The Max Inventory System



**Team Awesome**

|  |  |
| --- | --- |
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CLIENT DOCUMENTS

Client Documents

**Opening Statement**

Milestone 2 of The Max Inventory System has been completed. The development of this system continues to remain on schedule and on budget.

Client Documents

**Executive Summary**

With technology today bars can make a more efficient use of time and energy by using a system to track inventory. Using an inventory system, a bar can track which items they need to reorder, which items are most popular and which items should be discontinued from their purchases. Many other features can also be available to a bar.

Our plan is to design a system around the liquor usage at The Max. This application will allow them to make orders easier, as well as track where potential theft or breakage may exist. As inventory increases we feel that this system will be a good complement to the already successful bar.

This milestone contains documents to describe The Max Inventory project. The documents include:

* Opening Statement: Details that Milestone 1 has been completed and that the project is on schedule and on budget.
* Executive Summary: Provides a high level overview of the system being developed.
* Implications for Client: Details implications that the client currently has for development of this system.
* Items for Approval: Details items that need to be approved to advance further in the development of this system.
* System Service Request: Details the request for the system.
* Project Charter: Details the intention of this system as well as expected start and completion date.
* Project Scope Statement: Details the scope of the project and phases of the project.
* Statement of Work: Details the work that will be done as result of this project.
* Work Breakdown Structure: Details events that will be done relating to this project.
* Work Breakdown Structure Dictionary: Defines terms used in the work breakdown structure.
* Gantt Chart: Outlines timelines of events that make up this project.
* Economic Feasibility Analysis: Outlines the financial benefits of this project.
* Enterprise Diagrams: Includes the current workflow diagram and organizational chart of the project.
* Roles and Responsibilities: Outlines the duties of each team member.
* Change Log: Details the changes that have been made during milestone 1.
* Communication Management Plan: Details how the group intends to communicate and how often.
* Meeting Communications: Outlines the communication that we have during meetings and in the day to day development of the system.
* Team Member Status Report: Gives the status of each team member and their duties in the development of milestone 2.

Client Documents

Implications for Client

Currently the only implication for the client is communication about the design of the system.

Client Documents

**Items for Approval**

Project Charter and System Service Request have been approved by the client. There are currently no items necessary for approval in The Max Inventory System project.

**Project Documents**



**Project Documents**

**System Service Request**

**Requested by:** Derek

**Company:** The Max

**Location:** 1417 Jackson Street Omaha NE 68102

**Contact:** 402-346-4110

**Type of Request:** New system

**Urgency:** Business losses can be tolerated until new system installed

**Problem Statement:** Sales growth along with the dependency of the current information system has resulted in the owner of the Max needing a sustainable information system for inventory and ordering purposes. There is no electronic inventory system in place right now. The inventory system is currently pen and paper and only performed by the owner, which allows for errors to happen during the liquor ordering process. The requester would like an electronic information system to simplify the process, in addition to making the process possible for someone besides himself to complete, in case of an emergency.

**Service Request:** The customer would like a new information system designed and built to improve the efficiency of the current information system. The system should allow the user to view the amount of liquor in inventory, in addition to adding to the inventory when a delivery is made by a distributor. This system should also enable the user view the quantity of each individual liquor to be ordered and should output the list, organized by liquor distributors.

**IS Liaison:** Justin Hendricks jhendricks01@unomaha.edu

**Sponsor:** The Max

**Project Documents**

**Project Charter**

**Project Name:** Liquor Inventory System

**Project Manager:** Justin Hendricks, Paul Naumann, Tom Jorgenson, Collyn Sansoni

**Customer:** The Max

**Project Start/End (projected): 9/1/17- 5/5/18**

**Project Overview:** This project will implement an inventory system to keep track of which liquors need to be ordered and compile a list by distributor to make liquor orders easier.

