

COUSE MANAGEMENT SYSTEM

Iteration 2: Identifying Structures to Support Primary Functionality



<u>Iteration 2:</u> Identifying Structures to Support Primary Functionality

Step 2: Establish Iteration Goal by Selecting Drivers

For this iteration the main goal is to further define the architecture into more detail

The main drivers selected are:

UC-2

UC-3

UC-7

UC-10

UC-11

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

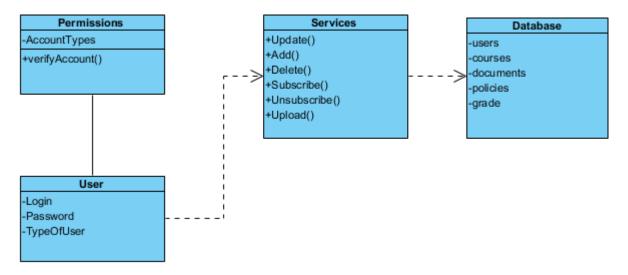
We are working on the modules in the different layers that were defined in the previous iteration. We will see how to structure them to support the primary functionality of the system.

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

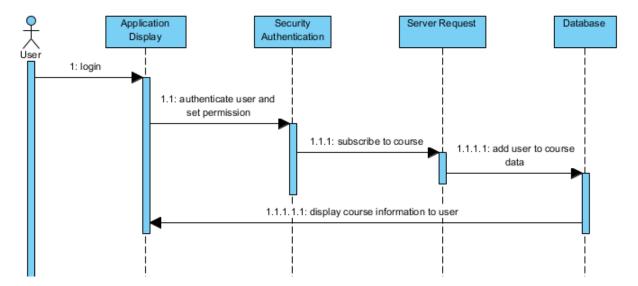
Design Decisions	Rationale	
Create a Domain Model for the application	To efficiently map out the relationships and connections between the entities in the domain, a domain model must be created.	
Identify the Domain Objects that will be mapped	The modules and components defined in the system must be used as domain objects to map out the relationships.	
Decompose the Domain Model Objects into general and specialized components	The domain objects will be further decomposed to better support the elements location within the layers.	

Step 6: Sketch Views and Record Design Decisions

The figure below shows the classes used for the selected use cases and their attributes and dependencies.



The sequence diagram below shows the flow for UC-2. This type of interaction can be expected for all the selected drivers of this iteration.



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

The following table summarizes the design process of this iteration using the Kanban board technique.

Not Addressed	Partially Addressed	Completely Addressed	Design Decisions Made During Iteration
		UC-2	
		UC-3	Domain Model created to explicitly outline
		UC-7	the interaction between client and server to
		UC-10	satisfy these requirements.
		UC-11	
QA-1			No particular decisions were made to address this requirement.
		QA-2	Data and application separation allow for changes to be made without affecting the rest of the system.
		QA-3	A permissions module was placed in the server side which will only allow users with authorization to access certain features/data.
QA-4			No particular decisions were made to address this requirement.
QA-7			No particular decisions were made to address this requirement.
		CON-1	A permissions module was placed in the server side which will only allow users with authorization to access certain features/data.
CON-2			No particular decisions were made to address this requirement.
CON-3			No particular decisions were made to address this requirement.
		CON-4	With data and application services separated, third-party applications can be integrated to work with the course management system.
		CON-5	A database server is being implemented and can have more storage added to it to increase storage capacity when needed.