## CT5106 Software Engineering II

## Assignment 5 – JSF

In this assignment, you are asked to create a simple JSF application which mimics the behaviour demonstrated in the code example given in the last lecture.

The application for this assignment will work on a Todo list, and will utilise a MysQL table with the following structure:

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	ID 🤌	int(11)			No	None		AUTO_INCREMENT
2	CATEGORY	varchar(255)	latin1_swedish_ci		No	None		
3	DESCRIPTION	varchar(2550)	latin1_swedish_ci		Yes	NULL		
4	PRIORITY	int(11)			No	None		

Note that the primary key field must use AUTO\_INCREMENT, thereby allowing you to use the following JPA annotation in the entity bean class:

```
@Id
@Column(name = "ID")
@GeneratedValue(strategy = GenerationType.AUTO)
private Long id;
```

The index.xhtml page will use a backing bean to retrieve and display the list of Todo tasks as a table:

Create new Todo item						
Category	Description	Priority				
Maintenance	Wash car before going on holidays	1	Edit	Delete		
Domestic	Clean house before party	2	Edit	Delete		
Maintenance	Boiler not working - urgent	1	Edit	Delete		
Domestic	Do washing	2	Edit	Delete		
Hobbies	Book lesson	2	Edit	Delete		

You <u>must</u> use the PrimeFaces dataTable component, such as demonstrated here:

https://www.mastertheboss.com/web/primefaces/datatables-with-primefaces/

When you click on the link to create a new Todo item, a page will be displayed:

Create Todo Item"					
Category					
Family	]				
Description					
Buy Present	]				
Priority					
🔘 High  🔿 Medium	O Low				
Create					

You <u>must</u> use the PrimeFaces selectOneRadio component to input the todo priority, as demonstrated here:

## https://www.javatpoint.com/primefaces-selectoneradio

Clicking on the 'Create' button will result in a new Todo entity being created and persisted in the database via the Façade class.

A result of 'success' returned by the backing bean function to add the new entity will route the user back to the index.xhtml page:

Create new Todo item						
Category	Description	Priority				
Maintenance	Wash car before going on holidays	1	Edit	Delete		
Domestic	Clean house before party	2	Edit	Delete		
Maintenance	Boiler not working - urgent	1	Edit	Delete		
Domestic	Do washing	2	Edit	Delete		
Hobbies	Book lesson	2	Edit	Delete		
Family	Buy Present	1	Edit	Delete		

You must therefore make use of the 'faces-config.xml' file to define the relevant navigation rules as per the example in the book example given in the lecture.

Clicking on 'Edit' will bring the user to the edit.xhtml page where the user can edit the values already populated in the inputs (again including the radio select):

Update Book
Category
Maintenance
Description
Wash car before going on ho
Priority
🔵 High 🔿 Medium 🔿 Low
Update

You must be able to edit the Category, Description and Priority.

Clicking on 'Delete' will bring you to a page (e.g. delete.xhtml) where you will confirm that you want to delete the record. The backing bean will use the Façade class to implement the deletion. Success will route the user back to index.xhtml.

Delete Todo item					
Category					
Domestic					
Description					
Do washing					
Priority					
2					
Confirm Delete					

Create new Todo item						
Category	Description	Priority				
Maintenance	Wash car before going on holidays	2	Edit	Delete		
Domestic	Clean house before party	2	Edit	Delete		
Maintenance	Boiler not working - urgent	1	Edit	Delete		
Hobbies	Book lesson	2	Edit	Delete		
Family	Buy Present	1	Edit	Delete		

To submit your assignment:

- Perform a 'Clean' on the project
- Zip the project folder
- Submit the Zip file on Blackboard for the assignment