

Prince Mohammad Bin Fahd University

Project Guidelines

For

Principles of Software Engineering (GEIT 3351)

Fall-2017

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WebShare: A web based URL sharing system for PMU Students

WebShare is a web application that will be used by PMU students to help them share interesting URLs (relative to topics of interest) with their classmates.

In order to use the system, each student has to create an account and provide necessary information.

The student should be allowed to update his/her account (especially the list of courses he/she is taking) every semester.

A student having a Webshare account can log into the system to:

- 1- View the list of URLs relative to a given course and which are uploaded by his/her classmates
- 2- Filter URLs by topic, uploader, ...
- 3- Add a new URL to the list of URLs about a given topic related to a given course.
- 4- Delete a URL that he/she added.

Each uploaded URL will be shown in the list with the following details: the URL (i.e. the web link), who uploaded it, date and time of upload, related topic (e.g. scrum, recursion, etc.)

The system should automatically capture duplicate URLs. A student should not be able to add a duplicate URL.

- 1. The **scrum** method should be used with:
 - A minimum of 03 sprints (including sprint 0)
 - 5 to 8 students per development team
 - Agilefant (or a similar free scrum tool) must be used as a scrum tool

- A minimum of 2 to 3 scrum meetings during the first 10-15 minutes of each software engineering class
- Every student will play the different roles in the project (product owner, development team member, scrum master).

Project report: Screenshots from Agilefant (list of user stories, associated tasks, sprints, burndown charts, ...) should be included in the project report.

2. Requirements Engineering:

Requirements should be specified and managed through the **Requiew** application (or any similar free requirements management tool).

Project report: Screenshots from ReqView, the list of needs and the SRS should be included in the project report.

3. Design:

Design models should be prepared with the **StarUML** (or any similar free UML modeling tool).

Project report: At least one use case diagram, one class diagram and 03 sequence diagrams should be included in the project report.

4. Implementation:

Development should be based on any web programming language. ASP.NET with Visual Studio Community 2017 is preferred.

Any database management system could be used (Visual Studio Community 2017 has a built-in SQL server DBMS).

GitHub could be used as a source code management and development collaboration tool.

Project report: Screenshots of user interfaces, database, and source code should be added to the project report.

5. Testing:

Unit tests could be conducted via visual studio IDE. Any other web automated testing tool could be used as well.

Deliverables:

- 1. A well-structured project report including the above required parts (hard copy+soft copy)
- 2. Soft copy of the different files associated to the different used tools.
- 3. Soft copy of the WebShare project.
- 4. A short presentation of the work done.

Due date: Week of 17 December 2017.