



March 2022
Ver 2.0

HENRY BOOKS INVENTORY SYSTEM

ITEC 6420 DISTRIBUTED ENTERPRISE SOFTWARE DESIGN AND DEVELOPMENT

Software Requirements Specification

FINAL PROJECT: GANESH SARGAM

REVISION HISTORY

Date	Author(s)	Version	Change Reference
02/25/2023	Ganesh Sargam	1.0	Initial requirements
02/27/2023	Ganesh Sargam	1.1	Updated requirements
02/28/2023	Ganesh Sargam	1.2	Added Non functional requirements
03/01/2023	Ganesh Sargam	1.3	Added initial mockups
03/01/2023	Ganesh Sargam	1.6	Reviewed and updated
03/03/2023	Ganesh Sargam	1.7	Added additional mockups
03/05/2023	Ganesh Sargam	2.0	Final review done/ updated review comments

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I. INTRODUCTION

The following subsections of the Requirements Analysis Document (SRS) document provides an overview of the entire system.

1.1. PURPOSE

This document outlines the usage and implementation of the **Mobile Online Henry's Books Inventory System**.

1.2. SCOPE

Henry is the owner of a bookstore chain named Henry Books. Henry wants to manage book inventory of each chain using a mobile app. The system is mainly for the Henry and his chain (including all the branches) to maintain and view Book Inventory.

- Enable the branches to add branch information
- Allow to add book information and availability information by branch
- Should have option to view inventory report

1.3. OVERVIEW

The system will let Henry's chain to manage book's inventory using mobile android app and his chain including branches can add book and branch information to maintain inventory. This app also useful to view final report to view inventory of the books by branch.

1.4. NEED FOR THE SYSTEM

- The Android app will allow Henry's chain (branch) to track books and branch information using mobile android phone over the internet.
- It allows to add branch demographic information like Branch Name, Address, City, State, zip code and phone number
- Android app allows users to add book information like book author, title, description (if any), thumbnail URL and the price of the book
- App should allow to enter inventory book availability information like book and associated branch information along with Quantity of books
- Finally Android app should have a report view to see Inventory of the books availability by Branch

II. PROBLEM STATEMENT AND SCOPE

- a) The system should enable the branches to add branch information
- b) The system will allow to add book information and availability information by branch
- c) The system should have option to view inventory report

III. TIMELINES

- ✓ Design and requirement gathering will be done by Feb 28th 2023
- ✓ Design and Development between Feb 28th 2023 to March 02nd 2023
- ✓ Test design will start on March 01st 2023 and Testing targeted for March 03rd 2023
- ✓ Estimated to Launch in March 04th 2023

IV. ASSUMPTIONS AND DEPENDENCIES

- ✓ User must have android phone in order access this application
- ✓ Android phone should have access to the internet in order to access this application

VI. GLOSSARY

INTRODUCTION

This document is used to define terminology specific to the problem domain, explaining terms, which may be unfamiliar to the reader of the use-case descriptions or other project documents. Often, this document can be used as an informal data dictionary, capturing data definitions so that use-case descriptions and other project documents can focus on what the system must do with the information.

DEFINITIONS

The glossary contains the working definitions for the key concepts in the Course Registration System.

6.1 Book

A class offered by the Henry's Inventory System.

6.2 Branch

The system used for maintain Henry's Book Inventory System.

6.3 Inventory

A person responsible to admin activities at the Henry's Branches.

6.4 Inventory Report View

A branch or any user who has access can view Book Inventory Report by Branch

6.5 Admin

A admin can delete, modify master data like branch delete, edit based on access roles(full security features will be develop in the upcoming future releases)

VII. SUPPLEMENTARY SPECIFICATION

Objectives

The purpose of this document is to define requirements of the Henry Books Inventory System. This document lists the requirements that are not readily captured in the use cases of the use-case model. The Supplementary Specifications and the use-case model together capture a complete set of requirements on the system.

7.1 REFERENCES

None.

7.2 INTENDED AUDIENCE AND INTENDED USE

Branch users to maintain book inventory

7.3 FUNCTIONALITY

Multiple branches can add and access books inventory details. And also branches will have access to add new book and branch information based on access roles.

7.4 USABILITY

The App user-interface shall be Android Mobile application compliant.

7.5 RELIABILITY

The system shall be available 24 hours a day 7 days a week, with no more than 10% down time.

7.6 PERFORMANCE

The system shall support up to 2000 simultaneous users against the central database at any given time, and up to 500 simultaneous users against the local servers at any one time. The system shall provide access to the legacy course catalog database with no more than a 10 second latency.

7.7 SUPPORTABILITY

None.

7.8 SECURITY

- The system must prevent Branch users from changing any branch information other than their own. Only the Admin can add or edit branch information but role-based security will be added in the future release. Currently delete branch functionality will be disabled
- Build secured firewall rule to allow communications between the servers

7.9 DESIGN CONSTRAINTS

The system shall integrate current existing Henry systems and will be used current Google Cloud infrastructure to re-use same database.

