

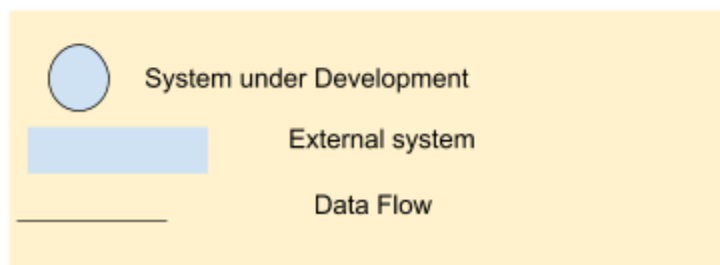
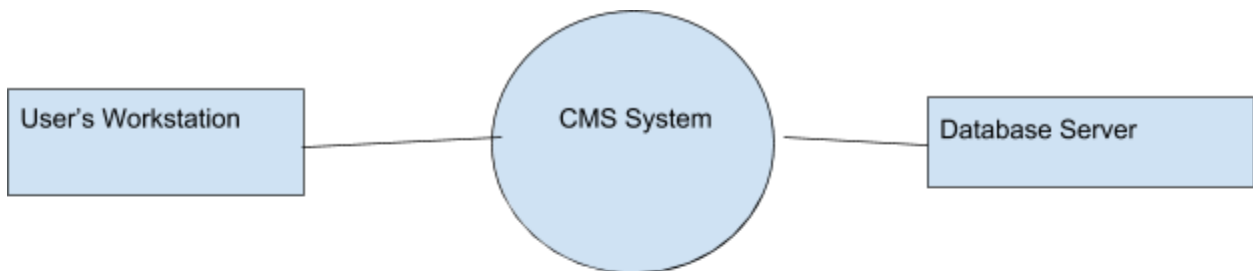
## Iteration 1: Establishing an Overall System Structure

This section presents the result of the activities that are performed in each of the steps of ADD in the first iteration of the design process.

### Step 2: Establish iteration Goal by Selecting Drivers

This is the first iteration, so the goal is to design A CMS system. The following drivers should be kept in mind:

Drivers	Inputs
QA-1	Performance
QA-2	Modifiability
QA-3	Availability
QA-5	Accessibility
All CON, CNR	



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

The systems that will need to be refined is the CMS system Shown in the diagram above.

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

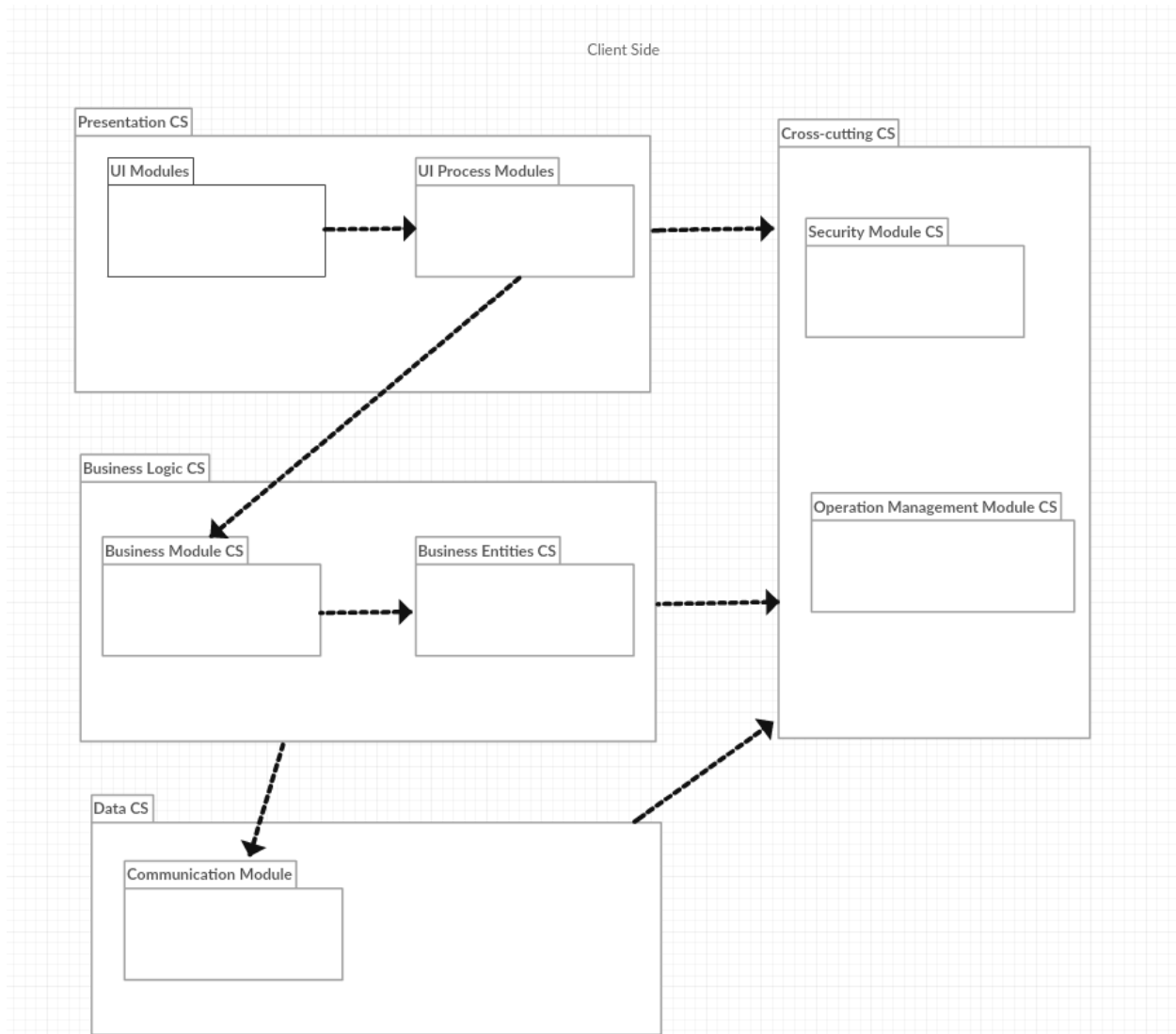
Design decisions and location	Rationale
Logically structure the client part of the system using a Web Application architecture.	This architecture is used in order to build rich user interface that will be operating inside a wide range of web browsers (CON-4). This will make it very easy for the customer to use(CON-2,QA-5).
Logically structure the server part of the system using the Service Application reference architecture	The service application exposes services that are used by other applications, and does not provide a user interface.
Physically structure the application using the three-tier-deployment pattern	The user are required to access the system from a web browser(CON-4). Therefore the three-tier-deployment pattern works well with the CMS system.
The user interface of the client application will be built using angular.js	Angular.js is create for our system since it provides a great simple single page framework that will hide all the back side part of the website(CON-1,2)

