The Max Inventory System



**Team Awesome**

|  |  |
| --- | --- |
|  | Paul Naumann (pnaumann@unomaha.edu)  Collyn Sansoni (csansoni@unomaha.edu) |
|  | Tom Jorgensen (twjorgensen@unomaha.edu) |

Justin Hendricks (jhendricks01@unomaha.edu)

**Table of Contents**

Client Documents ……………………………………………………………………………………………………………………………………4

Opening Statement ……..…………………………………………………………………………………………………………….5

Executive Summary …………..……………………………………………………………………………………………………….6

Implications for Client ………..………………………………………………………………………………………………………8

Items for Approval……………..……………………………………………………………………………………………………….9

Project Documents ………………………………………………………………………………………………………………………………10

System Service Request …………..……………………………………………………………………….………………………11

Project Charter………………………………………………………………………………………………………………………….12

Project Scope Statement..…………………………………………………………………………………………………………13

Statement of Work……………………………………………………………………………………………………………………14

Work Breakdown Structure…..………………………………………………………………………………………………….15

Work Breakdown Structure Dictionary……………………………………………..………………………………………18

Gantt Chart……………………………………………………………………………………………………………………………….22

Economic Feasibility Analysis………………………………………………………………………………………..………….23

Enterprise Diagrams……..…………..……………………………………………………………………………………………..24

Baseline Project Plan…………………………………………………………………………………………………………….....26

Requirements Documentation…………..………………………………………………………………………...............34

Risk Management Plan…………………………………………………………………………………………………………..…35

Context Diagram.………………………………………………………………………………………………………………………36

Data Flow Diagram Level 0………………………………………………………………………………………………………..37

Data Flow Diagram Level 1………………………………………………………………………………………………………..38

Data Flow Diagram Dictionary…………………………………………………………………………………………………..39

IDEF A-0 Diagram………………………………………………………………………………………………………………………40

IDEF A0 Diagram……………………………………………………………………………………………………………………….41

Control Documents ……………………………………………………………………………………….………………………………………42

Roles and Responsibilities………………………………………………………………………………………………………...43

Communication Management Plan………………………………………..……..……..…………………………………..44

Meeting Communications……….……….…….…………………………………….…………………………………………..45

Team Member Status Report..…….……………………………………………….……………………………………..…...57

Change Log………………….…………..………………………………………………….…..……………………………………….59

Appendix A……………………………………………………………………………………………………………………………….68

Appendix B………………………………………………………………………………………………………………………………..70

Client Documents

**Opening Statement**

Milestone 3 of The Max Inventory System has been completed. The development of this system continues to remain on schedule and on budget.

**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.

We plan to design a system around the liquor usage at The Max. This application will allow them to make orders more easily. As inventory increases 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 through Milestone 3 have 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.
* Baseline Project Plan: Introduce and describe the system with alternatives along with a feasibility assessment, in addition to management issues.
* Requirements Documentation: Lists the stakeholders affected by the project and what is required of them
* Risk Management Plan: Outlines risks associated with the system and how they are mitigated.
* Roles and Responsibilities: Outlines the duties of each team member.
* 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 4.
* Change Log: Details the changes that have been made during Milestone 3.

**Implications for Client**

Currently the implications for the client is communication centered around the analysis and design of the system. The client will need to review and submit feedback for the project documents. The client will also need to approve the project documents from Milestone 2. The client will also need to meet with team members as needed.

**Items for Approval**

In Milestone 3, members of the team and the client must agree upon the details of the project. Specific documents associated with Milestone 3 that have been approved by the client include:

1. Project Scope Statement
2. Statement of Work
3. Work Breakdown Structure
4. Gannt Chart
5. Economic Feasibility Analysis
6. Enterprise Diagrams

See Appendix A for approvals from Derik Nelson.

**Project Documents**

**System Service Request**

**Requested by:** Derik Nelson

**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 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 can let the customer know which liquors to order and the quantity of each liquor to order.

**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 I | Manage Documents |
| Collyn Sansoni | Milestone Manager | Manage Milestone 3 |
| Justin Hendricks | IS Liaison/ Document Manager II | Communicate between team and customer. Assist Paul in documentation management |
| Tom Jorgensen | Milestone Organizer | Organize documentation |
| Derik Nelson | The MAX owner | Communicate system needs |

**Project Scope Statement**

**Team Awesome Prepared by: Paul Naumann**

**Project Scope Statement Date: October 10th, 2017**

**General Project Information**

* **Project Name:** The Max Inventory System
* **Sponsor:** The Max
* **Project Managers:** Collyn Sansoni, Tom Jorgensen, Paul Naumann, Justin Hendricks

**Problem/Opportunity 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. 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:**

* Track liquor inventory and can let the customer know which liquors to order and the quantity of each liquor to order.

**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.

**Business Benefits**

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

**Project Deliverables**

Upon completion, the following items will be delivered:

* Prototype of application
* Binder with all documents from Milestones

**Estimated Project Duration:**

* 9 months

**Statement of Work**

**Team Awesome**

**Statement of Work**

**Project Name:** The Max Inventory System

**Project Manager:** Collyn Sansoni, Justin Hendricks, Paul Naumann, Thomas Jorgensen

**Customer:** The Max

**Project Sponsor:** Derik Nelson

**Start Date:** September 1, 2017

**End Date:** May 1, 2-17

**Development Staff Estimates (person-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.

**Goals:**

* 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 can let the customer know which liquors to order and the quantity of each liquor to order.

