

Business Inventory Tracker

Colten Van Voorhis, Chris Navarrete, Jordan Phillips, Shawn Tucker, Kaitlyn Kalisek

Project Charter

Current Date: October 16, 2022

Project Start Date: October 9, 2022

Project End Date: May 2023

Project Purpose

An inventory system designed for businesses to track, update, search, and otherwise manage inventory through a single, easy-to-use web interface. Customizable alerts for events such as low inventory will be available. Progress updates for ordered inventory will also be available to view.

Project Team Members

Participant	Primary Responsibilities
Jordan Phillips	Creating the project back-end
Colten Van Voorhis	Creating the user interface Designing how the system responds to data changes
Chris Navarrete	Creating the project back-end
Shawn Tucker	Creating the user interface Designing how the system responds to data changes

System Vision Document

Problem Description

Managing inventory is an important aspect for any sort of business that has product to sell. Businesses not only need to manage what inventory is on hand, but also manage inventory that needs to be ordered and inventory that has yet to arrive. Inventory of high importance that needs to be kept on hand or even inventory that may run low without businesses realizing can introduce delays and reduce revenue.

By building this system, inventory can be quickly tracked, updated, and organized to prevent shortages and overstocking with an easy overview viewable from any Web-capable device on the network.

System Capabilities

The new system should be able to:

- Store information on currently available inventory, as well as inventory expected to arrive
- Provide the available and expected inventory information at a glance to the user from a main overview screen
- Collect tracking information on ordered inventory and display information to the user
- Display alerts to the user when available inventory drops below a specified amount to allow for ordering of new inventory
- Be accessible from any device with a Web browser and access to the network the system is hosted on

Business Benefits

We believe that the production and deployment of our system will provide the following benefits to businesses:

- More efficient view of inventory at a glance by condensing information to provide an overview of the status of all inventory items
- Viewable on any device with a web browser and connection to the business network to allow access without having to install software on each device, as well as allowing updates to the system without needing to update on devices
- Customizable alerts for inventory low on stock prevent part or inventory shortages due to user error and allow users to reorder inventory items
- View status on inventory items currently ordered to account for incoming inventory, helping prevent over-ordering and account for potential shipping delays



Project Schedule

Link: [Here](#)

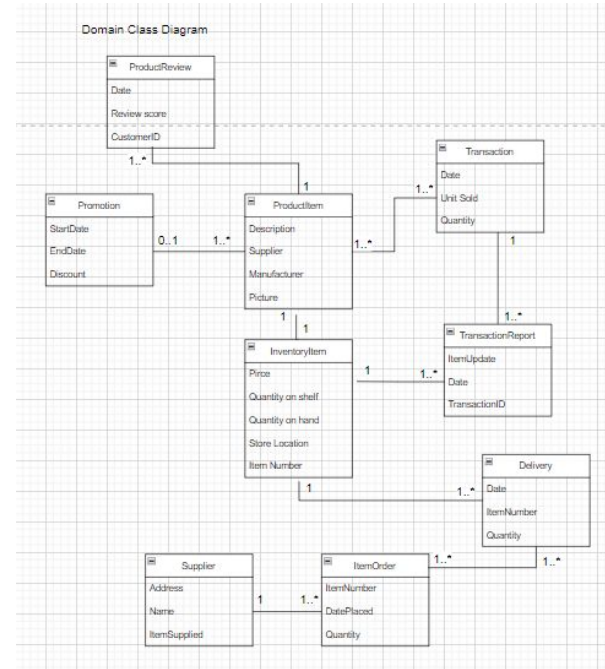
- Analysis and Design Review efforts will take place from January 17 to February 5
- Integration Testing will begin around March 17 and conclude roughly around April 1.
- User Manual work will start on March 28.
- Final Project Presentation will take place somewhere between April 15 and 28.

