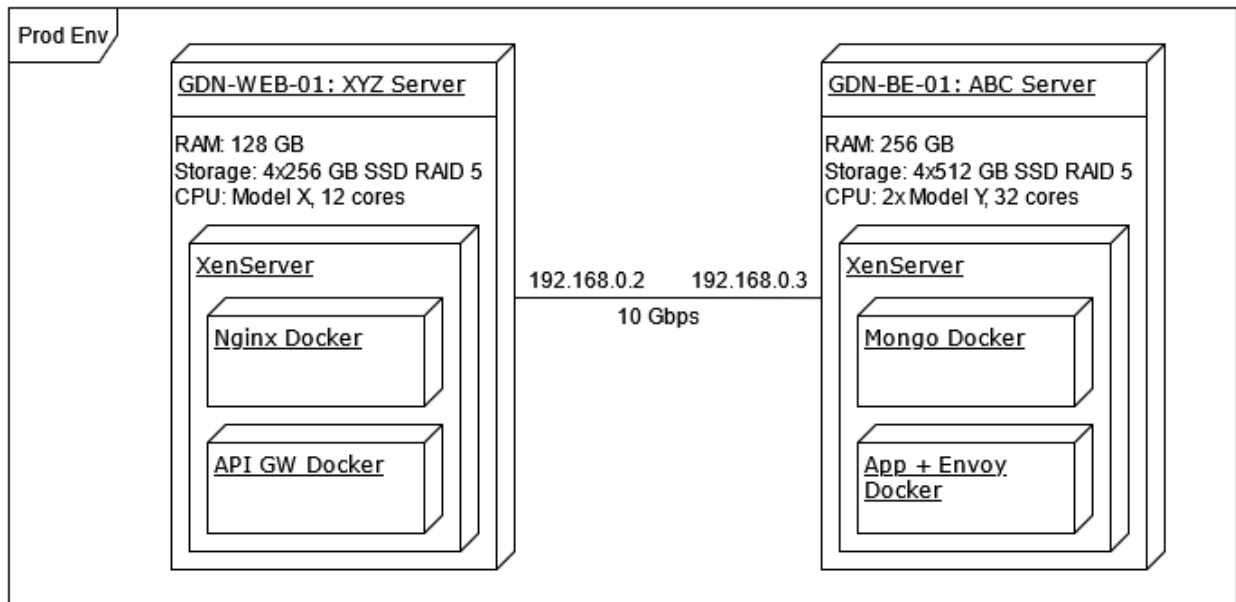

Figure 3.5 – Deployment diagrams demonstrate the hardware on which each software component will run. It can also be used to pass on information regarding the network