Milestone 2

-Client Documents

-Project Scope Statements

-Statement of Work

-Economic Feasibility Analysis

-Gantt Chart

-Work Breakdown Structure

-WBS Dictionary

Enterprise Diagrams

-Control Documents

--Completion Date 10/13/17

Milestone 1

-Client Documents

-System Service Request

-Project Charter

-Control Documents

--Completion Date 9/15/17

Milestone 3

-Client Documents

-Tracking Gantt

-Baseline Project Plan

-Risk Management Plan

-Control Documents

--Completion Date 11/8/17

Milestone 4

-Client Documents

-Context Diagram

-IEDF

-Data Flow Diagram

-Activity Diagram

-Sequence Diagram

-Control Documents

--Completion Date12/13/17

**Work Breakdown Structure**

1. **Plan and Analyze System**

**1.1 User Needs**

1.1.1 Meet with Derik (user)

1.1.2 Determine User requirements

**1.2 User Tasks**

1.2.1 Understand system tasks

1.2.2 Understand system tasks relationship to user and other tasks

**1.3 Technical Requirements**

1.3.1 Understand software requirements

1.3.2 Understand hardware requirements

**1.4 Financial Impact**

1.4.1 Analyze software costs

1.4.2 Analyze hardware costs

1.4.3 Analyze labor costs

1. **Design System**

**2.1 System Requirements**

2.1.1 Breakdown system requirements

2.1.2 Connect tasks to logical model

2.1.3 Build logical system model

1. **Develop Database**

**3.1 Logical Model for Database**

3.1.1 Create entity relationship model of database

3.1.2 Translate into a set of relational tables

3.1.3 Examine model for redundancy

3.1.4 Examine model for referential integrity

**3.2 Physical Model for Database**

3.2.1 Create database in Microsoft Access

3.2.2 Revise model according to user review

1. **Develop User Interface**

**4.1 Logical Model for interface**

4.1.1 Create model of interface according to discussed needs of user

4.1.2 Get approval of model from user

4.1.3 Revise model according to user review

**4.2 Physical Model for Interface**

4.2.1 Write code for interface

4.2.2 Connect interface with database

1. **Implement System**

**5.1 Database**

5.1.1 Populate database

5.1.2 Install Antivirus Software

5.1.3 Test database

**5.2 Interface**

5.2.1 Populate database through user interface

5.2.2 Test interface

1. **Create Documentation**

**6.1 M1 - Milestone 1**

6.1.1 Create and Revise Client Documents

6.1.2 Create and Revise Executive Summary

6.1.3 Create and Revise Implications for Client

6.1.4 Create and Revise Items for Approval

6.1.5 Create and Revise Project Documents

6.1.6 Create and Revise System Service Request

6.1.7 Create and Revise Project Charter

6.1.8 Create and Revise Control Documents

6.1.9 Create and Revise Roles and Responsibilities

6.1.10 Create and Revise Change Log

6.1.11 Create and Revise Communication Management Plan

6.1.12 Create and Revise Meeting Communication

6.1.13 Create and Revise Team Member Status Report

**6.2 M2 - Milestone 2**

6.2.1 Create and Revise Project Scope Statement

6.2.2 Create and Revise Statement of Work

6.2.3 Create and Revise Work Breakdown Structure

6.2.4 Create and Revise Work Breakdown Structure Dictionary

6.2.5 Create and Revise Gantt Chart

6.2.6 Create and Revise Economic Feasibility Analysis

6.2.7 Create and Revise Enterprise Diagrams

6.2.8 Update and Revise Milestone 1 Documents

**6.3 M3 - Milestone 3**

6.3.1 Create and Revise Baseline Project Plan

6.3.2 Create and Revise Risk Management Plan

6.3.3 Create and Revise Risk Register

6.3.4 Create and Revise Information Systems Security Policies

6.3.5 Update and Revise Milestone 1 & 2 Documents

**6.4 M4 - Milestone 4**

6.4.1 Create and Revise Data Flow Diagrams

6.4.2 Create and Revise IDEF0 Models

6.4.3 Create and Revise Logic Modeling

6.4.4 Create and Revise Work Flow Diagram

6.4.5 Update and Revise Milestone 1, 2, &3 Documents

**7. Monthly Meeting with Client**

**Work Breakdown Structure Dictionary**

**1 Plan and Analyze system-** Describes the user needs, tasks, technical requirements, and fiscal impact of the project.

**1.1 User Needs-** Meet with user and determines the user’s needs.

**1.1.1 Meet with Derik (user)-** Meet with Derik to introduce Team Awesome and determine user’s needs.

**1.1.2 Determine the user’s needs-** Meet with the user to determine requirements for project.

**1.2 Tasks-** Understands the systems tasks and relationship to user and other tasks

**1.2.1 Understand System Tasks-** Understand the tasks the system will be able to do

**1.2.2 Understand system tasks relationship to user and other tasks-** Relate the tasks of the system to other tasks that the system will deal with in the business.

**1.3 Technical Requirements-** Understand hardware and software requirements

**1.3.1 Understand software requirements-** Identify the needs of the software that will be used in the system.

**1.3.2 Understand hardware requirements-** Identify the needs of the hardware that will be used in the system.

**1.4 Financial Impacts-** Analyze hardware, software, and labor costs.

**1.4.1** **Analyze software costs-** Calculate costs associated with software.

**1.4.2 Analyze hardware costs-** Calculate costs associated with hardware.

**1.4.3 Analyze labor costs-** Calculate costs associated with labor.

**2 Design System-** Describes the system requirements for the project.

**2.1 System Requirements-** Breaks down the system requirements, connects tasks to logical model,

and builds system logical system model

**2.1.1 Breakdown system requirements-** Analyze and asses requirements of system.

**2.1.2 Connect tasks to logical model-** Analyze how tasks will relate to logical model.

**2.1.3 Build logical system model-** Develop logical model based on tasks.

**3 Develop Database-** Describes the logical model and the physical model for the database.

**3.1 Logical Model for Database-** Creates entity relationship model of database, translate it into a set of relational tables, and examine model for redundancy and referential integrity.

**3.1.1 Create entity relationship model of database-** Develop entity relationship diagram for database.

**3.1.2 Translate into a set of relational tables-** Translate entity relationship diagram into relational tables.

**3.1.3 Examine model for redundancy-** Check model to see if it has redundancy

**3.1.4 Examine model for referential integrity-** Check model to see if references are accurate.

**3.2 Physical Model for Database-** Creates the database in Microsoft Access.

**3.2.1 Create database in Microsoft Access-** Develop the database using Microsoft Access.

**3.2.2 Revise model according to user review-** Make necessary changes to database to suit user’s needs.

**4 Develop User Interface-** Describes the logical and physical interface.

**4.1 Logical Model for interface-** Creates the model of interface according to discussed needs of user, gets approval of model from user, and then revise per user feedback

**4.1.1 Create model of interface according to discussed needs of user-** Develop graphical user interface based on the described needs from user.

**4.1.2 Get approval of model from user-** Have user accept model.

**4.1.3 Revise model according to user review-** Make necessary changes to model based on user feedback.

**4.2 Physical Model for Interface-** Create the code for interface and then connect interface to the database.

**4.2.1 Write code for interface-** Develop code to support the interface.

**4.2.2 Connect interface with database-** Sync interface with database for connectivity.

**5 Implement System-** Describes the database and the interface.

**5.1 Database-** Populate and test the database

**5.1.1 Populate database-** Load existing inventory into database.

**5.1.2 Test database-** Ensure database works successfully.

**5.2 Interface-** Populate the database through the user interface and then test the interface.

**5.2.1 Populate database through user interface-** Use user interface to add entries into database.

**5.2.2 Test interface-** Ensure interface works successfully.

**6 Create Documentation-** Creates the documentation needs for all 4 milestones.

**6.1 M1- Milestone 1-** Creates and revises the client documents, executive summary, implications for client, items for approval, project documents, system service request, project charter, control documents, roles and responsibilities, change log, communication management plan, meeting communications, and team member status report.

