

# ITERATION 2: Identifying Structures to Support Primary Functionality

## Step 2: Establish iteration Goal by Selecting Drivers

The goal of this iteration is to address the general architecture concern of identifying structures to support primary functionality.

In this second iteration, beside CRN-3(Equal workload distribution)

The architect considers the system's primary use cases:

- UL-2
- UL-5

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

The element that will refine in this iteration are the modules located in the different layers defined by the two reference architecture from the previous iteration.

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

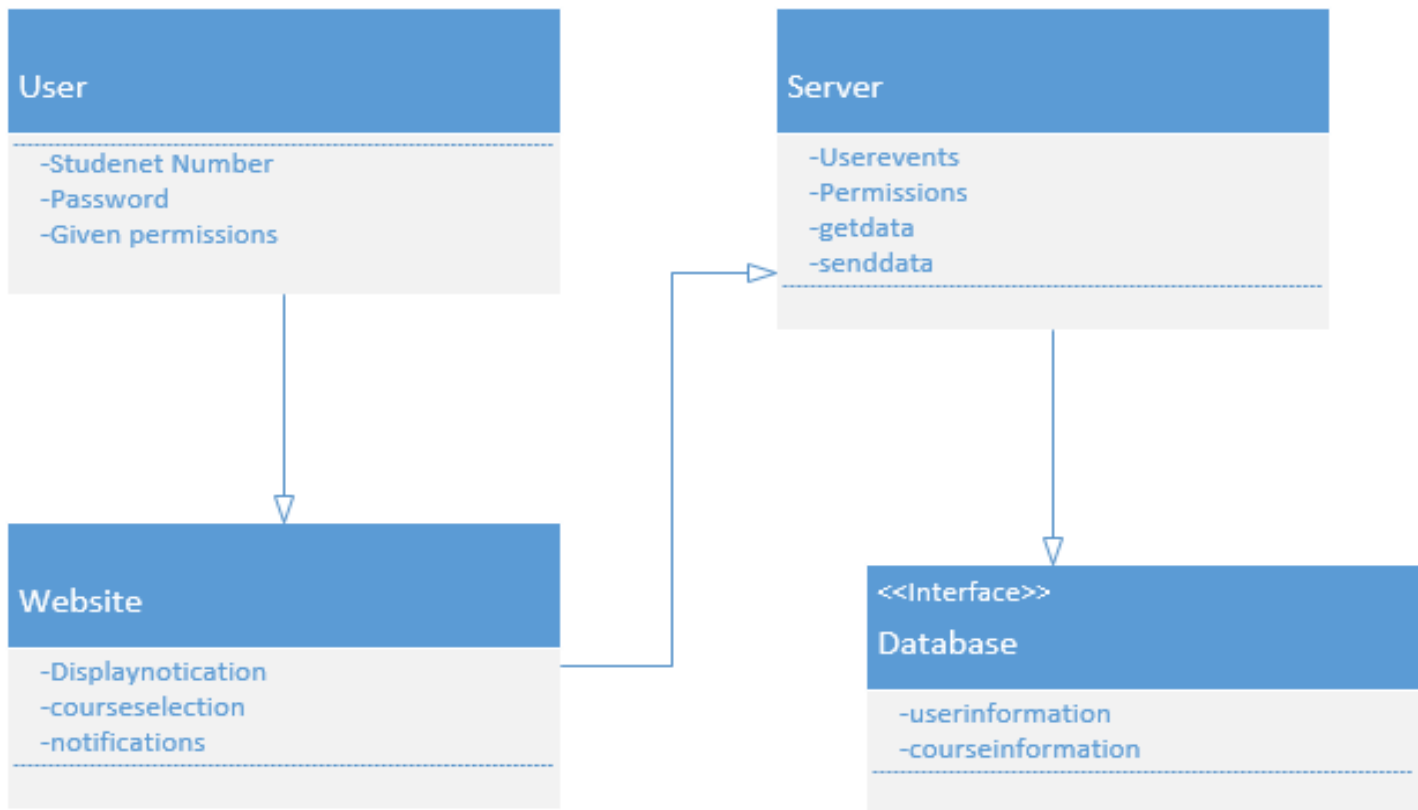
Design Decisions and Location	Rationale and Assumptions
Create a Domain Model for the application	Because CMS system the domain model is suitable to solve the problem related to the domain, which will save the development the trouble in the future
Identify Domain Objects that map to functional requirements	Each distinct functional element of the application needs to be encapsulated in a self-contained building block-a domain object.
Decompose Domain Object into general and specialized Components	<p>Domain objects complete sets of functionality, but this functionality is supported by finer-grained elements located within the layers.</p> <p>The components in this pattern are what we have referred to as modules.</p> <p>Specialization of modules is associated with the layers where they are located</p>