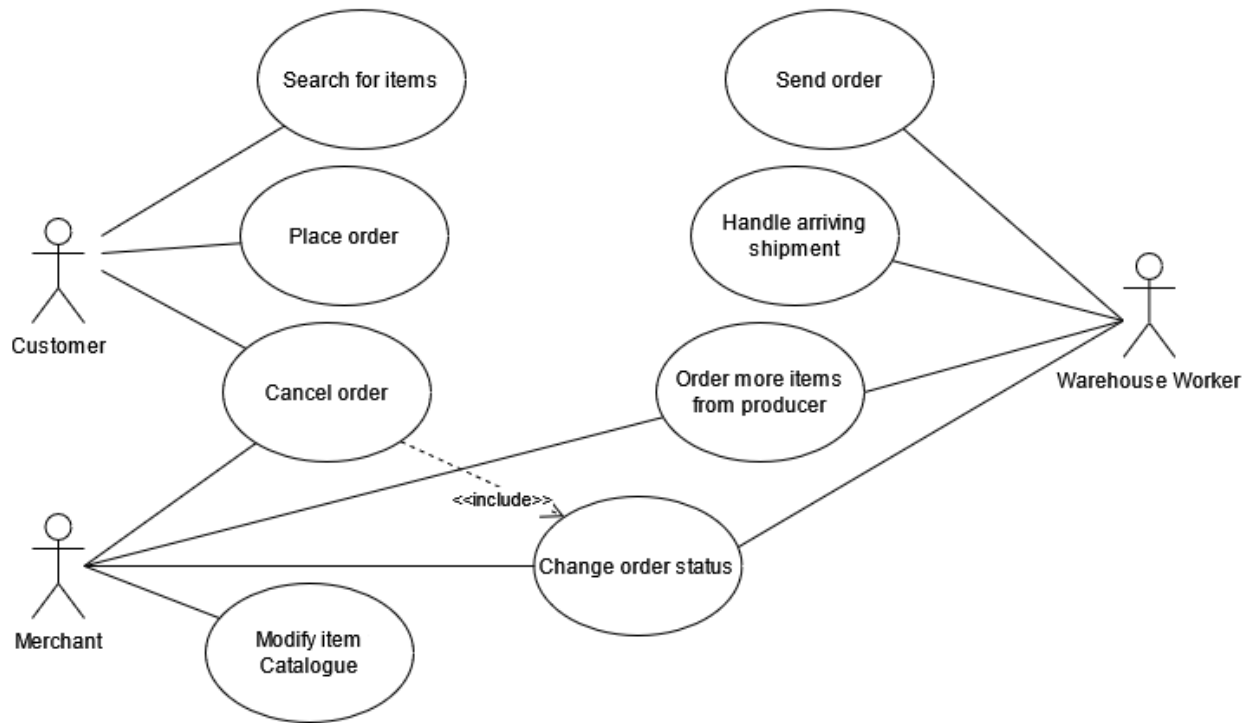
Figure 3.6 – Use case diagrams show how specific actors interact with the system and how the interactions relate to each other
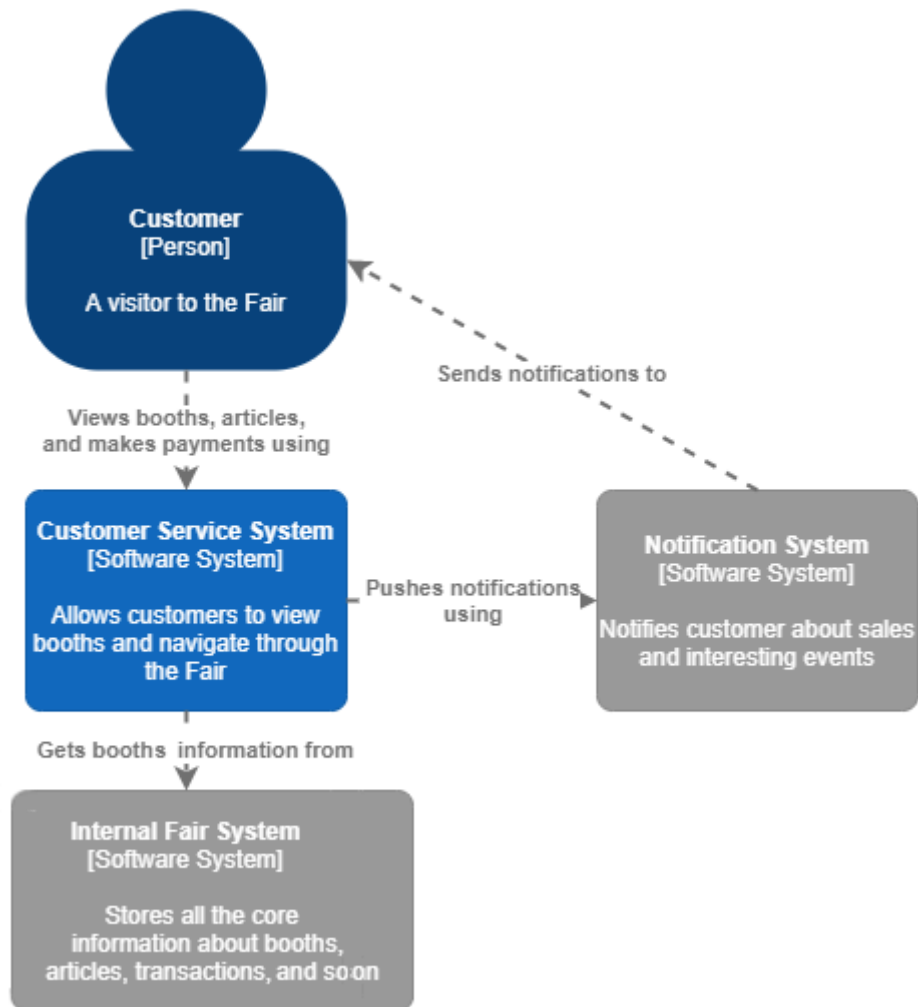
Customer
[Person]