**Objectives:**

* Track liquor inventory and be able to let the customer know which liquors to order and the quantity of each liquor to order.
* Track potential theft by enabling the customer to track which liquors need to be ordered more often than regular.
* **Key Assumptions:**
  + System will use open source software
  + System will be built in house
  + System will use a database maintained by customer
* Stakeholders and Responsibilities:

|  |  |  |
| --- | --- | --- |
| Stakeholders | Role | Responsibility |
| Paul Naumann | Document Manager II | Assist in managing documents |
| Collyn Sansoni | Document Manager I | Manage documents |
| Justin Hendricks | IS Liaison/ Milestone manager | Communicate between team and customer/ Manage Milestone 2 |
| Tom Jorgenson | Milestone Organizer | Organize documentation |
| Derek | The MAX owner | Communicate system needs |

**Project Documents**

**Project Scope Statement**

**Team Awesome**

**Project Scope Statement**

General Project Information

**Project Name:** The Max Inventory System

**Project Sponsor:** The Max

**Problem Statement:** Sales growth along with the dependency of the current information system has resulted in the owner of the Max needing a sustainable information system for inventory and ordering purposes. There is no electronic inventory system in place right now. The inventory system is currently pen and paper and only performed by the owner, which allows for errors to happen during the liquor ordering process. The requester would like an electronic information system to simplify the process, in addition to making the process possible for someone besides himself to complete, in case of an emergency.

**Project Objectives:**

**Goals Includes:**

* Establish an easy to use application that will determine the amount of liquor needed for an order
* Make application at a low cost for The Max

**Objectives:**

* Track liquor inventory and be able to let the customer know which liquors to order and the quantity of each liquor to order.
* Track potential theft by enabling the customer to track which liquors need to be ordered more often than regular.

**Project Description:**

The Max is requesting a database application that can assist in determining liquor inventory and assist in determining the correct number of liquor bottles to order each week. The application will contain information needed to make accurate liquor orders from each liquor warehouse.

**Organization Benefits Includes:**

* Reduced time to make orders for liquor
* Allow other employees to make liquor orders instead of just manager
* Track potential theft

**Project Deliverables**

Upon completion the following items will be delivered:

* Prototype of application
* Binder with all documents from Milestones

**Estimated Project Duration:**

**Phase 1: Analytics and preparations**

* August 21st, 2017 – December 14th, 2017

**Phase 2: Design**

* January 8th,2017 – May 3rd, 2017

**Project Documents**

**Statement of Work**

**Team Awesome**

**Statement of Work**

**Project Name:** The Max Inventory System

**Customer:** The Max

**Project Sponsor:** Derek

**Project Start/End (projected):** September 1, 2017 – May 1, 2-17

**Development Staff Estimates (man-months):** 9

**Project Description**

Team Awesome plans to develop a Microsoft Access based database application to track inventory for The Max. The database application will handle liquor inventory and will be able to return accurate numbers needed for liquor orders.

**Goal/s**

The goals are:

* Create a user friendly Microsoft Access based application that allows employees to see inventory levels of liquor
* Create a database to track inventory of liquor to assist in liquor orders

**Objectives:**

* Track liquor inventory and be able to let the customer know which liquors to order and the quantity of each liquor to order.
* Track potential theft by enabling the customer to track which liquors need to be ordered more often than regular.

**Phases of Work**

Milestone 1 from 8/21/17 – 9/15/17 contains:

* Control Documents
* Client Documents
* Systems Service Request
* Project Charter
* Meeting Communications
* Team Member Status Report
* Communication Management Plan

Milestone 2 from 9/16/17 - 10/13/17 contains:

* Client Documents
* Statement of Work
* Project Scope Statement
* Project Management (Work Breakdown Structure and WBS Dictionary)
* Gantt Chart
* Economic Feasibility Analysis
* Enterprise Diagrams
* Meeting Communications
* Team Member Status Report
* Communication Management Plan

Milestone 3 from 10/14/17 – 11/8/17 contains:

* Client Documents
* Tracking Gantt
* Baseline Project Plan
* Requirements Documentation
* Risk Management Plan
* Meeting Communications
* Team Member Status Report
* Communication Management Plan

Milestone 4 from 11/9/17 - 12/13/17 contains:

* Client Documents
* Context Diagram
* Data Flow Diagram Levels 0 & 1
* IDEF A-0 and A0 Models
* Meeting Communications
* Team Member Status Report
* Communication Management Plan
* Presentation Slides