## Step 5: Instantiate Architectural Elements, Allocated Responsibilities, and Define Interface

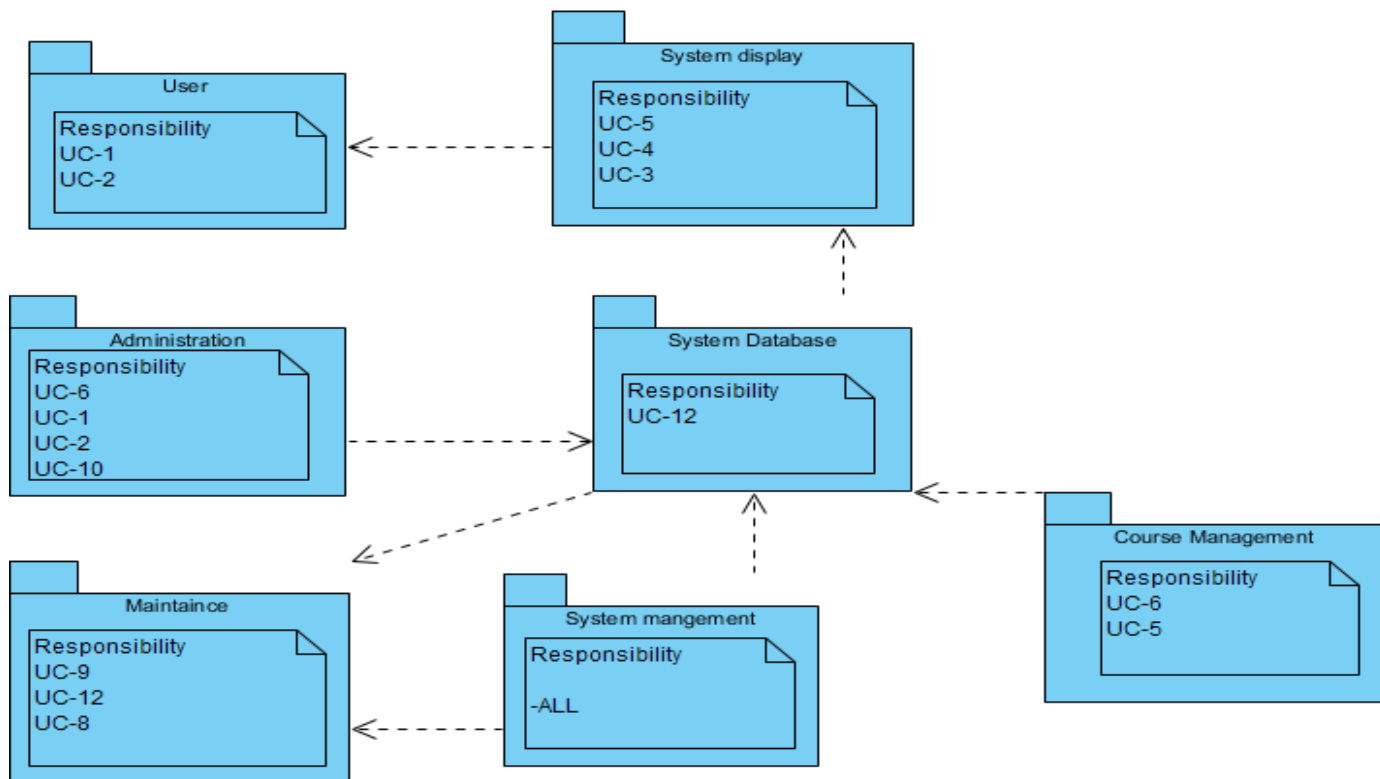
Design Decisions and Location	Rationale
Create only an initial domain model	The entities that participate in the primary use case need to be identified and modeled but only an initial domain model is created
Map the system use case to domain objects	An initial identification of the domain object can be made by analyzing the system's use cases.
Decompose objects into layered components	This technique ensures that modules that support all of the functionalities are identified.