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION	PCT OF TASK COMPLETE
1	Project Planning and Analysis					
1.1	Project Charter - Rough Draft	Shawn Tucker	10/13/22	10/16/22	3	100%
1.2	System Vision Document - Rough Draft	Shawn Tucker	10/20/22	10/23/22	3	100%
1.3	Project Schedule - Rough Draft	Colten V	11/15/22	11/20/22	5	100%
1.4	UML Models - Rough Draft	Group	11/2/22	11/27/22	25	100%
1.6	Project Planning Powerslide	Group	11/21/22	12/5/22	14	25%
2	Project Definition and Planning					
2.1	Design Review		1/17/23	1/24/23	7	0%
2.2	Budget		1/25/23	1/28/23	3	0%
2.3	Communication Plan		1/29/23	2/2/23	3	0%
2.4	Risk Management		2/1/23	2/5/23	4	0%
3	Project Building and Initiation					
3.1	Build the Database		2/6/23	2/11/23	5	0%
3.2	Program code		2/12/23	3/11/23	29	0%
3.2.1	Build Test Data		3/12/23	3/16/23	4	0%
3.2.1	Deploy Version 1		3/17/23	3/21/23	4	0%
3.3	Team Introspection		3/22/23	3/26/23	4	0%
3.3.1	Chart Updates		3/26/23	3/29/23	3	0%
4	Project Performance / Monitoring					
4.1	Project Objectives		03/27/23	03/28/23	1	0%
4.2	User Manual		3/28/23	4/4/23	6	0%
4.3	Final Updates		4/7/23	4/14/23	7	0%
4.4	Project Presentation	Group	4/15/23	4/28/23	13	0%

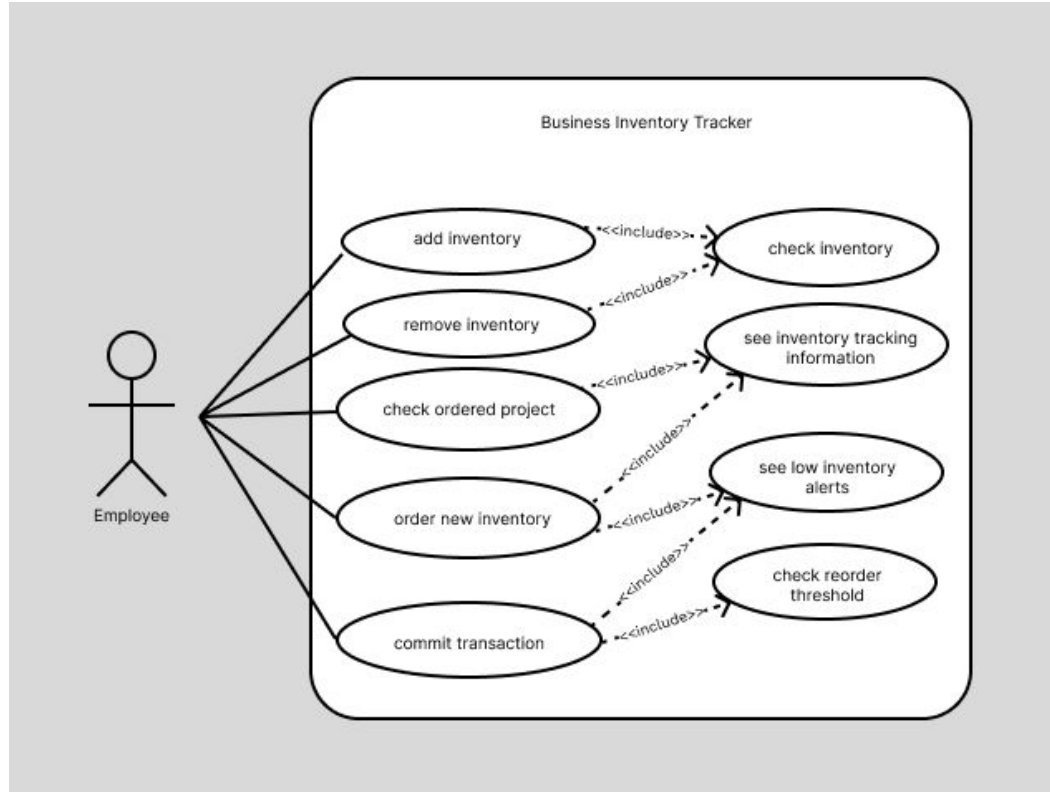
All project timeline dates were constructed in order to give each phase of the project equal attention and value.