**6.1.1 Create and Revise Client Documents-** Creates and revises all Client Documents**.**

**6.1.2 Create and Revise Executive Summary-** Creates and revises the Executive Summary document.

**6.1.3 Create and Revise Implications for Client-** Creates and revises the Implications for Client document.

**6.1.4 Create and Revise Items for Approval-** Creates and revises Items for Approval document.

**6.1.5 Create and Revise Project Documents-** Creates and revises Project Documents.

**6.1.6 Create and Revise System Service Request-** Creates and revises System Service Request document.

**6.1.7 Create and Revise Project Charter-** Creates and revises the Project Charter document.

**6.1.8 Create and Revise Control Documents-** Creates and revises Control Documents.

**6.1.9 Create and Revise Roles and Responsibilities-** Creates and revises the Roles and Responsibilities documents.

**6.1.10 Create and Revise Change Log-** Creates and revises the Change Log document.

**6.1.11 Create and Revise Communication Management Plan-** Creates and revises the Communication Management Plan document.

**6.1.12 Create and Revise Meeting Communication-** Creates and revises the Meeting Communication document.

**6.1.13 Create and Revise Team Member Status Report-** Creates and revises the Team Member Status Report document.

**6.2 M2- Milestone 2-** Creates and revises project scope statement, statement of work, work breakdown structure, work breakdown structure dictionary, Gantt chart, economic feasibility analysis, and enterprise diagrams. Also revises all documents in previous milestone.

**6.2.1 Create and Revise Project Scope Statement-** Creates and revises the Project Scope Statement document.

**6.2.2 Create and Revise Statement of Work-** Creates and revises the Statement of Work document.

**6.2.3 Create and Revise Work Breakdown Structure-** Creates and revises the Work Breakdown Structure document.

**6.2.4 Create and Revise Work Breakdown Structure Dictionary-** Creates and revises Work Breakdown Structure Dictionary.

**6.2.5 Create and Revise Gantt Chart-** Creates and revises the Gantt Chart.

**6.2.6 Create and Revise Economic Feasibility Analysis-** Creates and revises the Economic Feasibility Analysis.

**6.2.7 Create and Revise Enterprise Diagrams-** Creates and revises the Enterprise Diagrams, which are Current Workflow and Organizational Chart.

**6.2.8 Update and Revise Milestone 1 Documents-** Updates the necessary documents from Milestone 1.

**6.3 M3- Milestone 3-** Creates and revises baseline project plan, risk management plan, risk register, and information systems security policies. Also revises all documents in previous milestones.

**6.3.1 Create and Revise Baseline Project Plan-** Creates and revises the Baseline Project Plan document.

**6.3.2 Create and Revise Risk Management Plan-** Creates and revises the Risk Management Plan document.

**6.3.3 Create and Revise Risk Register-** Creates and revises the Risk Register document.

**6.3.4 Create and Revise Information Systems Security Policies-** Creates and revises Information Systems Security Policies document.

**6.3.5 Update and Revise Milestone 1 & 2 Documents-** Updates the necessary documents from Milestone 1 & 2.

**6.4 M4- Milestone 4-** Creates and revises data flow diagrams, IDEF0 models, logic modeling, work flow diagram, and milestone documents. Also revises all documents in previous milestones.

**6.4.1 Create and Revise Data Flow Diagrams-** Creates and revises the Data Flow Diagrams.

**6.4.2 Create and Revise IDEF0 Models-** Creates and revises the IDEF0 Models.

**6.4.3 Create and Revise Logic Modeling-** Creates and revises the Logic Modeling document.

**6.4.4 Create and Revise Work Flow Diagram-** Creates and revises the Work Flow Diagram.

**6.4.5 Update and Revise Milestone 1, 2 & 3 Documents-** Updates the necessary documents from Milestone 1, 2 & 3.

**7 Monthly Meeting with Client-** Team members meet with client to speak about the project regarding updates and any issues that arise.

**Gantt Chart**

<<See attached Max.MPP>>

**Economic Feasibility Analysis**

<<See attached Max.XLS>>

**Enterprise Diagram**

**Current Work Flow Diagram**



**Team Awesome Organizational Chart**



**Baseline project plan**

**Introduction**

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.

**System Descriptions**

*Statements of Alternatives*

**Not Doing the Project**

|  |  |
| --- | --- |
| Pros | Cons |
| No learning curve for organization | Outdated system of completing inventory |
| No costs | Only one member of the organization can complete inventory with current system |

The organization has been running using the current inventory system. Along with any new process or system in a company, there is always a learning curve and people that are not motivated to change their current process. The company currently solely relies on the manager to perform inventory on a daily basis, to keep liquor and beer levels at the appropriate number to allow the business to run. If something were to happen to the manager, no one else, would be able to perform inventory in the organization. The current system is done on pen and paper with no checks for user errors or back-ups of the current levels of inventory.

The positives include, there will be no start-up costs for the organization. Goals of any business are to cut costs and increase profits. Not changing the system will cut start-up costs, in addition to users not having to spend time or resources on learning the new system. The system has been working for the Max for years and will continue to be the process to perform inventory until the new system is implemented.

The negatives include, the manager is the only one who performs inventory and if something happened to him, nobody else in the organization would know how to do inventory. In addition, the system is not based in a computer system, therefore, there is no back-up in the case of the inventory spreadsheet being misplaced or destroyed. The system is outdated, not utilizing the benefits technology brings to expedite or enhance the current process of inventory.

**Microsoft Excel**

|  |  |
| --- | --- |
| Pros | Cons |
| User friendly interface | Inefficient process to complete an inventory system |
| Inexpensive start-up/maintenance | The system would not provide error messages with input errors |

As Microsoft Excel as an alternative method, the system would strictly be reserved to a single localized personal computer. The inventory would solely be kept in a spreadsheet. It would be possible to print out graphs or reports using Excel. With the system using Excel as its primary data store, there would not be any sense of procedure to how the inventory is done.

The positives include, using Excel as the primary data store for an inventory system would be the user-friendly nature of the program in addition to the start-up costs being minimal compared to maintaining a localized server or setting up a database. The only start-up cost would be purchasing the Microsoft Excel program. Excel can be user-friendly, due to the fact that, it is a spreadsheet laid out in digital form.

The negatives include, that it is an inefficient process to complete inventory. The system would be localized unless it was shared as a Google Document. However, new accounts would be required to share the document on Google Documents. The system would also not give out error messages if the numbers for updated inventory are entered incorrectly. For example, if a user enters in 100 instead of 10, the system should output an error message or reject the user input.