**Project Documents**

**Work Breakdown Structure**

* **Plan and Analyze System**
* **User Needs**

Meet with Derik (user)

Determine the bar’s need

* **Tasks**

Understand system tasks

Understand system tasks relationship to user and other tasks

* **Technical Requirements**

Understand software requirements

Understand hardware requirements

* **Financial Impact**

Analyze software costs

Analyze hardware costs

Analyze labor costs

* **Design System**
* **System Requirements**

Breakdown system requirements

Connect tasks to logical model

Build system logical system model

* **Develop Database**
* **Logical Model for Database**

Create entity relationship model of database

Translate into a set of relational tables

Examine model for redundancy

Examine model for referential integrity

* **Physical Model for Database**

Create database in Microsoft Access

* **Develop User Interface**
* **Logical Model for interface**

Create model of interface according to discussed needs of user

Get approval of model from user

Revise model according to user review

* **Physical Model for Interface**

Write code for interface

Connect interface with database

* **Implement System**
* **Database**

Populate database

Test database

* **Interface**

Populate database through user interface

Test interface

* **Create Documentation**
* **M1 - Milestone 1**

Create and Revise Client Documents

Create and Revise Executive Summary

Create and Revise Implications for Client

Create and Revise Items for Approval

Create and Revise Project Documents

Create and Revise System Service Request

Create and Revise Project Charter

Create and Revise Control Documents

Create and Revise Roles and Responsibilities

Create and Revise Change Log

Create and Revise Communication Management Plan

Create and Revise Meeting Communication

Create and Revise Team Member Status Report

* **M2 - Milestone 2**

Create and Revise Project Scope Statement

Create and Revise Statement of Work

Create and Revise Work Breakdown Structure

Create and Revise Work Breakdown Structure Dictionary

Create and Revise Gantt Chart

Create and Revise Economic Feasibility Analysis

Create and Revise Enterprise Diagrams

Update and Revise Milestone 1 Documents

* **M3 - Milestone 3**

Create and Revise Baseline Project Plan

Create and Revise Risk Management Plan

Create and Revise Risk Register

Create and Revise Information Systems Security Policies

Update and Revise Milestone 1 & 2 Documents

* **M4 - Milestone 4**

Create and Revise Data Flow Diagrams

Create and Revise IDEF0 Models

Create and Revise Logic Modeling

Create and Revise Work Flow Diagram

Update and Revise Milestone Documents

Update and Revise Milestone 1, 2, &3 Documents

**Project Documents**

**Work Breakdown Structure Dictionary**

**Interface**- How the user will interact with the program.

**Logical Model**- Describes the data with as much detail as possible, without regard to how they will be physical implemented in the database.

**System**- The inventory program/database being designed.

**Task**- How the system performs actions for the user.

**User**- Derik Nelson (primary user) or other individuals at the bar.

**Project Documents**

**Gantt Chart**

<<See attached Max.MPP>>

**Project Documents**

**Economic Feasibility Analysis**

<<See attached Max.XLS>>

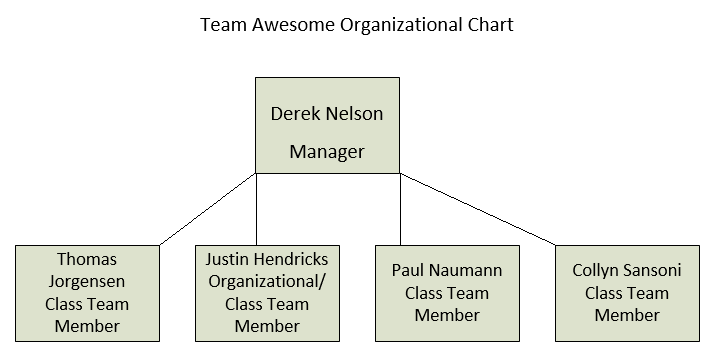
**Project Documents**

**Enterprise Diagram**

Current Work Flow Diagram



Team Awesome Organizational Chart



**Control Documents**

****

**Control Documents**

**Roles and Responsibilities**

|  |  |  |
| --- | --- | --- |
| Name | Role | Responsibility |
| Justin | Client Liaison | * Communicating with Customer/Customer Needs * Organizing meetings between customer and Team Awesome |
| Paul | Document Manager II | * Backup Collyn managing documents * Assigning tasks for each documents as necessary |
| Collyn | Document Manager I | * Managing Documents for group * Proof Read documents before final turn in |
| Tom | Milestone Manager | * Collecting documents for turning in. * Make sure Milestone 2 stays on task and is completed thoroughly |

