**Project Initiation and Planning**

**Initialisation of project**

**What is the problem domain?**

Create an application that can execute all these commands:

* Create/Add a **customer** to the system
* Read/View all **customers** in the system
* Update a **customer** in the system
* Delete a **customer** in the system.
* Add an **item** to the system
* View all **items** in the system
* Update an **item** in the system
* Delete an **item** in the system
* Create an **order** in the system.
* View all **orders** in the system.
* Delete an **order** in the system
* Add an **item** to an **order**.
* Calculate a cost for an **order**.
* Delete an **item** in an **order**

**Who is the client ?**

A major bookstore known as Book Galore!!!

**Will the development of a project solve that problem?**

Yes. The manager and specific employees of Book Galore will have a brand-new application that will allow them to manage their inventory much better

**What are the aims and goals of the project?**

Develop an application that will allow Book Galore to quickly and easily manipulate their inventory according to the features outlined in the problem domain above.

**Do we have the resources for this project?**

Yes we have the relevant resources:

* Me (Developer/Project Manager)
* Software tools (Trello, MySQL, Java, Junit, GitHub, SourceTree or Git)
* Google for extra information
* Documentation for how to use software tools
* Microsoft Word – Writing documentation for tools, project planning, risk assessment
* Microsoft Excel – Track progress of the project
* Microsoft PowerPoint – For presenting final application
* Artefact repository manager [ARM] (Nexus, Docker etc…)
* Continuous Integration Server tools [CI ] (Jenkins, Gitlab)

**BOSCARD**

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| --- | --- |
| **Background** | Book Galore, an SME, desire a new application to manage their ever-expanding inventory database which is currently on Excel |
| **Objectives** | Develop a functional application for Book Galore’s that allows them to manage and manipulate their current inventory database using CRUD ideology, as well as easily expand their database |
| **Scope** | The project should:   * Include a Kanban board with full expansion on user stories. Should also provide record of any issues/risks to project * Minimum 3 tables stored in a relational database software with relationship between tables modelled. Idea is to store data somewhere during project * Functional application programmed in Java following best practices * Unit and integration tests conducted to validate application. At least one round of testing must be executed * Integrate Java code into a version control system that will be built through a Continuous Integration (CI) server and deployed to an artefact repo manager |
| **Constraints** | Time is a constraint:   * Project deadline is 13th May 2020 * Presentation day 15th May 2020 * 14 days of work time available from 29/04/2020 * Spending 3-4 hrs on weekdays and 8hrs on weekends gives me 72 hrs of time available to complete project   Technology:   * Various technologies are new to me therefore I will take time to learn some |
| **Assumptions** | * Don’t know how long it will take me to learn enough Java, Junit, Git, SourceTree, ARM and CI to develop a fully functioning application * How much of my project time set out for the evenings will be consumed by other non-project activities |
| **Roles, Responsibilities, Reporting** | **Brian Maweu** is responsible for this whole project being completed and delivered to the client successfully |
| **Deliverables** | A fully functioning inventory management application that will work on a command line interface, allowing employees at Book Galore to easily apply CRUD methods to their inventory database |

**Business Case**

**Executive Summary:**

Several options were considered by Book Galore to update their Inventory Management System on Excel as data entry/editing was time consuming and errors were consistently cropping up as different employees edited the IMS.

The standout option was a fully functioning Java based application that utilised MySQL as a database for handling Book Galore’s inventory. Cuts managing IMS time by 50%

**Reasons:**

Book Glaore face several challenges with their current IMS that prevents them from scaling their inventory and book range:

1. Lots of time consumed during data entry and editing IMS on Excel
2. Errors in data entry like duplicates and incorrect information keeps occurring

**Business Options:**

1. Do nothing and continue to lose time updating IMS
2. Train all employees in using Excel, by signing them to bootcamp style 2 day Excel course
3. Implement a new software application that acts as an IMS which cuts update time by 50% and is easier to modify errors within the database

**Expected benefits:**

* Significant reduction in time spent updating the inventory database
* Easier tracking and analysis of stock required as well as quicker tracing of specific information about current and past stock
* Reduced errors when updating inventory database

**Timescale:**

* Project Time: 14 days

**Major risks:**

* Application not completed within given timeframe meaning deployment of app in Book Galore store won’t happen. Leads to further delays in Book Galore’s plans to expand inventory along with new IMS
* Brian Maweu not able to meet QA’s minimum requirements for checkpoint at week 4. Could affect further progression through the remainder of the course

**Execution of plan:**

* **Implement Agile methodologies e.g begin sprint**
* **Work in line with a business process. Outline your process**
* Should contain definitions of columns, tables, relationships and constraints. Makes clear how to use each element