**Microsoft Access (Selected System)**

|  |  |
| --- | --- |
| Pros | Cons |
| User friendly Interface | Not highly scalable |
| Easy to maintain | Higher start-up costs |

Utilizing Microsoft Access as the primary system in an inventory system would reduce user input errors, create a user-friendly interface, and be a localized database. The system would have a tough time scaling, if the data store would include over 10,000 items. However, the inventory system requested by the organization would not be required to hold that many items, thus, Microsoft Access would fulfill the requested system. The cost to reduce user input errors and create a user-friendly interface would be more expensive than using a spreadsheet program, however, the benefits of using Microsoft Access plan to outweigh the costs of using a spreadsheet program.

The positives include, the ease of use for end users and the low-cost nature of maintaining the database. The idea is that using this database program will reduce the risks and costs of user input errors. Microsoft Access also has the ability to create useful reports for the end user. Access will also implement a more efficient process to do inventory at the Max. Currently, only one member of the organization can perform inventory, with the implementation of this system, the idea is that in case something happens to that single user, another member of the organization will be able to complete inventory.

The negatives include, the program is more expensive than the current system of performing inventory and that it is not highly scalable. As stated earlier, the size of the inventory system that will be implemented, will not have a scaling issue. With the hopes of allowing the business to keep functioning, in the case of something happing to the user who performs inventory, and reducing user-input errors, the start-up cost is reasonable to mitigate the costs to the organization if one of the two given examples occurred.

**SQL Server**

|  |  |
| --- | --- |
| Pros | Cons |
| Highly scalable | Not user friendly interface for non-technical members of the organization |
| Localized server with only certain people having access | Higher start-up/maintenance costs |

In the SQL server alternative, the inventory system would utilize a database on a localized SQL server. The system would be similar to the Microsoft Access alternative because it would have the same functionality. The main difference would be that SQL servers can scale much easier and the administrator can implement their own security assurances on this server. The interface for the end-user would not be as friendly, and in the current situation, the organization requested an easy to use system.

The positives include, a localized and highly scalable database. In addition, the administrator can implement any security measures and allow access to individuals who have clearance to access the database. The administrator could set up times to back-up the data to another physical device whenever deemed necessary. If the inventory system needed to get bigger as time goes on, there would be no scaling issue.

The negatives include, the user interface. The organization requested an easy to use system to mitigate the learning curve for members of the organization. The members of the organization are not technically inclined and do not consider that trait when looking to hire individuals. The cost to keep an on-site server including maintenance and utilities, would be much higher than other alternatives. In addition, the organization is not interested in storing data in a highly secured database.

**Feasibility Analysis**

*Economic*

* Project Overall Net Present Value: $8,947.65
* Net Present Value of all Benefits: $67,760.31
* Net Present Value of all Costs: $35,598.27
* Return on Investment: $90.35%
* Anticipated Breakeven: 2.0044 years
* One-time start-up cost: $10,200
* Full EFA: See Attached MAX.XLSX

Technical

Collyn

* Planning and creating a database in Access
* Modifying fields in Access
* Creating Reports in Access
* SQL Generation in Access

Tom

* Planning and creating a database in Access
* Modifying fields in Access
* Creating Reports in Access
* SQL Generation in Access

Paul

* Planning and creating a database in Access
* Modifying fields in Access
* Creating Reports in Access
* SQL Generation in Access

Justin

* Planning and creating a database in Access
* Modifying fields in Access
* Creating Reports in Access
* SQL Generation in Access

*Operational*

The implementation of the new inventory system will allow for many members of the organization to perform inventory. The system will mitigate input errors by displaying input errors. The system will allow for better storage of the data.

The day to day business activities will allow for other members of the organization to perform inventory before the manager arrives for the day. It should expedite the ordering process by printing user-friendly reports regarding inventory levels for certain distributors. The day to day business activities will also be affected by the ability to view inventory levels. The organization would like to include printing the reports and updating inventory on a daily basis. The likelihood this system is deployed will be low.

*Legal or Contractual*

To implement a new inventory system utilizing Microsoft Access will require a contract to purchase the program necessary program to implement the database.

*Political*

There are no political requirements to implement a new inventory system.

*Schedule*

* Phase 1: Outreach: September, 2017 – May, 2018
  + Development Team Meetings: September, 2017 – May, 2018
  + Organizational Meeting: September, 2017 – May, 2018
* Phase 2: Project Requirements: September, 2017 – May, 2018
  + User Requirements: September, 2017 – October, 2017
  + System Requirements: September, 2017 – October, 2017
* Phase 3: Project Design: September, 2017 – May, 2018
  + Database Design: December, 2018 – May, 2018
  + Reports Design: January, 2018 – May, 2018
  + Prototype of System: March, 2018 – May, 2018
* Phase 4: Documentation: September, 2017 – May, 2018
  + Milestone 1: August, 2017 – September, 2017
  + Milestone 2: September, 2017 – October, 2017
  + Milestone 3: October, 2017 – November, 2017
  + Milestone 4: November, 2017 – December, 2017

**Management Issues**

*Team Configuration*

* Team Members: Collyn Sansoni, Thomas Jorgensen, Justin Hendricks, Paul Naumann
* External Contacts: Derik Nelson

*Communications Plan*

The Max inventory development team will meet every week, in person, on Thursdays at 7:00 PM. The purpose of these weekly meetings is to discuss the status of the current Milestone and possible revisions that are necessary. The team will also be utilizing slack.com and group text messages to relay informal information regarding meeting times and any updates with change of plans regarding due dates and feedback from the instructor and team members. The team will meet with the manager of The Max once a month to present documents for approval and to touch base on how the development of the system is going.

*Project Standards and Procedures*

Milestone 1

* Client Documents
* Systems Service Request
* Project Charter
* Control Documents

Milestone 2

* Client Documents
* Project Scope Statement
* Statement of Work
* Economic Feasibility Analysis
* Gantt Chart
* Work Breakdown Structure
* Work Breakdown Structure Dictionary
* Enterprise Diagrams
* Control Documents

Milestone 3

* Client Documents
* Tracking Gantt Chart
* Baseline Project Plan
* Risk Management Plan
* Control Documents

Milestone 4

* Client Documents
* Context Documents
* IEDF
* Data Flow Diagram
* Activity Diagram
* Sequence Diagram
* Control Documents

**Security Issues**

*Information Security Analysis*

Assets

* Inventory Data

Vulnerabilities

* Old hardware
* Employee negligence

Threats

* Hardware crash
* Bad data entered by employees

Losses

* Data integrity

Safeguards

* Policy to back up the data once every week
* Train employees who have access to the system to enter data correctly

*Information Security Policies*

Overview

The data in the inventory system will be backed up on a weekly basis by the manager. Only users

with approval from the organization’s manager will have access to the data in the system. Data will

be updated daily, during the time allotted by the organization. Unless otherwise approved by the

manager, no other updates will be done in the database.