Control Documents

**Change Log**

**Client Documents**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 9/5/17 | 1 | Creation of Executive Summary | Created the Executive Summary document |
| 9/5/17 | 1 | Creation of Implications for Client | Created Implications for Client document |
| 9/6/17 | 1 | Creation of Items for Approval | Created Items for Approval document |
| 9/6/17 | 1 | Creation of Opening Statement | Created Opening Statement document |
| 9/8/17 | 2 | Revised Executive Summary | Revised Executive Summary |

**System Service Request**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 9/6/17 | 1 | Creation of System Service Request | Created System Service Request document |

**Project Charter**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 9/6/17 | 1 | Creation of Project Charter | Created Project Charter document |
| 9/11/17 | 2 | Revised Project Charter | Added Stakeholders and Responsibilities |

**Project Scope Statement**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 10/2/17 | 1 | Created Project Scope Statement | Created Project Scope Statement |
| 10/8/17 | 2 | Revised Project Scope Statement | Revised Project Scope Statement |

**Statement of Work**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 10/2/17 | 1 | Created Statement of Work | Created Statement of Work |
| 10/8/17 | 2 | Revised Statement of Work | Revised Statement of Work |

**Work Breakdown Structure and WBS Dictionary**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 9/27/17 | 1 | Created Work Breakdown Structure & Dictionary | Created Work Breakdown Structure & Dictionary |

**Gantt Chart**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 9/27/17 | 1 | Created Gantt Chart | Created Gantt Chart |

**Economic Feasibility Analysis**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 9/27/17 | 1 | Created Economic Feasibility Analysis | Created Economic Feasibility Analysis |

**Enterprise Diagrams**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 9/27/17 | 1 | Created Enterprise Diagrams | Created Enterprise Diagrams |

**Roles and Responsibilities**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 8/30/17 | 1 | Creation of Roles and Responsibilities Document | Creation of Roles and Responsibilities Document for Milestone 1. |
| 9/16/17 | 2 | Revised Roles and Responsibilities for Milestone2 | Revised Roles and Responsibilities for Milestone2 |

**Communication Management Plan**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 9/5/17 | 1 | Creation of Communication Management Plan | Created the Communication Management Plan Document |
| 9/11/17 | 2 | Updated Communication Management Plan | Included the use of slack website for communication within the group |

**Meeting Communications**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 9/6/17 | 1 | Creation of Meeting Communications | Created Meeting Communications document |
| 9/13/17 | 2 | Revised Meeting Communications | Revised Meeting Communications |
| 10/9/17 | 3 | Revised Meeting Communications | Revised Meeting Communications |

**Team Member Status Report**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 9/13/17 | 1 | Created Team Member Status Report | Created Team Member Status Report |
| 10/7/17 | 2 | Revised Team Member Status Report to reflect Milestone 2 | Revised Team Member Status Report to reflect Milestone 2 |

**Miscellaneous**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Version Name | Change | Comments |
| 8/30/17 | 1 | Creation of GitHub Repository | Created the GitHub Repository and added members of group |
| 9/6/17 | 1 | Creation of Title Page | Created Title Page document |
| 9/10/17 | 2 | Revised Title Page | Added logo to Title Page |
| 9/11/17 | 2 | Revised Milestone 1 document | Addressed changes suggested by Professor Germonprez |

