

Iteration 3: Addressing Quality Attribute Scenario Driver

In this iteration, the aim is to address quality attribute driver QA-3

Step 2: Establish Iteration Goal by Selecting Drivers

For this iteration, the focus is on QA-3: Failure occurs in the system, a system restart will occur within 20 seconds of crash

Step 3: Choose One or More Elements of the System to Refine

For this step, we will refine:

- Application Server
- Database Server

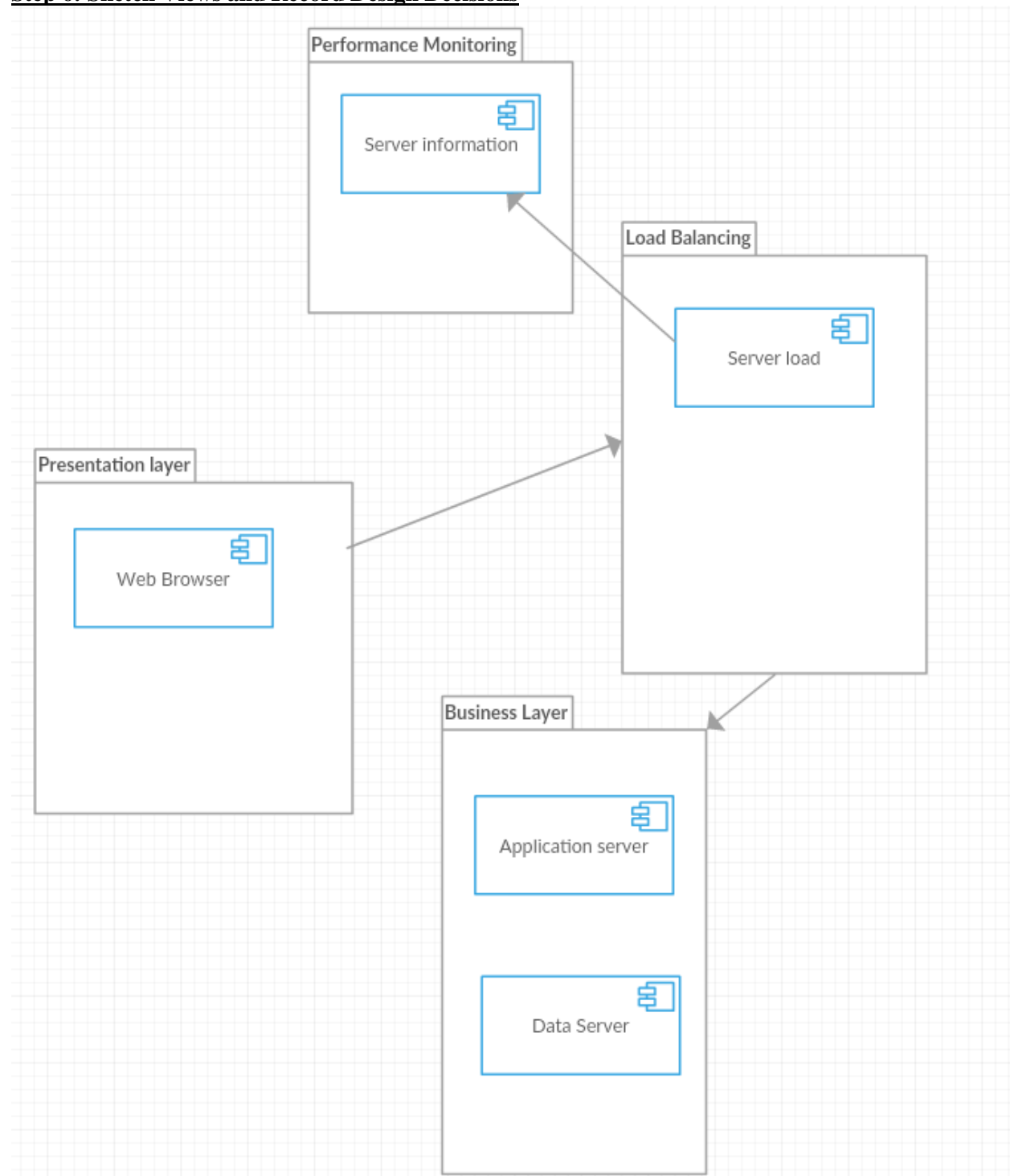
Step 4: Choose One or More Design Concepts That Satisfy the Selected Drivers

Design Decisions and Location	Rationale and Assumptions
Introduce the active redundancy tactic by replicating the application server and other critical components such as the database	When critical elements are replicated, the system can withstand the failure of one of the replicated elements.
Introduce performance monitoring	Introducing this will allow the server to manage its load and switch servers when the load is too high

Step 5: Instantiate architectural elements, Allocate Responsibilities, and Define Interfaces

Design Decisions and Location	Rationale
Active redundancy and load balancing in the application server	This tactic can be achieved through the use of the load-balanced cluster pattern.

Step 6: Sketch Views and Record Design Decisions



Step 7: Perform Analysis of Current Design and Review Iteration Goal and Achievement of Design Purpose

Not Addressed	Partially Addressed	Completely Addressed
	UL-1	
		UL-2
	UL-3	
	UL-4	
	UL-5	
		QA-6
	CRN-2	
		CRN-4
	QA-6	
	CON-7	