Scope

All team and organization members involved with the product

Policy

Timing: Effective once agreed with organization members

Review: If the employee responsible for the update does not update the data, a reminder

message will be sent by the system to update the inventory.

Definitions

Not applicable

Enforcement

Any policy violations will result with an email and a follow-up, in person, regarding fixing the issue in

the future, with the general manager.

**Requirements Documentation**

Project Title: The Max Inventory Database Date Prepared: 10/26/2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Stakeholder** | **Requirement** | **Category** | **Priority** | **Acceptance Criteria** |
| Derik Nelson | Input liquor inventory using Access based user interface | Support | High | User can successfully input liquor inventory into Access database |
| Derik Nelson | View available liquor inventory | Performance | High | Available liquor inventory is displayed based on a query |
| Derik Nelson | Display needed amount of liquor for liquor order | Performance | High | Liquor amount needed for weekly order is displayed based on a query |
| Derik Nelson | User can adjust user interface if needed | Support | Medium | Documentation is created to help discuss the process |
| Derik Nelson | User can back up database | Technical | Low | Proper backup of database |

**Risk Management Plan**

**Risk:**

* The data could be corrupted due to software or database failure.

**Methods:**

*Control*

* Perform regular system backups

**Tools:**

*Apple Time Capsule*

* This device will be used to store all backup information for database. The Time Capsule will automatically backup data every Thursday night.

**Roles and Responsibilities:**

* Client is responsible to keep Time Capsule up to date with all software updates and to make sure that data is backed up at the end of every month.

**Risk Categories:**

* Database

**Risk:**

* The data could be compromised due to viruses and malware.

**Methods:**

*Control*

* Install latest anti-virus software.

**Tools:**

*AVG for Mac*

* Used to prevent viruses and other malware from infecting the computer.

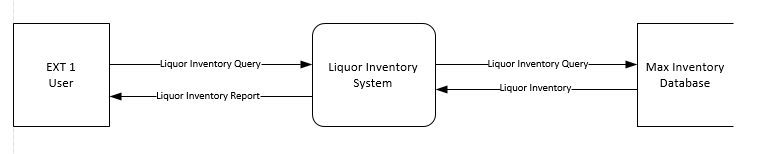
**Roles and Responsibilities:**

* Client is responsible to run anti-virus software on regular basis.
* Client is also responsible to ensure account information is secured.

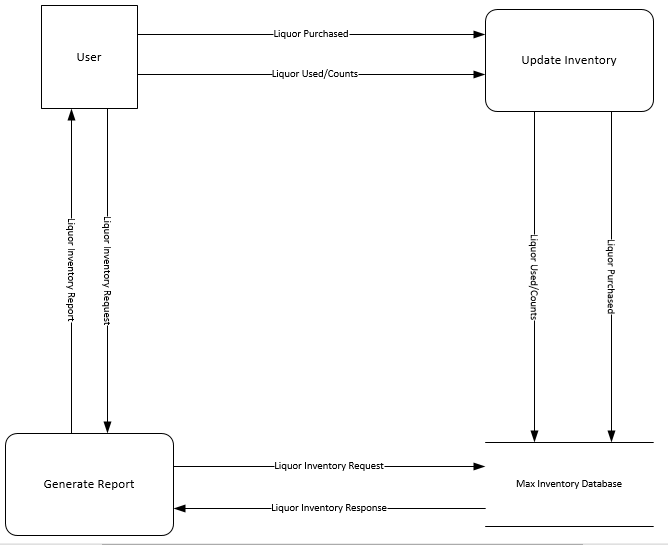
**Risk Categories:**

* Software

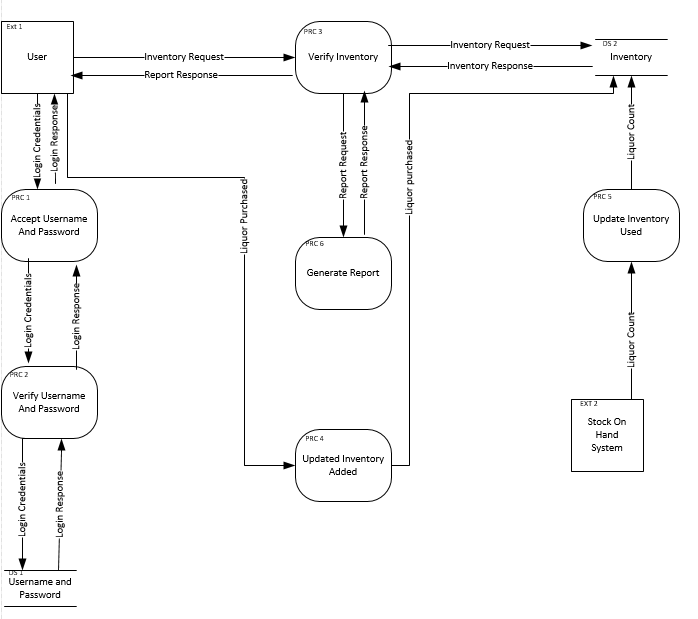
**Context Diagram**



**Data Flow Diagram Level 0**



**Data Flow Diagram Level 1**

****

**Data Flow Diagram Dictionary**

Accept Username and Password- Process that accepts the username and password.

Generate Report- Process that generates report on inventory

Inventory- Database that stores all the inventory information.

Inventory Request- Data flow that request information about current inventory

Inventory Response- Data flow that carries inventory response.

Liquor Count- Data flow that carries current count of all liquor

Liquor Purchased- Data flow that user enters.

Login Credentials- Data flow that will carry the user username and password to enter the system.

Login Response- Data flow that carries login response.

Report Request- Data flow that sends the request to generate report.

Report Response- Data flow that sends the generated report back.

Stock On Hand System- System that keeps track of current stock on hand.

Updated Inventory Added- Process that updates current inventory being added.

Updated Inventory Used- Process that updates the liquor on hand based on liquor count.