Domain Class Diagram

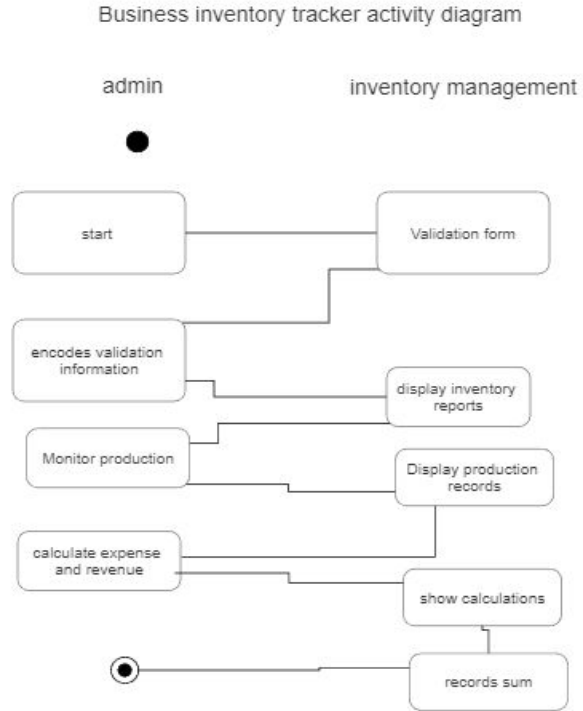
- Since the project is a business inventory tracker, the main domain class will revolve around products/objects that are offered in store
- Additional domain classes will either be related to or involve actions that pertain to business inventory
- Most relationships between classes will either be one to one or one to many, save for a few select cases.



Use Case Diagram



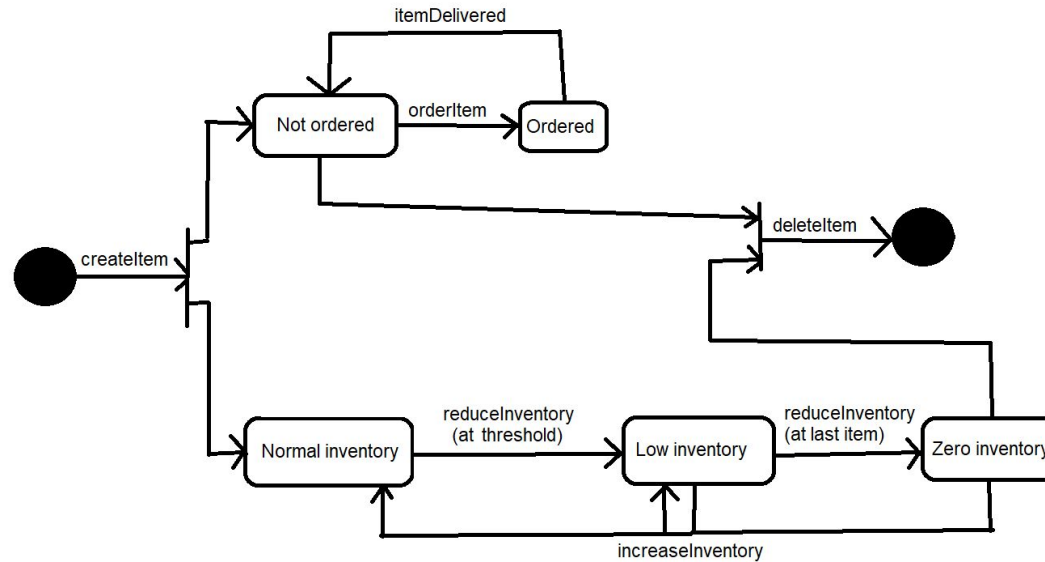
Activity Diagram



System Sequence Diagram



State Machine Diagram



InventoryItem - State Machine diagram