7.10 NON-FUNCTIONAL REQUIREMENTS

- Database server (MySQL is recommended) should be hosted on a separate Google VM instance. So, use two Google VM instances; one for REST API and another for database server.
- REST API should run on a Google or other Cloud VM instance
- Need to create a firewall rule to allow communications between two servers (database and REST API)

VIII. NOT IN SCOPE

- Role based security is out of scope for this release
- Delete branch from android app is out of scope only technical team can delete branch or book by using REST API's

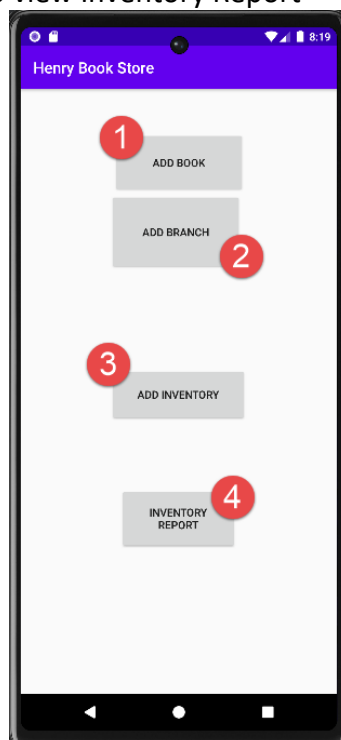
IX. UI MOCKUP

❖ Android App Home

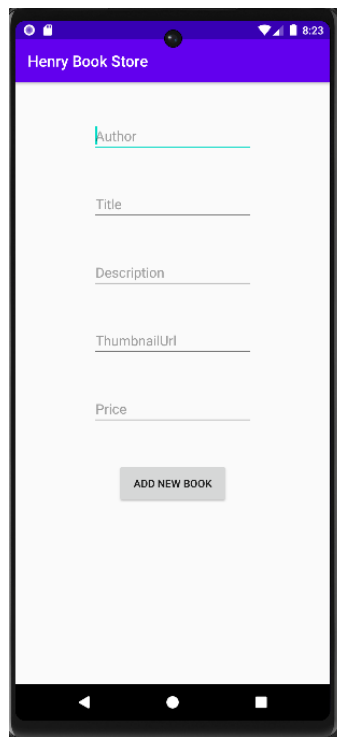


❖ Landing Screen:

- ◆ Add Book Button
- ◆ Add Branch Button
- ◆ Add Inventory
- ◆ Button to view Inventory Report

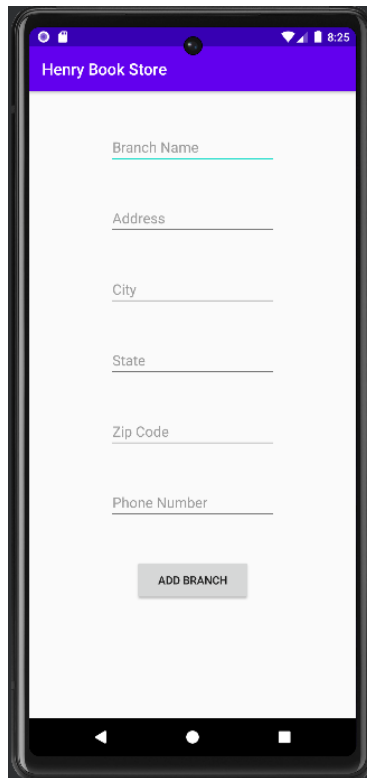


- ❖ Add Book into the system:
:



The screenshot displays a mobile application interface for 'Henry Book Store'. The app has a purple header bar with the title 'Henry Book Store'. Below the header, there is a form with five input fields: 'Author', 'Title', 'Description', 'ThumbnailUrl', and 'Price'. Each field is represented by a horizontal line with its label above it. At the bottom of the form, there is a grey button labeled 'ADD NEW BOOK'. The status bar at the top of the phone shows the time as 8:23 and various icons for battery, signal, and connectivity.

- ❖ Add Branch into the system:



The screenshot shows a mobile application interface for 'Henry Book Store'. The app has a purple header bar with the title 'Henry Book Store'. Below the header, there is a form with the following fields: 'Branch Name', 'Address', 'City', 'State', 'Zip Code', and 'Phone Number'. Each field is represented by a text input box with a light blue underline. At the bottom of the form, there is a grey button labeled 'ADD BRANCH'. The status bar at the top of the phone shows the time as 6:25 and various icons for signal, battery, and notifications. The bottom of the phone shows the standard Android navigation bar with back, home, and recent apps buttons.

❖ Add Invenry into the system:

Henry Book Store

BookID

BranchId

Quantity

ADD

❖ Inventory Report View:

Henry Book Store

1	2	10
3	2	112111
5	10	25
6	11	25

REQUIREMENTS DESIGNED BY

Sargam, Ganesh S.
March 04th, 2023