Bookstore

Analysis and Design Document

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Revision History

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| **Date** | **Version** | **Description** | **Author** |
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# Project Specification

The bookstore application is meant to provide a digital representation and permanently store a bookstore’s information. The users of this application can be divided in two types:

* Employee
* Administrator

The employee can perform the following operations:

* Filter books by their properties
* Sell books

The administrator can perform the following operations:

* Create, update, delete, view employee information
* Create, update, delete, view book information

# Create a textual report on the books, which are out of stock

# Elaboration – Iteration 1.1

# Domain Model

*[Define the domain model and create the conceptual class diagrams]*

# Architectural Design

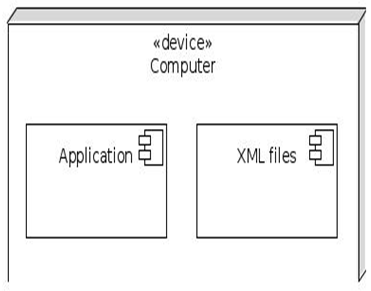
## Conceptual Architecture

## For this application the use of model-view-controller design pattern was encouraged.

## Package Design

*[Create a package diagram]*

## Component and Deployment Diagrams



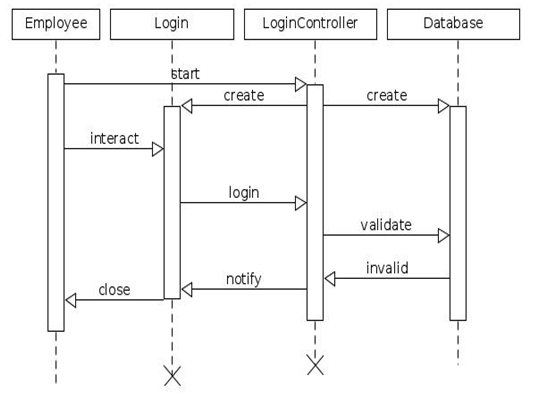
# Elaboration – Iteration 1.2

# Design Model

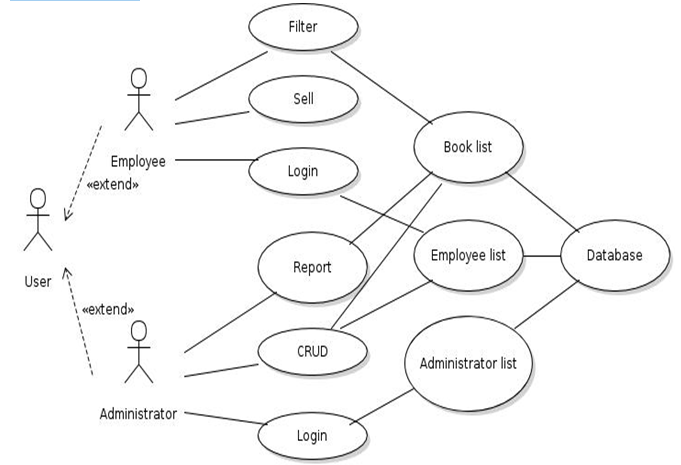
## Dynamic Behavior

*[Create the interaction diagrams (1 sequence, 1 communication diagrams) for 2 relevant scenarios]*

**UML Sequence Diagrams**

**

**Use-Case Model**

**

**Use case:** Create a new employee **Level:** user goal

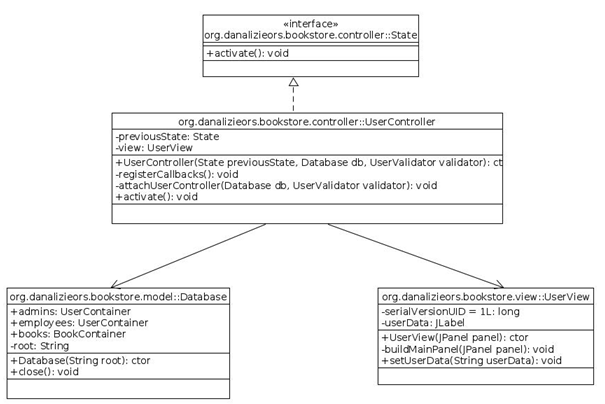
**Main success scenario:** the user logs in, if it has an admin account, the list with all employees appearsafter changing the tab from books to employees. The admin can create a new employee by clicking on the create button and specifying the employee’s data in the dialog window.

**Possible failure scenario:** the user may have an employee account, therefore it cannot view and editother employee’s information.

**Possible failure scenario:** the user uses a wrong password to log in.

## Class Design

*[Create the UML class diagram; apply GoF patterns and motivate your choice]*

**

# Data Model

*[Create the data model for the system.]*

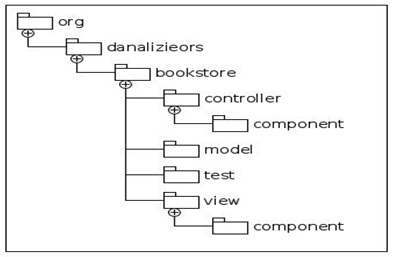
# Unit Testing

*[Present the used testing methods and the associated test case scenarios.]*

# Elaboration – Iteration 2

# Architectural Design Refinement

*[Refine the architectural design: conceptual architecture, package design (consider package design principles), component and deployment diagrams. Motivate the changes that have been made.]*

******

# Design Model Refinement

## *[Refine the UML class diagram by applying class design principles and GRASP; motivate your choices. Deliver the updated class diagrams.]*

# Construction and Transition

# System Testing

*[Describe how you applied integration testing and present the associated test case scenarios.]*

# Future improvements

*[Present future improvements for the system]*

# Bibliography