# CSULB.edu – CECS 323 Term Project

## **Objectives**

- Perform fundamental relational database design
- Build a software system that uses JDBC and a relational database, and it allows multiple transactions happened
- Work in a group productively

## **Introduction:**

- Creating a software tool for a small company which uses SCRUM as its devenment methodology
- The company name is webuildsoftware.com, (fictitious company). This company was established in 2001 and currently has 14 employees.
- The company has been using SCRUM as a development methodology. But it does not find a software tool that it likes. So the management wants to built its own SCRUM software tool

## **Description:**

A development project or a product has a backlog; and a backlog has many user stories. Each user story has the format describe as follows

A team at Connextra developed the traditional user-story template in 2001:[4]

"As a <role>. I want <qoal/desire> so that <benefit>"

from http://en.wikipedia.org/wiki/User\_story

A project has a current Sprint and past Sprints. A project has one scrum team. A scrum team has several software engineers.

The current Sprint has a Sprint backlog, which has multiple user stories. During Sprint planning, Sprint team select user stories from Project Backlog to be completed in the coming Sprint. At the end of a Sprint a spring review meeting will be conducted. A software demo will be conducted by the team.

Sprint duration is about 2 to 4 weeks and is set before a Sprint is started. At the end of a Sprint, completed user stories are tested, documented and is ready-to-ship. So each Sprint team member will perform many roles.

About Project Backlog: Project Backlog is co-managed by Sprint team members and stakeholders. Stakeholders are people that have a stake in the success of the project: company owners,

managements, salespersons and so on. Users stories of Project Backlog can be deleted, or modified. Also a user story of backlog can be replaced by several smaller user stories.

About Sprint backlog: Sprint duration is fixed and cannot be extended. User stories that are incompleted at the end of the Sprint will go back to the Project Backlog. During the Sprint, a user story will be marked as

- Todo
- Build-and-document
- Testing
- Completed, (i.e. passed testing)

User story can not be added to Sprint backlog once a Sprint starts. This is a strict rule.

After a Sprint review, the team goes through a spring retrospective meeting which is a typical scrum retrospective activity. A new Sprint planning will be conducted before a new spring starts.

### Software features

Below is the must-have features of the system.

- CRUD operations for Stakeholders, and sprint team members
- CRUD operations user stories to project/product backlog
- Create Sprints
- Add user stories to sprint backlog.
- Features to operate user stories of backlog

Additional features are desirable, especially ones that make the software more usable. If an item is not specifically specified in this document, your group can base on software usability to design.

#### Size of the team

- Preferrable: 4 persons, and team can use pair-programming
- Team should discuss about risks and benefits of group projects so that every member are insync with each other: how does the team deal with weak-links, or conflict of schedule

#### Deadline:

- Form a team and upload your team member list to DropBox by 3/19. If you are not in a team, upload a page with name "lamnotinateam.docx. Then I can assign you in one.
- Project part 1 is due 4/7 in the lab demo in the lab
- Code screenshots of Second/Final part will be turned in at DropBox on Beachboard April 29<sup>th</sup> by 11:59pm
- Second/Final part of the project will be demonstrated in lab either on April 30<sup>th</sup> or May 5<sup>th</sup>