

## Iteration 2: Support primary functionality

### *Step 2: Identify the elements that support the primary functionality*

Section will record the outcome of iteration 1 for the CMS following the ADD procedure. Whereas the goal is to identify the elements that support the primary functionality and the inputs for this iteration will be the primary use cases:

UC-2

UC-12

UC-1

UC-10

### *Step 3: Elements are the different layers, and have been chosen to decompose*

The primary functionality of the CMS is supported by the elements spreads through the layers of the system. In this case the elements to decompose are the different layers previously mentioned.

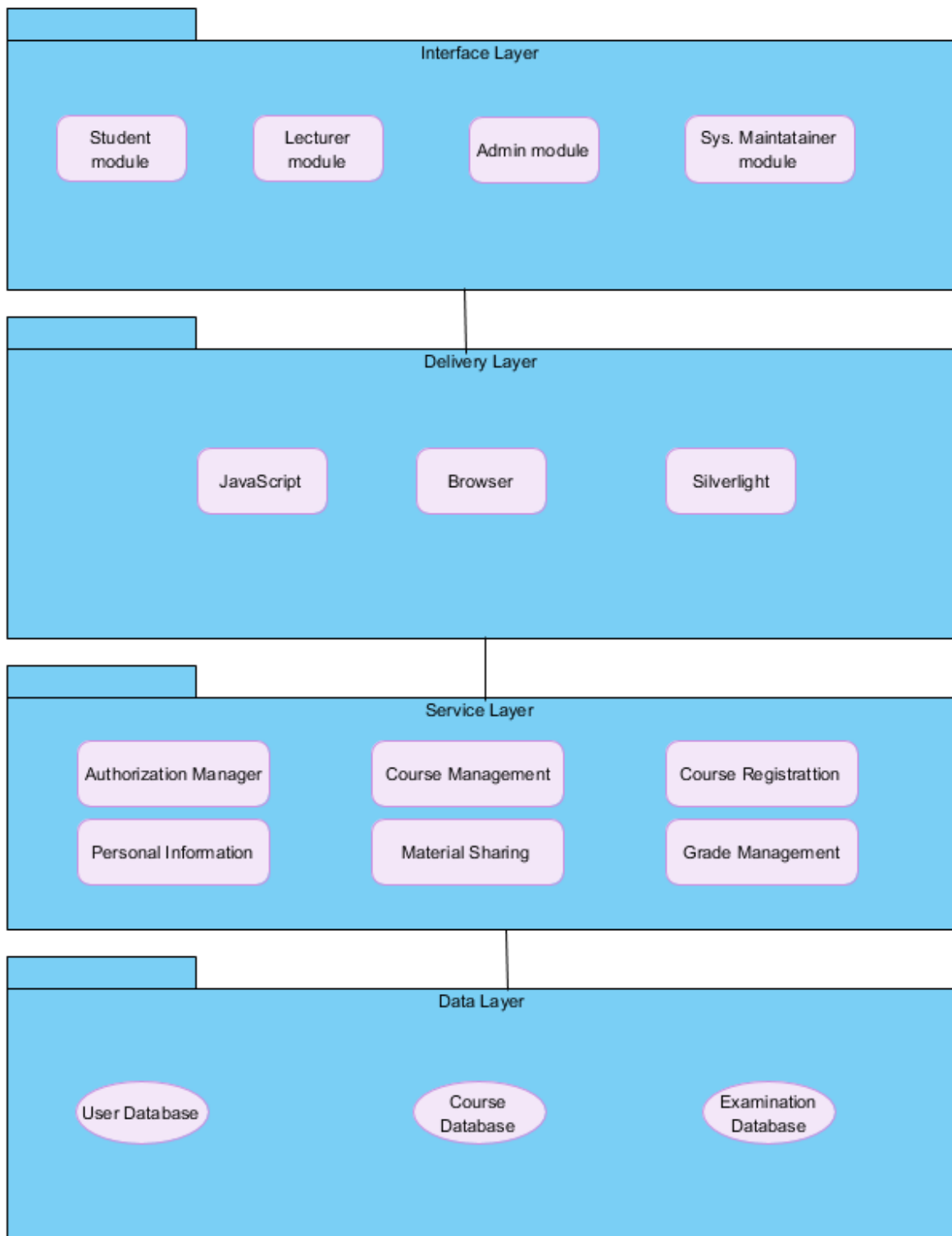
### *Step 4: Selection of design concepts*

Design Decision	Rationale
Use domain objects to decompose layers	Allows to allocate responsibilities to components
Use sequence diagram for data mapping.	Allows to follow each type of application object.
Use Swing Framework for UI	Developers are familiar with this framework

### *Step 5: Define elements, responsibilities, and, interfaces*

Elements	Responsibility	Properties	Interface
Student Module	UI login portal for students	Secure and user friendly	Interface Layer
Lecturer Module	UI login portal for Lecturers	Secure and user friendly	Interface Layer
Admin Module	UI login portal for Administration	Secure and user friendly	Interface Layer
Sys. Maintainer Module	UI login portal for System Maintainer	Secure and user friendly	Interface Layer

Authorization Manager	Will provide security and classify permissions	Secure and user friendly	Service Layer
Course Management	To view, delete or add course materials	Easily accessible	Service Layer
Course Registration	Ability to subscribe to course	Easy to navigate through the system	Service Layer
Personal Information	Add/Edit course history, grades, contact and personal information	Secure and easily accessible	Service Layer
Material Sharing	Support content upload and messaging	Time efficient consuming and easily accessible	Service Layer
Grade Management	Grade assignment, calculation of averages and etc.	Secure, time efficient and easily accessible	Service Layer
User Database	Store all student, lecturers information	Reliable and secure	Data Layer
Course Database	Store all course related material	Reliable and secure	Data Layer
Examination Database	Store exam schedule	Reliable, secure, time efficient and easily accessible	Data Layer



Existing modules, objects and layers in the CMS

## Sequence MVC diagram supporting UC-2: Manage Subscriptions