A visitor to the Fair

Views booths, articles,
and makes payments using

Customer Service System
[Software System]

Allows customers to view
booths and navigate through
the Fair

Pushes notifications
using

Notification System
[Software System]

Notifies customer about sales
and interesting events

Sends notifications to

Gets booths information from

Internal Fair System
[Software System]

Stores all the core
information about booths,
articles, transactions, and so on
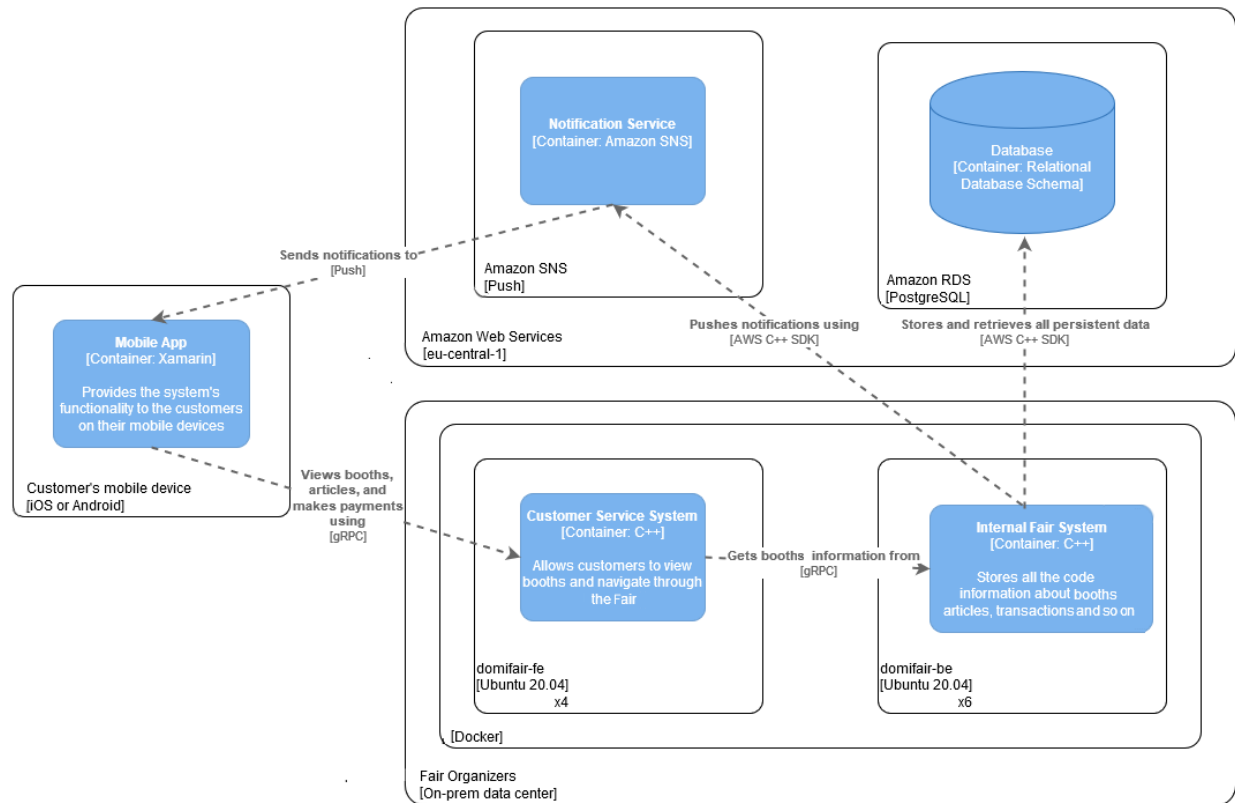
Figure 3.7 – A C4 context diagram
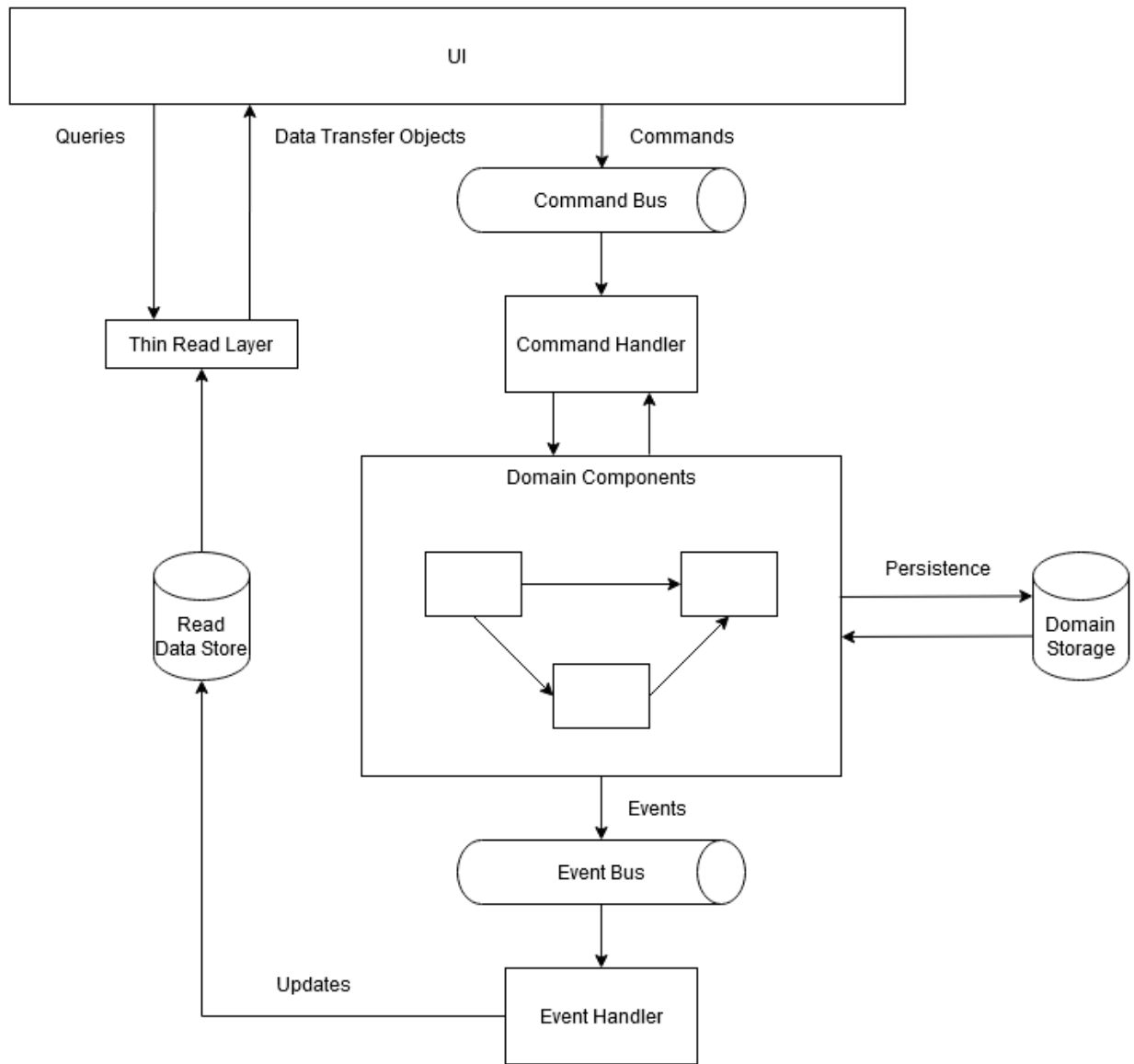
Figure 3.8 – A C4 deployment diagram

Chapter 4

Figure 4.1 – CQRS with event sourcing