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| [American Video Game Company] |
| CRM Requirements Proposal |
| [Business Vision Document/Business Requirements] |

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| [Brandon Davis]  3-1-2023  [Version 4.0] |

Contents

[A. Introduction 3](#_Toc7598012)

[A.1. Purpose Statement 3](#_Toc7598013)

[A.2. Overview of the Problem 3](#_Toc7598014)

[A.3. Goals and Objectives 3](#_Toc7598015)

[A.4. Prerequisites 3](#_Toc7598016)

[A.5. Scope 3](#_Toc7598017)

[A.6. Environment 4](#_Toc7598018)

[B. Requirements 4](#_Toc7598019)

[B.1. Business Requirements 4](#_Toc7598020)

[B.3. Functional Requirements 4](#_Toc7598022)

[B.4. NonFunctional Requirements 4](#_Toc7598023)

[C. Software Development Methodology 5](#_Toc7598024)

[C.1. Advantages of the Waterfall Method 5](#_Toc7598025)

[C.2. Disadvantages of the Waterfall Method 5](#_Toc7598026)

[C.3. Advantages of Agile Method 5](#_Toc7598025)

[C.4. Disadvantages of Agile Method 5](#_Toc7598025)

[C.5. Best suited 5](#_Toc7598027)

[D. Design 6](#_Toc7598028)

[D.1. Flowchart For Forecasting 6](#_Toc7598029)

[D.2. UML Diagram of Company Database 7](#_Toc7598030)

[E. Testing 8](#_Toc7598032)

[E.1. Functional Testing 8](#_Toc7598033)

[E.1.1. Sales Information Importation 9](#_Toc7598034)

[E.1.2. Report Generation 10](#_Toc7598035)

[E.1.3. Forecast Generation 11](#_Toc7598036)

[F. Sources 11](#_Toc7598037)

# Introduction

The company American Video Game Company has outgrown its current system and requires a new Customer Relationship Management (CRM) system. This project proposal will detail the needs of the company to help better understand the goals and objectives of this CRM system.

# A.1. PUrpose Statement

To provide the client company with a comprehensive customer CRM system that is intuitive and allows for sales tracking, reporting, forecasting, and opportunity management.

# A.2. Overview of THE PROBLEM

As things currently stand, the American Video Game Company has outgrown its current system for customer management. The proposed CRM system would be able to increase the efficiency of the company by providing tools to track sales for a given period, manage reports, provide forecasting for future sales, and help to provide insight into future opportunities for the company.

# A.3. Goals and Objectives

The goals and objectives for the proposed CRM system are the following:

Improved ability to track sales.

Improved ability to report company activities.

Ability to integrate with other systems to allow for data sharing.

Ability to forecast future sales and revenue.

Ability for opportunity management.

# A.4. Prerequisites

There is only one prerequisite needed before the new CRM system can be implemented. The company server size needs to be increased. With the constantly growing business need the American Video Game Company has, they’ll require a much larger server to store consumer information. This will allow them to have increased data management which will allow them to forecast sales and for opportunities to expand later in the future.

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| Number | Prerequisite | Description | Completion Date |
| 1 | Increasing server size | Increase server size to better accommodate companies’ future expansion | 3/5/2023 |

# A.5. Scope

The proposed CRM system will cover the ability to track sales, report sales/company activity, forecast future growth(sales/revenue), and opportunities for future growth.

The proposed system will not cover ticketing, quoting, order management, and contracting.

# A.6. Environment

The company server will be deployed using Microsoft Azure, allowing access for Windows, Android, iOS, and MacOS users. This will allow users using Chrome 110.0, Firefox 109.0, Internet Explorer 9.0 and up, iOS7 Safari or Third-Party browsers (Chrome and Firefox), and Android 4.0 Chrome to access the webserver to place their orders from products listed in the online catalog. All information will reside on the company’s onsite servers and will be backed up to a cloud server as part of the company’s business continuity plan. The cloud server updates every 24 hours, allowing continuous data synchronization.

# Requirements

Some of the requirements for the CRM system will include sales tracking, reporting, forecasting, and opportunity management.

