UTCN
Computer Science Department
Software Design 2017

ASSIGNMENT A1

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1. Objective

The objective of this assignment is to allow students to become familiar with architectural patterns.

2. Application Description

Use Swing/C# API to design and implement an application for the order managers of a furniture manufacturer. The application should have two types of users (a regular user represented by the order manager and an administrator user) which have to provide a username and a password in order to use the application.

The regular user can perform the following operations:

- Add/update/view order information (customer, shipping address, identification number, delivery date, status.).
- Create/update/delete/view product information (title, description, color, size, price, stock etc).
- Add products to order and update order value and stock accordingly.

The administrator user can perform the following operations:

- CRUD on employees' information.
- Generate reports for a particular period containing the activities performed by an employee.

3. Application Constraints

The data will be stored in a database. Use the Layers architectural pattern to organize your application. Use a domain logic pattern (transaction script or domain model) / a data source hybrid pattern (table module, active record) and a data source pure pattern (table data gateway, row data gateway, data mapper) most suitable for the application. The login will be performed in a secured manner.

4. Requirements

- Create the analysis and design document (see the template).
- Implement and test the application.

5. Deliverables

- Analysis and design document.
- Implementation source files.

6. References

Martin Fowler et. al, Patterns of Enterprise Application Architecture, Addison Wesley, 2003
http://java.sun.com/docs/books/tutorial/uiswing/
http://java.sun.com/j2se/1.4.2/docs/api/javax/swing/package-summary.html
http://www.exampledepot.com/egs/?
http://java.sun.com/docs/books/tutorial/jdbc/basics/index.html
http://msdn.microsoft.com/en-us/library/54xbah2z(VS.80).aspx
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