**Communication Management Plan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| What | Who | Purpose | When/Frequency | Type of Meeting |
| Semi Monthly Meeting | The Max Inventory Development team | To discuss status of current milestone and possible revisions needed | Every other week occurring  Thursday at 7:00 PM, unless otherwise noted | In person meeting |
| Ongoing Max Inventory Updates | The Max Inventory Development team | Inform Max Inventory Development team of necessary updates | Open | Group text or slack.com group chat |
| Presentations | The Max Inventory Development team | Present necessary information for project | As necessary | In person presentations for client and/or class |

**Meeting Communications**

**Date:** 8/30/17

**Time:** 1 PM US Central Time

**Location:** Scheduled Classroom (Rm 155)

**Present:**

Paul Naumann, Tom Jorgensen, Collyn Sansoni, Justin Hendricks

**Absent:**

Not Applicable

**Subject:**

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Initial Group Meeting | Team Awesome | * Met and created Change Log and Roles and Responsibility Document. * Also set up meeting with client for 8/31/17 at 8 PM, to discuss system. |

**Handouts:** None

**Discussion:** See Comments

**Date:** 8/31/17

**Time:** 7 PM US Central Time

**Location:** The Max

**Present:**

Paul Naumann, Tom Jorgensen, Collyn Sansoni, Justin Hendricks, Derek

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Initial Meeting with client | Team Awesome | * Met with Derek to discuss desired features for the inventory system |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 9/04/17

**Time:** All week

**Location:** Group text/ slack.com chat

**Present:**

Paul Naumann, Tom Jorgensen, Collyn Sansoni, Justin Hendricks, Derek

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group text/ slack.com chat | Team Awesome | * Discussed current status of Milestone 1 documents * Divided remaining tasks amongst team members |

**Handouts:** None

**Discussion:** See Comments

**Date:**9/11/17

**Time:** 1:30pm US Central Time

**Location:** Scheduled Classroom (PKI Rm 155)

**Present:** Thomas Jorgensen, Paul Naumann, Justin Hendricks, Collyn Sansoni

**Absent:** Not Applicable

**Subject:**

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Milestone 1 | Team Awesome | * Wrapped up tasks for Milestone * Discussed Header Content and set Headers up. * Will e-mail Professor Germonprez for feedback |
| Other | Team Awesome | Watched video that Professor Germonprez posted on Canvas |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 9/11/17

**Time:** All week

**Location:** Group text/ slack.com chat

**Present:**

Paul Naumann, Tom Jorgensen, Collyn Sansoni, Justin Hendricks, Derek

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group text/ slack.com chat | Team Awesome | * Discussed current status of Milestone 1 documents * Discussed necessary revisions to documents * Divided necessary revisions amongst the team |

**Handouts:** None

**Discussion:** See Comments

**Team Member Status Report**

**Current Milestone Activities**

Name: Thomas Jorgensen

Completed

1) Created GitHub repository

2) Met with client and determined needs for product

3) Created and revised documents for Milestone 1

* Opening Statement
* Executive Summary
* Implications for Client

In-Progress (estimated date of completion)

1. Milestone 2 activities (10/11/17)

Other/Issues

1. Not Applicable

**Current Milestone Activities**

**Name:** Collyn Sansoni

**Completed**

1) Completed Milestone 1 documents

* Meeting Communications
* Team Member Status Report

2) Met with client and determined needs for product

3) Created slack.com chat group

4) Created group text

**In-Progress (estimated date of completion)**

1) Milestone 2 activities (10/11/17)

**Other/Issues**

1) Not Applicable

**Current Milestone Activities**

**Name:** Justin Hendricks

**Completed**

1) Completed Milestone 1 documents

* Roles and Responsibilities
* Change Log
* Communication Management Plan

2) Met with client and determined needs for product

* Organized meeting between Derek and Team Awesome

**In-Progress (estimated date of completion)**

1) Milestone 2 activities (10/11/17)

**Other/Issues**

1) Not Applicable

**Current Milestone Activities**

**Name:** Paul Naumann

**Completed**

1) Met with client and determined needs for product

2) Created and revised documents for Milestone 1

* Implications for Client
* Items for Approval
* System Service Request
* Project Charter

**In-Progress (estimated date of completion)**

1) Milestone 2 activities (10/11/17)

**Other/Issues**

1) Not Applicable