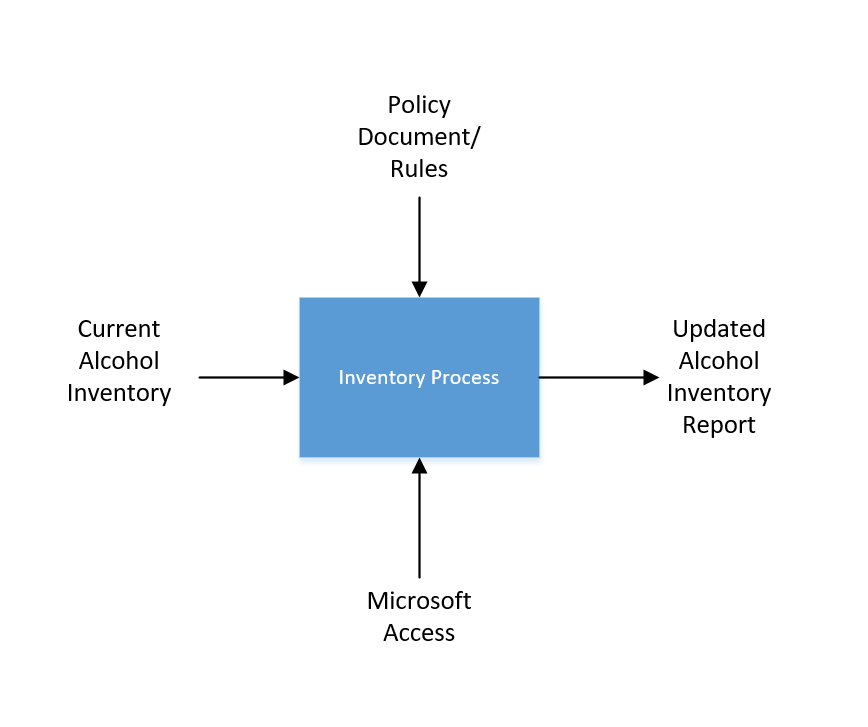
User- This is an external entity, this is the person who is using the system.

Username and Password- Database that confirms that entered username and password are valid.

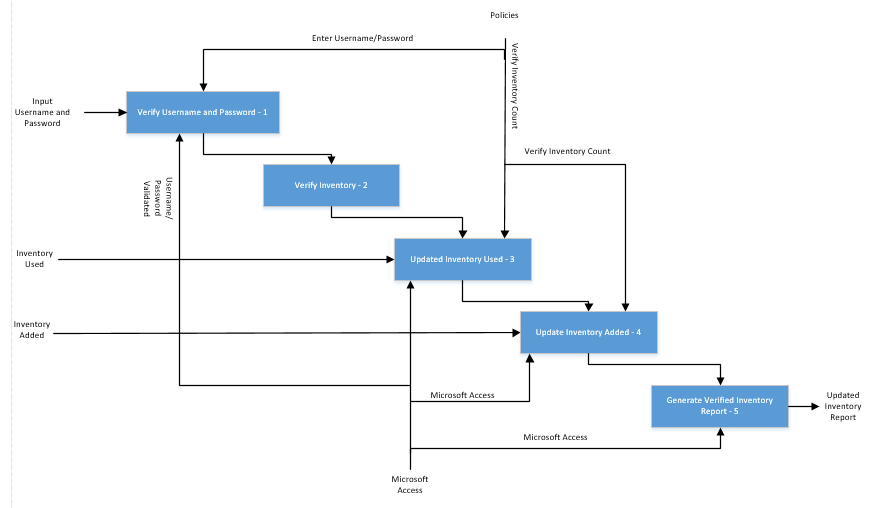
Verify Inventory- Process that verifies inventory information

Verify Username and Password- Process that verifies that username and password was entered correctly per guidelines.

**IDEF A-0 Diagram**

****

**IDEF AO Diagram**



**Control Documents**

**Roles and Responsibilities**

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Responsibility** |
| Justin | Client Liaison/  Document Manager II | * Organizing meetings between customer and Team Awesome * Assist Paul in documentation management |
| Paul | Milestone Manger | * Managing documents for group * Proof Read documents before final turn in |
| Collyn | Document Manager I | * Managing documents * Assigning tasks for each document as necessary |
| Tom | Milestone Organizer | * Make sure Milestone 4 stays on task and is completed thoroughly * Organizing documentation within Milestone 4 |

**Communication Management Plan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **What** | **Who** | **Purpose** | **When/Frequency** | **Type of 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 |
| Weekly Meeting | The Max Inventory Development Team | Opportunity to ask questions and get help from Team on individual responsibilities for milestone | Thursdays at 6:30pm unless planned otherwise | In person meeting |

**Meeting Communications**

**Milestone 1**

**Date:** 8/30/17

**Time:** 1 PM US Central Time

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

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

|  |  |  |
| --- | --- | --- |
| **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, Derik Nelson

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

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 9/4/17

**Time:** All week

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

**Present:** Paul Naumann, Tom Jorgensen, Collyn Sansoni, Justin Hendricks, Derik

|  |  |  |
| --- | --- | --- |
| **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

|  |  |  |
| --- | --- | --- |
| **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, Derik Nelson

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

**Handouts:** None

**Discussion:** See Comments

**Milestone 2**

**Date:**  Week beginning 9/18/17

**Time:** All week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group text/ slack.com chat | Team Awesome | * Discussed status of Milestone 2 documents * Discussed necessary documents for Milestone 2 and how to divide the work * Divided necessary work amongst the team |

**Handouts:** None

**Discussion:** See Comments

**Date:**  9/25/17

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

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of topics discussed during in person meeting | Team Awesome | * Discussed any issues team members had on their individual documents * Decided to have everyone complete their assigned documents by 10/5/17 |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 9/28/17

**Time:** All week

**Location:** The Max

**Present:** Paul Naumann, Tom Jorgensen, Collyn Sansoni, Justin Hendricks, Derik Nelson

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of topics discussed during the meeting with the Organizational Manager | Team Awesome, Derik Nelson | * Discussed the status of the project * Showed Derik the items for approval for Milestone 2 (SSR, Project Charter) |

**Handouts:** None

**Discussion:** See Comment

**Date:**  Week beginning 10/1/17

**Time:** All week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Discussed the current work flow * Discussed the current organizational chart * Created the Enterprise Diagram |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 10/9/17

**Time:** All week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Completed scope of statement document * Finalized touches on Enterprise Diagram |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 10/11/17

**Time:** All week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Finalized collection of documents * Finalized formatting on M2 |

**Handouts:** None

**Discussion:** See Comments

**Milestone 3**

**Date:**  Week beginning 10/16/17

**Time:** All week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Assigned responsibilities for Milestone 3 * Assign due dates for responsibilities |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 10/23/17

**Time:** All week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Finalizing Milestone 3 Responsibilities * Setting Meeting Date for work time |

**Handouts:** None

**Discussion:** See Comments

**Date:**  10/26/17

**Time:** 6:30

**Location:** UNO Library Room 119

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of weekly meeting | Team Awesome | * Working on individual milestone responsibilities * Collaborated on documents with team members |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 10/30/17

**Time:** All week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Worked on documentation for Milestone 3 |

**Handouts:** None

**Discussion:** See Comments

**Date:**  11/2/17

**Time:** 6:30

**Location:** UNO Library Room 119

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of weekly meeting | Team Awesome | * Working on individual milestone responsibilities * Collaborated on milestone document to send to Matt for revisions |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 11/6/17

**Time:** All Week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Revising Milestone 3 Document based on feedback * Finalizing formatting on Milestone 3 |

