Final lab

Create a bug tracker application with 4-5 pages.

The application must be using the entity framework code first approach for the data access.

The gui must allow the manipulation of the database in a ergonomic manner.

**Description :**   
The bug tracker application will help developper to keep track of a bug they found. The application must allow the selection, insertion ,edition of a bug. The application should be separated in 4-5 pages which are the following : Selection, Bug, Person, Message, and optionnally, a new bug page.

**Bug :**  
This page should display all the field in a bug object in a readonly fashion.

There must be a edit button that will make the following field editable.  Name,Description,priority, severity, solved.

You will need a save button and a cancel button on that form.

The save button will confirm the changes, save onto the database and add a log for each of the changes.

The cancel button will revert the changes, no log ,no traces.

Both buttons will return the page to a readonly state with the correct values if reverted.

The messages should be displayed in a data grid view showing the id(in the list not in the table), the name, the creatorid and the creation date.

The page should have a new message button to open the message page which will be used to retrieve the message information.

Selecting a message in the datagrid view will open the message page displaying the message in a readonly fashion.

The logs should be displayed in a rich text box as strings. The string should contain a timestamp and the logText.

The Creator full name should be in a label or a button that once clicked, will open a person window to displays all the informations about that person.

You will need a « new bug » button onto the bug display form to either make the bug window

editable(harder) or open a new form that has all the field to create a new bug(easier). The button should only be enabled if the page is not being edited.

The same button should be found on the selection page.

**Selection :**

The application must have a selection  page to find all the bugs matching the criterias**. \*\***

The search page must have a button to execute the query and a data grid view to display the result of the query.

When a row is selected, a select button shoud become enabled, this will allow the user to open a bugDisplayPage with the selected bug.

**Person :**

This page should display all the field of a person. ( name, address, etc)

**Message :**

This page should allow to either display a bug message or to create a new one, depending on the context, this page could be readonly. The confirmation button text should change depending on the context also.

**New bug ( optional) :**

This page should have all the following fields : name, desc, creator, severity, priority .

The confirm button on this page should create a new entry in the database and save it.  
the application should then display this bug in the bug page.

**The Criterias required on the selection form**\*\* :

Bug id

From ,to creation date. ( the default value should 1 year range from today’s date)

From to last edit date. ( the default value should 1 year range from today’s date)

Creator (id first and last name displayed in combo box + option any)

Name(part of word)

Desc(contain word)

Priority

Severity

Solved or not ( include solved bugs in the query or not)

**The data structures:**

* 1. Person
  2. Bug
  3. Message
  4. Log
  5. Severity(reference table) / Priority(reference table)

**Person :**

Id,

FirstName,

LastName,

JobTitle,(can be null)

Salary,

YearsOfExperience,

HiredDate,

Address,

Email,(can be null)

DateOfBirth,

**Bug :**

Id

Name

Description (can be null)

CreatorID

Priorityid

Severityid

CreationDate

LastUpdateDate , (can be null)

solved

Messages

Logs

**Message :**

Id,

BugId,

Title,

Text,

CreationDate,

CreatorId,

**Logs :**

Id

bugId,

Text,

CreationDate

**Severity and Priority : (require 2 tables)**

Id,

Name,

Desc, (can be null)

**Evaluation**

|  |  |  |
| --- | --- | --- |
| **Layer** | **%** | **Description** |
| **DataAccess** | **30** | **15%** migrations have been used properly  **15%** the models contains all the required informations, relationship and constraints. |
| **Business** | **10** | the business layer is implemented |
| **GUI** | **60** | The Gui is displaying the correct info in the correct places and the all the functions are working as intended.  **20%** the selection page (data grid view, selection combo box, etc)  **20%** The bug display page  **10%** person display page  **10%** the new bug Page / the bugDisplayPage behaviour |