Posted: 28 Oct. 2019 Updated: 21 Nov. 2019

# SEN4406 ADVANCES IN WEB PROGRAMMING PROJECT ASSIGNMENT

#### 1. Project Definition

Develop a JSF based web application which supports CRUD (create, read, update, delete) functions for a topic of your choice.

Students are free to pick any suitable topic for project assignment as long as it meets the given requirements described in section 4.

## 2. Development Environment and Technology Stack

The following tools must be used while developing project:

- Eclipse IDE for Java EE
- JSF 2.2
- Apache Derby Database
- JDBC

## 3. Project Groups

Students should form project groups consisting of two students.

## 4. Requirements

The following modules must be implemented according to the selected project topic:

#### a. Database setup module

This module will be called for constructing the required database tables before running the following core modules (b, c and d).

# b. <u>Data input module</u>

This module gets a number of input values from the user. All user submitted data must be validated and saved in the database. The application must include at least two different Facelets pages for data entry.

# c. Data viewing (listing) module

The application should be able to list and view the values saved in the database.

## d. Data modification module

Users should be able to edit and delete all previously saved data. While editing existing values, validation must be applied before updating.

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The following requirements should also be met within the scope of the selected project topic:

- Multi-language support for all Facelets pages for at least two different languages.
  - Provide options to the user to change the language.
- AJAX support for partial page updates (at least in one Facelets page).
- Using page templating feature of JSF.
- Using custom validator methods for validating some (not all, only applicable) form fields.

### 5. Project Files

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Each group must prepare the following files for submission:

- <u>File 1</u>: Prepare a project report which includes the definition and scope of your project topic.
  The project report must also include the output (screen shots) of the project by brief
  descriptions of each module. *The responsibility of each group member must be clearly*stated. File format: PDF.
- <u>File 2</u>: Export your Eclipse project as a "zipped archive". File format: ZIP.