**Handouts:** None

**Discussion:** See Comments

**Milestone 4**

**Date:**  Week beginning 11/13/17

**Time:** All Week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Assigned Milestone 4 responsibilities * Started working on milestone 4 responsibilities |

**Handouts:** None

**Discussion:** See Comments

**Date:** 11/16/17

**Time:** 6:30pm

**Location:** UNO Room Library 102d

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Worked on DFD Level 0 * Worked on DFD Level 1 * Continued working on Milestone 4 responsibilities |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 11/20/17

**Time:** All Week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Worked on IDEF A-0 * Finalized DFD Level 1 * Continued working on Milestone 4 responsibilities |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 11/27/17

**Time:** All Week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Finalized IDEF A-0 * Creating IDEF A0 * Continued working on Milestone 4 responsibilities |

**Handouts:** None

**Discussion:** See Comments

**Date:**  11/30/17

**Time:** All Week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Finalized IDEF A0 * Updated Change Log * Updated Milestone 4 document |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 12/4/17

**Time:** All Week

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

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Updated Meeting Communications * Updated Change Log * Continued working on Milestone 4 responsibilities |

**Handouts:** None

**Discussion:** See Comments

**Date:**  Week beginning 12/7/17

**Time:** All Week

**Location:** UNO Criss Library 102d

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

|  |  |  |
| --- | --- | --- |
| **Item** | **Responsible Party** | **Comments** |
| Summary of group meeting | Team Awesome | * Finalizing Milestone 4 Document |

**Handouts:** None

**Discussion:** See Comments

**Team Member Status Report**

**Current Milestone Activities**

**Name:** Thomas Jorgensen

**Completed**

1) Revised documents based on feedback from Milestone 3

2) Updated communication management plan

3) Updated Change Log

4) Completed Milestone 4 documents

* IDEF A-0 Diagram
* IDEF A0 Diagram

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

1. Revise and add current information to Change Log (12/12/17)
2. Revise Meeting Communications to reflect more accurate meeting dates (12/11/17)

**Other/Issues**

1. Focus on future of project

**Current Milestone Activities**

**Name:** Collyn Sansoni

**Completed**

1) Completed Milestone 4 documents

* Context Diagram
* Roles and Responsibilities
* Communication Management Plan

1. Revised documents based on feedback from Milestone 3 for the following documents:

* All documents besides Gantt Chart

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

1. Addressing different documents in Milestone for alignment purposes

**Other/Issues**

1. Focus on future of project

**Current Milestone Activities**

**Name:** Justin Hendricks

**Completed**

1. Completed Milestone 3 documents

* Risk Management Plan

1. Met with client to discuss

* Organized meeting between Derik and Team Awesome

1. In charge of major revisions for Milestone 3

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

1. Preparation for Milestone 4 (11/8/17)

**Other/Issues**

1. Coordinate future meetings between Derik and Team Awesome

**Current Milestone Activities**

**Name:** Paul Naumann

**Completed**

1) Requirements Documentation

2) Tracking Gantt Chart

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

1) Preparation for role as Milestone Manager for Milestone 4 (11/8/17)

**Other/Issues**

1. Focus on future of project
2. Focus on preparing for Milestone 4 role as Milestone Manager

**Change Log**

**Opening Statement**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 9/6/17 | 1 | Creation of Opening Statement | Created Opening Statement document |
| 10/4/17 | 2 | Revised Opening Statement | Revised Opening Statement to reflect Milestone 2 |
| 10/16/17 | 3 | Revised Opening Statement | Revised Opening Statement to reflect Milestone 3 |

**Executive Summary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 9/5/17 | 1 | Creation of Executive Summary | Created the Executive Summary document |
| 9/8/17 | 2 | Revised Executive Summary | Revised Executive Summary |
| 10/4/17 | 2 | Revised Executive Summary | Revised Executive Summary to reflect Milestone 2 |
| 10/16/17 | 3 | Revised Executive Summary | Revised Executive Summary to reflect Milestone 3 |

**Implications for Client**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 9/5/17 | 1 | Creation of Implications for Client | Created Implications for Client document |
| 10/4/17 | 2 | Revised Implications for Client | Revised Implications for Client based on Professor feedback |
| 10/16/17 | 3 | Revised Implications for Client | Revised Implications for Client for Milestone 3 |

**Items for Approval**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 9/6/17 | 1 | Creation of Items for Approval | Created Items for Approval document |
| 10/5/17 | 2 | Revised Items for Approval | Revised Items for Approval |
| 10/16/17 | 3 | Revised Items for Approval | Revised Items for Approval |

**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 |
| 10/9/17 | 2 | Revised Project Scope Statement | Revised Project Scope Statement |
| 10/10/17 | 3 | Revised Project Scope Statement | Revised Project Scope Statement to reflect example |

**Statement of Work**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 10/2/17 | 1 | Created Statement of Work | Created Statement of Work |
| 10/9/17 | 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 and Dictionary | Created Work Breakdown Structure and Dictionary |
| 10/1/17 | 2 | Added tasks to the Work Breakdown Structure and Dictionary | Added new tasks that were identified after initial creation of document |
| 10/8/17 | 3 | Updated Formatting of Work Breakdown Structure and Dictionary | Changed the numbering system of the WBS and Dictionary |
| 10/10/17 | 4 | Revised Work Breakdown Structure Dictionary | Revised Work Breakdown Structure Dictionary based on Professor feedback |
| 11/2/17 | 5 | Revised Work Breakdown Structure | Revised Work Breakdown Structure to reflect Antivirus software installation |

**Gantt Chart**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 9/27/17 | 1 | Created Gantt Chart | Created Gantt Chart |
| 10/9/17 | 2 | Updated Gantt Chart | Added additional tasks identified after initial creation of WBS |
| 10/30/17 | 3 | Updated Gantt Chart | Updated dates for Gantt Chart to reflect more accurate timeline. |
| 11/2/17 | 4 | Updated Gantt Chart | Updated Gantt Chart to reflect more accurate durations of tasks |

**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 |
| 10/8/17 | 2 | Updated Enterprise Diagrams | Added relationships on organizational chart |

**Baseline Project Plan**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 10/25/17 | 1 | Creation of Baseline Project Plan | Created Baseline Project Plan |
| 10/26/17 | 2 | Updated with Current Information | Updated with Current Information |
| 11/2/17 | 3 | Updated with Current Information | Updated with Current Information |
| 11/3/17 | 4 | Updated with Current Information | Revised document based on Professor Germonprez’ feedback |
| 11/6/17 | 5 | Updated with Current Information | Revised document based on Professor Germonprez’ feedback |

**Requirements Documentation**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 10/22/17 | 1 | Creation of Requirements Documentation | Creation of Requirements Documentation |
| 10/29/17 | 2 | Updated with Current Information | Updated with Current Information |