## Step 6: Sketch Views and Record Design Decisions

This is the domain model for the use case

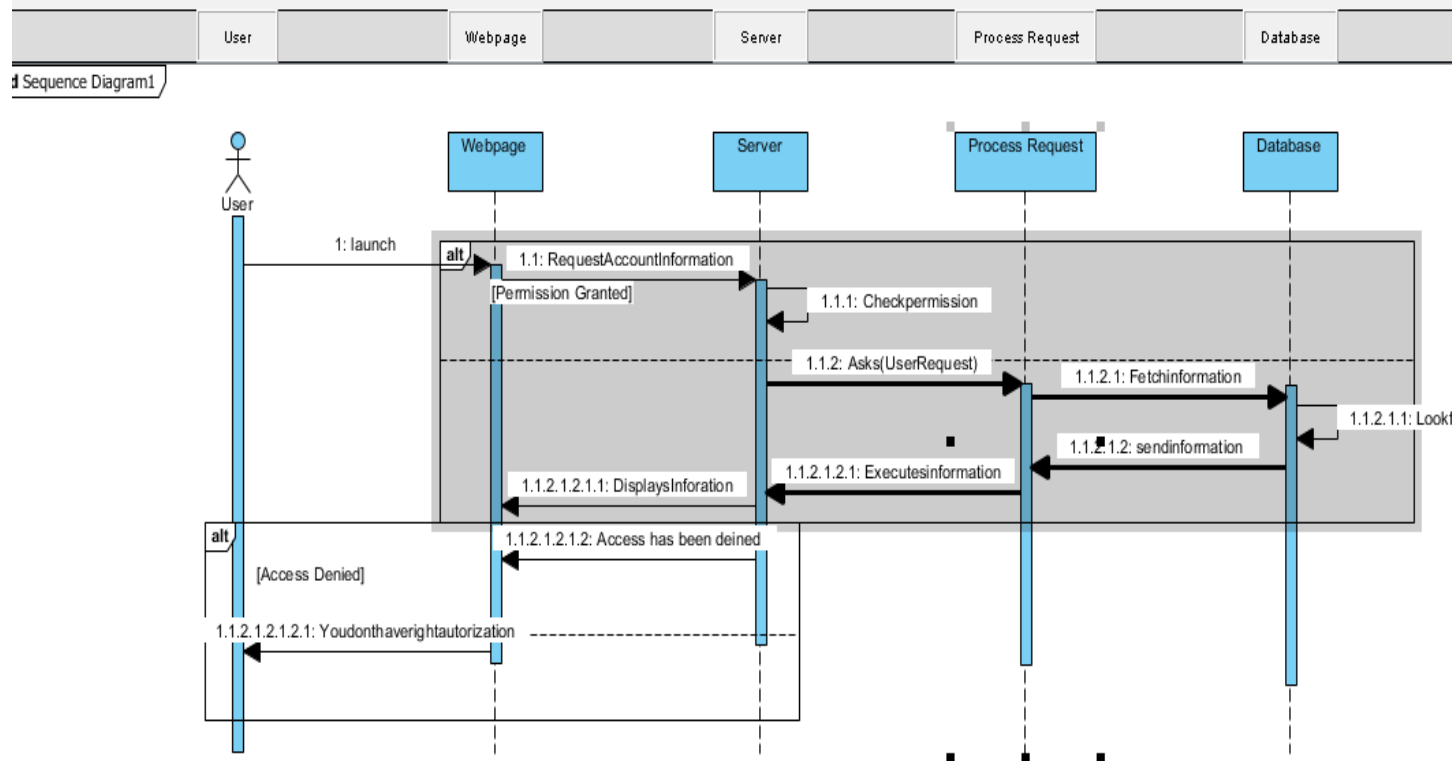


The domain object that are instantiated from the use case



## Use Case 2: Account management

This diagram is a sequence diagram that show how the system interacts with the user. This diagram will show the interaction between user when he requests to see account information and how the system will response. The user sends a request from the webpage which is sent to the server, the server will check if the user has the correct permission, if so then a request is made to the process request which send the info to the database. The database will search and retrieve the data that you have requested then forward it the the process request handler which send it to the server that displays the information to the user. But if the user does not have the correct permission then the server will send a message to the user telling him that he doesn't have to correct permission to access this information.



**Step 7: Perform analysis of current design and review iteration goal and achievement of design purpose**

Not Addressed	Partially Addressed	Completely Addressed	Design Decisions made during the Iteration
	UL-1		Used to support UL-2
		UL-2	Select for the sequence diagram
	UL-3		Used for description of diagram
	UL-4		Used in all diagram
	UL-5		Used in all diagrams
		QA-6	Relevant in all diagrams
	CRN-2		No relevant decision
		CRN-4	Used in the sequences to support-2
	QA-6		No relevant decision
	CON-7		No relevant decision