# business requirements

Sales tracking allows for the import and export of data that contribute to monetary value to the company. By tracking sales, the company would be able to use the imported data to generate sales reports. This data would be saved for future processes to forecast future market needs and in turn, generate opportunities to expand the services provided.

# Functional Requirements

A sales tracking function will be integrated into the CRM system and serve as the primary means of importing and exporting customer data into the database.

The task for sale tracking should perform:

* The system shall efficiently export and re-import data that will include appropriate validation with minimal risk.

A reporting function will be integrated to allow for the analysis of data and to allow data to be compiled for later use.

Tasks the reporting system should perform:

* Allow access to historical data.
* Allow filtering of data.
* Allow users to save reports for future access.
* Allow for detailed and higher-level reporting capabilities.

# NonFunctional Requirements

The ability to provide forecasting within the CRM tool will allow management to predict future profitability and help to manage the revenue expectations of the company. Doing so will allow the company to forecast the best times to roll out new products and services to consumers to increase profitability. This will also allow the company to seek opportunities to expand into different markets for better customer service.

# SOFTWARE DEVELOPMENT METHODOLOGY

Of the many software development methodologies to choose from, the ones that would be beneficial to this project are the waterfall method and the agile method. The waterfall method follows a simple staging structure, meaning that before the next step can start the previous one must be completed. If there are any issues during the staging process it creates compound issues throughout the entire project. Granted this method is less likely to have overlooked issues, due to the staging process. Using this method is effective for small projects, with a clear end goal.

The Agile method works by having the team work on different aspects of the project at the same time. This method works well to complete work fast while being able to incorporate changes quickly compared to the waterfall method. This is because the team works in small bursts known as sprints. The agile method is also known for increased customer satisfaction, due to the continuous feedback provided by the customer during the entirety of the project. Though the agile method has its pros, it also has its cons such as its easier to deviate from the project goal and lack of documentation.

# Advantages of the waterfall method

One advantage of the waterfall method is the ability to determine the end goal of a project early. Determining the end goal early in the development process, allows you to control the amount of deviation from the project timeline. Doing so allows the project to maintain time and budget constraints.

# disAdvantages of the waterfall method

One disadvantage of the waterfall method is that it is difficult to make changes to the project. This is due to the structure of the waterfall method. In the waterfall method initially, you would have to complete your current step before moving to the next step. If a sudden change were to arise, it will render all previous work useless and throw off the entire timeline of the project.

# Advantages of the Agile Method

One advantage of the agile method is its flexibility of the method (“Agile Methodology”). In this method, the development team breaks down the work into small bursts known as sprints. Doing so allows for the implementation of changes on short notice. Doing so allows for greater customer satisfaction.

# disAdvantages of the Agile Method

One disadvantage of the agile method is that a project can fall off track much easier. The reason for this is that the agile method has very little structuring to ensure that a project stays on track (“Agile Methodology”). If a project were to fall off track, it will create budget and timeline issues.

# best SUITED

The waterfall method would be the preferred method for this project for many reasons. The first reason why the waterfall method would be preferred is that this method will allow for a product with very few issues. Developers will be able to catch any design errors early in the process saving the team time from resolving the issue further down the line. The second reason why the waterfall method would be the preferred choice is that the total cost of the project can accurately be estimated as can the timeline for the project. This will allow the American Video Game Company to see upfront what the total cost of the project will be, as well as a timeline for project completion so any prerequisite step can be in place before the CRM is finished to ensure a streamlined integration process. Whereas with the agile method, the project is likely to fall off track by working on things outside the scope of the project. This would cost the company extra time and resources. Lastly, because of this structured approach, the American Video Game Company will be able to measure the progress of the project because of clearly defined milestones. The waterfall method does fall short in areas where the agile method would be better, such as the ability to integrate changes easily. Since the project requirements are clearly defined, the customer in this case would not need to integrate changes immediately. This means that the waterfall method would be able to provide a completed product, without interrupting the workflow of the company and allowing for the easiest implementation at the end.