**Risk Management Plan**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 10/30/17 | 1 | Creation of Risk Management Plan | Creation of Risk Management Plan |
| 11/1/17 | 2 | Updated with Current Information | Updated with Current Information |

**Context Diagram**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 11/13/17 | 1 | Creation of Context Diagram | Creation of Context Diagram |
| 11/23/17 | 2 | Updated Context Diagram | Updated Context Diagram |

**Data Flow Diagram Level 0**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 11/18/17 | 1 | Creation of DFD Level 0 | Creation of DFD Level 0 in class |
| 11/23/17 | 2 | Updated DFD Level 0 | Updated DFD Level 0 |

**Data Flow Diagram Level 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 11/21/17 | 1 | Creation of DFD Level 1 | Creation of DFD Level 1 |
| 11/23/17 | 2 | Updated DFD Level 1 | Updated Level 1 due to professor’s feedback |

**Data Flow Diagram Dictionary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 11/30/17 | 1 | Creation of DFD Dictionary | Creation of DFD Dictionary |

**IDEF A-0 Diagram**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 11/20/17 | 1 | Creation of IDEF A-0 Diagram | Creation of IDEF A-0 Diagram |

**IDEF A0 Diagram**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 11/29/17 | 1 | Creation of IDEF A0 Diagram | Creation of IDEF A0 Diagram |
| 11/30/17 | 2 | Updated IDEF A0 Diagram | Updated IDEF A0 diagram due to professor’s feedback |

**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 Milestone 2 | Revised Roles and Responsibilities for Milestone 2 |
| 11/2/17 | 3 | Revised Roles and Responsibilities for Milestone 3 | Revised Roles and Responsibilities for Milestone 3 |
| 11/9/17 | 4 | Revised Roles and Responsibilities for Milestone 4 | Revised Roles and Responsibilities for Milestone 4 |

**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 |
| 10/26/17 | 3 | Updated Communication Management Plan | Included weekly meeting on Thursdays |

**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 to show new meetings |
| 10/9/17 | 3 | Revised Meeting Communications | Revised Meeting Communications to show meetings since last revision |
| 10/26/17 | 4 | Revised Meeting Communications | Revised Meeting Communications to show meetings since last revision |
| 11/2/17 | 5 | Revised Meeting Communications | Revised Meeting Communications to show meetings since last revision |
| 11/30/17 | 6 | Revised Meeting Communications | Revised Meeting Communications to show meetings since last revision |
| 12/4/17 | 7 | Revised Meeting Communications | Revised Meeting Communications to show meetings since last revision |

**Team Member Status Report**

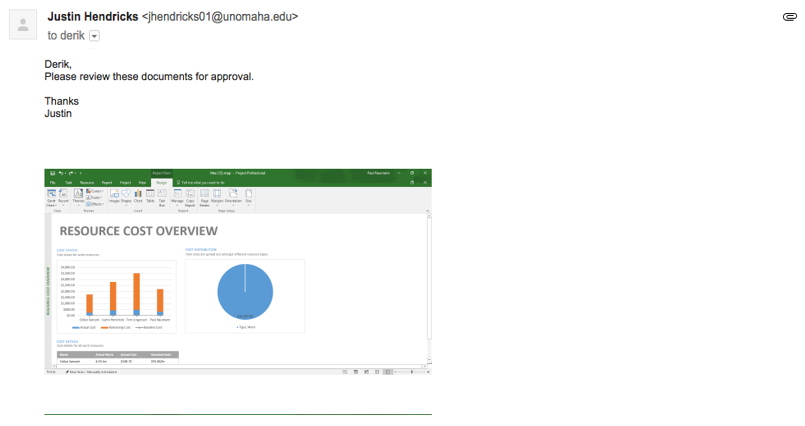
|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 9/13/17 | 1 | Created Team Member Status Report | Created Team Member Status Report |
| 10/7/17 | 2 | Revised Team Member Status Report to reflect Milestone 2 | Revised Team Member Status Report to reflect Milestone 2 |
| 10/11/17 | 3 | Revised Team Member Status Report to reflect feedback from Professor | Revised Team Member Status Report to reflect feedback from Professor |
| 11/2/17 | 4 | Revised Team Member Status Report to reflect Milestone 3 | Revised Team Member Status Report to reflect Milestone 3 |
| 11/30/17 | 5 | Revised Team Member Status Report to reflect Milestone 4 | Revised Team Member Status Report to reflect Milestone 4 |

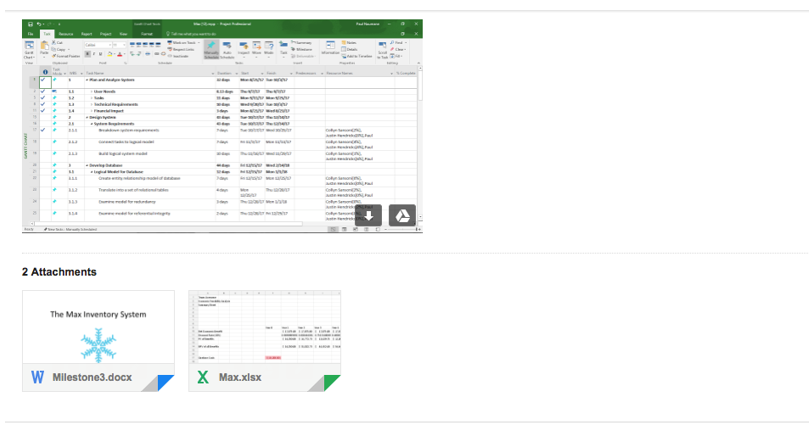
**Miscellaneous**

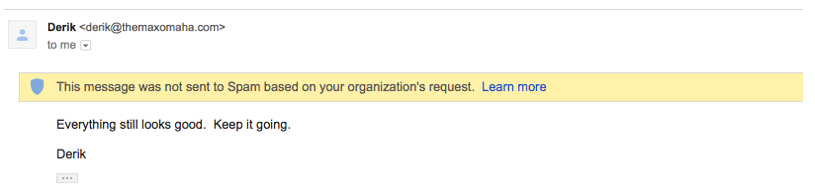
|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version Name** | **Change** | **Comments** |
| 8/30/17 | 1 | Creation of GitHub Repository | Created the GitHub Repository and added members of group |
| 9/6/17 | 1 | Creation of Title Page | Created Title Page document |
| 9/10/17 | 2 | Revised Title Page | Added logo to Title Page |
| 9/11/17 | 2 | Revised Milestone 1 document | Addressed changes suggested by Professor Germonprez |
| 11/23/17 | 1 | Creation of presentation slides | Creation of presentation slides |

**Appendix A**

**Approval of project documents through Milestone 3 from Derik Nelson (Client).**







**Appendix B**

**PowerPoint Presentation Slides**



