Fall 2022 CEG-4110-10 CEG-6110-10

Introduction to Software Engineering

Software Development Plan (Agile)

Project Title: Simple Library System

Project Synopsis: This simple library system is featured with capabilities to store book data in the MySQL database. The user interfaces in this project allow users to manipulate data including adding, deleting, modification.

Concept of Operation (CONOPS):

Store data & Retrieve data

Design

The Design:

<https://github.com/WSU-DGscheidle/team13_project_LibrarySystem/blob/main/doc/Software%20Design%20Flowchart%20Chart.png>

Project UML:

<https://github.com/WSU-DGscheidle/team13_project_LibrarySystem/blob/main/doc/Project%20UML.png>

Coverage

We will be using unit tests and demonstrations for determining code coverage.

Commits and pulls

Commits should specify what requirement it satisfies.

Pull requests need at least one reviewer.

Minutes:

Record of meetings conducted

<https://github.com/WSU-DGscheidle/team13_project_LibrarySystem/tree/main/doc/Meeting%20Minutes>

Schedule:

* Project start date: Sep 16.
* Define sprint durations: 2 weeks
* Project end date: Nov.25

Software Development Environment

* Hardware: Intel Core i5,16 GB RAM.
* Database environment: 100 M storage space. MySQL 5.7.
* Operating System: Windows 10
* Compiler/Linker Tools: Eclipse IDE for Enterprise Java and Web Developers - 2022-06

Configuration Management

* Install Eclipse Enterprise 2022-06
* Install Windows Builder Plugin
* Configure Project library JDK-18.0.2
* Incorporate "MySQL-connector-java-8.0.30.jar" to project

4. Target Environment

* Hardware: Same as the software development environment
* Operating System: Same as the software development environment

Development Methodology:

* Agile

Identify Roles:

* Product Owner: Caihong
* Team members: Skyler, Joshua
* Scrum Master: Caihong

Identify The Product Backlog

* Requirements of what is to be implemented
* <https://github.com/WSU-DGscheidle/team13_project_LibrarySystem/blob/main/doc/Requirments_Draft.pdf>

Identify Initial Sprint Backlog

* Identify what is to be implemented first, second, third, etc.
* <https://github.com/WSU-DGscheidle/team13_project_LibrarySystem/blob/main/doc/Sprint_Plan%20Oct%2013%20Revised.xlsx>

Sprint Execution:

Sprint Planning:

Inputs:

* Product backlog
* Sprint backlog
* Any required technical Information (interface definitions, etc.)

Team Activity:

* Product Owner – Updates product backlog to contain updated requirements.
* Scrum Master – Works with the team and product owner to define the new sprint backlog.
* Development Team – Provides feedback on task efforts and sprint backlog.
* All members define what “Done” is.

Outputs:

* Refined product backlog
* Updated sprint backlog

Daily Scrum:

Inputs:

* Sprint backlog:

<https://github.com/WSU-DGscheidle/team13_project_LibrarySystem/blob/main/doc/Sprint%20Backlog.xls>

Team Activity:

* Scrum master – polls the team as to the status
* Development Team – provides status on progress and other needs

Outputs:

* Updated sprint backlog
* Meeting minutes (Date, Time, Attendees, at a minimum

Sprint Review:

Inputs:

* Sprint backlog

Team Activity:

* Sprint Review
* Stakeholders updated with the latest status

Outputs:

* Delivered new software capability (Increment)