# Design

The elements of the CRM tool will work together to create a comprehensive product to meet the needs of the company. Below is a flowchart describing the process of forecasting and a UML diagram of the company database in the CRM tool.

# FLOWCHART FOR Forecasting

The flowchart below depicts the process required to accurately forecast future events for the company.

Diagram

Description automatically generated

Figure : Flowchart for Forecasting

# UML Diagram Of company database

Each table in the UML diagram represents a component of the system which the CRM tool will be able to access to help update information, generate reports, and aid in forecasting.

Diagram

Description automatically generated

Figure : UML Diagram of Company Database

# Testing

The testing focus will be on the functional process of importing new sales data using the sales tracking tool, testing the report-generating tool, and testing the forecasting system.

# functional testing

The three tests to be conducted will be functional testing of three different systems to ensure they are working to the required specifications.

# Sales information importation

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| Requirement to be tested   * Ensure the sales information is properly imported. * Ensure no error message is received. * Test the functionality of the system |
| Preconditions: Conditions that must be present before test case can successfully run   * Customer information * Product or service code |
| Steps: The steps tester must execute to test the feature.   1. Open the sales tracking system. 2. Click “Import/Export Sales Data”. 3. Click “Import New Sales Data”. 4. Wait for the system to import new sales data. 5. Once the new data is imported, select “Save all to”. 6. Select “Sales” on the company server. 7. Click “Save”. 8. Then close the sales tracking system. |
| Expected results: Expected results and any side effects such as updating a database, writing to a file, etc.  The expected result will import new customer sales records and save them to the company server for later use. This will update the customer’s file to reflect what products or goods they have purchased, and the amounts spent on those goods. |
| Pass/Fail: Mark whether the test case passed or failed. The results can be compiled and used to determine if the application is ready for delivery/release.  The test case passed. The result is ready for release, and customer sales data imported as expected. Once imported, data was saved to the database updating customers' reports reflecting such. |

# Report generation

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| Requirement to be tested   * Ensure that company sales details are accurately pulled from the system. * Ensure no error message is received. * Ensure functionality of the system |
| Preconditions: Conditions that must be present before test case can successfully run   * The customer sales information must already exist within the CRM system. |
| Steps: The steps tester must execute to test the feature.   1. Open reporting tool in the CRM 2. Click “Generate New Report”. 3. Select from the options of reports to generate. 4. Select the time frame for the report. 5. Click “Generate Report”. |
| Expected results: Expected results and any side effects such as updating a database, writing to a file, etc.  The expected result will pull the appropriate information from the database and generate a report based on the information required and the time frame selected. |
| Pass/Fail: Mark whether the test case passed or failed. The results can be compiled and used to determine if the application is ready for delivery/release.  The test passed by accurately generating a report of sales from a given period. This will allow the company to accurately measure sales performance and what products/services are currently in demand. This application is ready for release. |

# Forecast Generation

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| Requirement to be tested   * Test the functionality of the system. * Ensure no error message is received. * Ensure importation of historical data is accurate. |
| Preconditions: Conditions that must be present before test case can successfully run   * Ensure availability to access historical reports. |
| Steps: The steps tester must execute to test the feature.   1. Open the forecasting tool. 2. Click “Import Reports” 3. Select all reports you wish to compare. 4. Click “Run” 5. Allow the tool to run. 6. Once completed, review all historical data side by side to ensure accuracy. |
| Expected results: Expected results and any side effects such as updating a database, writing to a file, etc.  The expected result of this test will create a side-by-side analysis of all selected reports. Allowing for management to accurately forecast the growth of the company and projects for the coming quarter. |
| Pass/Fail: Mark whether the test case passed or failed. The results can be compiled and used to determine if the application is ready for delivery/release.  This test passed by successfully generating analysis reports for the past 5 years, showing an increase in sales. Allowing for management to create an estimated project of what sales will be like next quarter. This application is ready for release |

# Sources

1.) “Agile Methodology: Advantages and Disadvantages.” *College of Continuing and Professional Studies*, 11 Feb. 2022, https://ccaps.umn.edu/story/agile-methodology-advantages-and-disadvantages.