### Step 5: Instantiate Architectural Elements, Allocate Responsibilities, and Define Interfaces

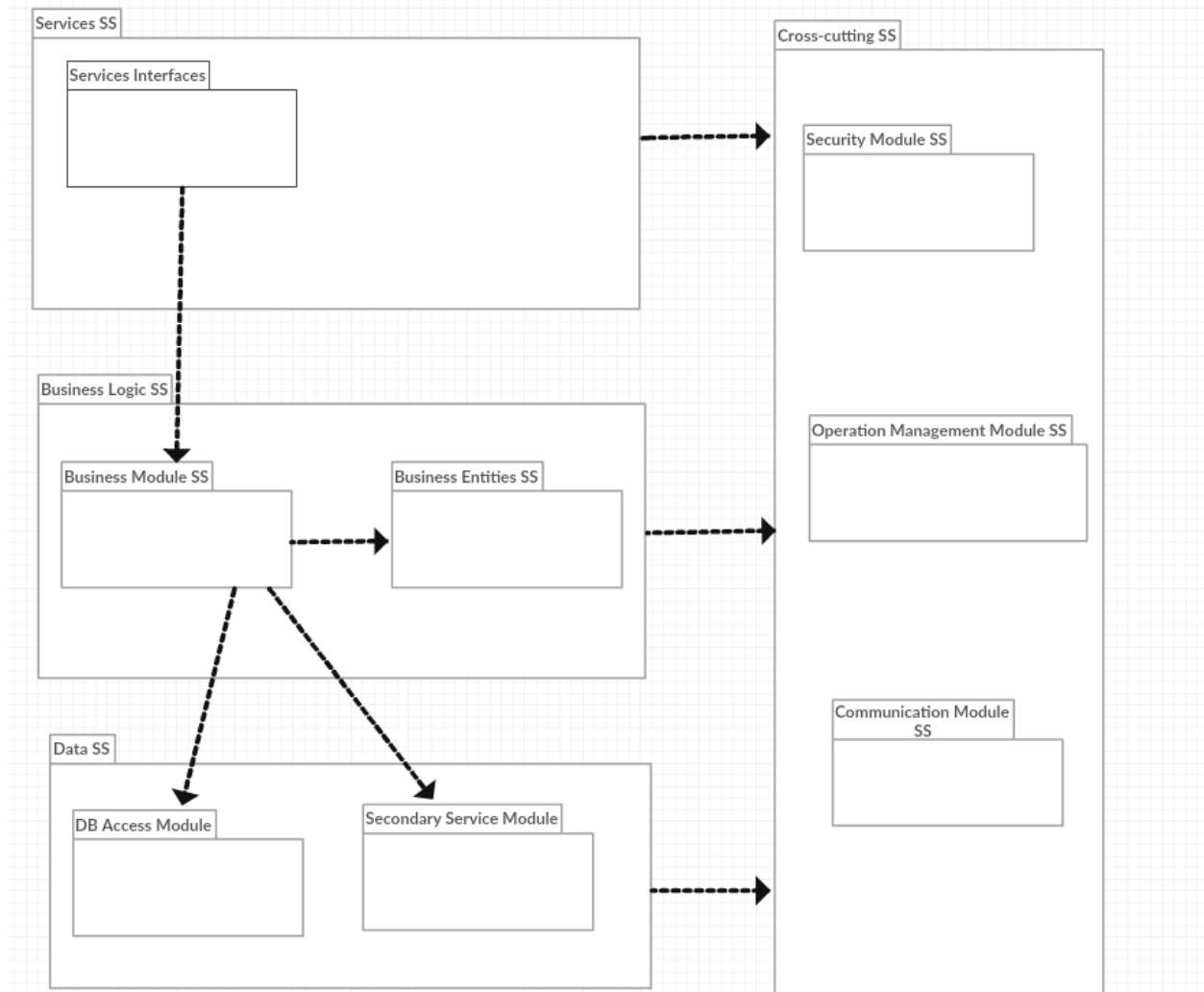
The design decisions considered are the following:

Design Decision and Location	Rational
Create tables with all the data types for the model in order to create the database.	The database will be started by filling in the tables with the data types we have.

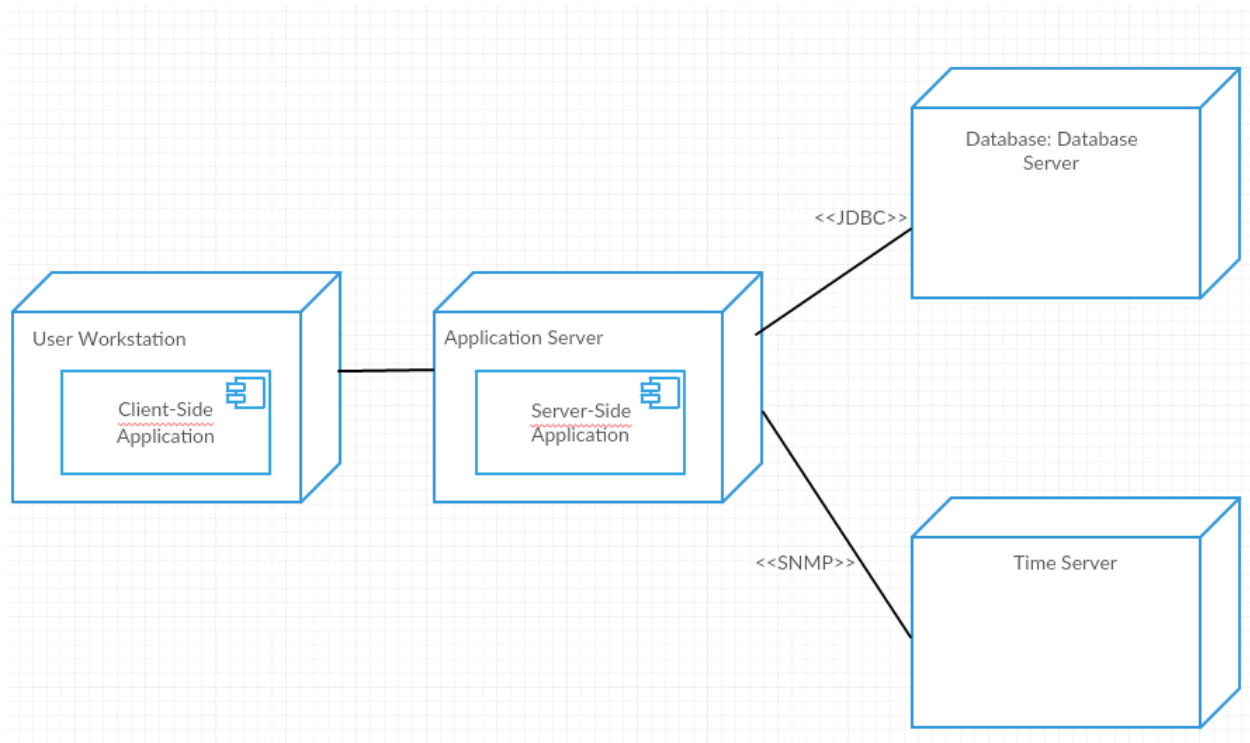
## Step 6: Sketch Views and Record Design Decisions



Server Side



<b>Element</b>	<b>Responsibility</b>
Presentation CS	Includes models that control UI and UI process
UI Module	Interact with user and receive inputs
UI Process Module	Responsible for flow control of all the system use cases.
Business Logic CS	Contains modules that perform business logic that can be executed on the client side
Business Module CS	Implement business operations that can be performed locally or expose business functionality from the server side
Business Entities CS	They make up the domain model
Data CS	Responsible for communication with the server
Cross-Cutting CS	Includes modules with functionality that goes across different layers.
Communication Modules CS	Consume the services provided by the application on the server side
Services Server Side SS	Contains modules that expose services that are consumed by the client
Business Logic SS	Contains modules that perform business logic that require processing on the server side
Data SS	Contains layers responsible for data persistence and for communication with the time servers
Cross-Cutting SS	Have functionality that goes across layers.
Services Interfaces SS	Expose services consumed by the client
Business Modules SS	Implement business operations
Business Entities SS	Make up the domain model
DB access module	Responsible for database persistence



Element	Responsibility
User Workstation	Users PC
Application server	Server that hosts the logic side of the application
Database server	Hosts the relational database
Time Server	Set of external time servers

**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	