**PROJECT REQUIREMENTS**

openLibrary

Tai Gunter

Ethan Madden

**Company Description**

At this time, our company is only focused on creating an open-source application to manage a library. This application can be used to manage a full-scale library or one at the personal level. We have not yet begun plans to expand the company in such a way that we are looking at other program options. In the future, we may have plans to make more programs, but we will likely stay with the current model of open-source, functional, and efficient programs which concentrating on user input to remain up to date and usable.

**Purpose and Goals of the Purposed Application**

The goal of the application is to allow library managers to simply and efficiently manage all of their data. The items that this program will be able to store are books, music, and movies. There is currently no need for other items to be stored in the library/database, but if the need were to arise, the application could be modified to support these features.

When the manager seeks to add a new item, all that will be required of them is the ISBN. Using the Amazon API, the application will lookup the ISBN and find the necessary information to fill the rest of the fields in the database.

The application will be able to support customers checking in or checking out items. A customer would bring their “Library Card” as well as the items they are looking to check out. The application will keep track of which customers have checked out which items.

The application will also support employees and customers of the library. If the manager hires a new employee, he will be able to quickly and easily add them to the system with their personal information. When the user comes to work, they will be able to login to the system, clock in, and have their hours recorded. At the end of their shift, they will clock out, and the hours recorded will stop. Customers will be added into the system so that records can be kept as to who has books/movies/music currently checked out.

The application will have receipt printing functionality, so after the book checkout process is completed, the application will print a receipt for the customer to take with them.

**Sources of Knowledge**

The basics behind a library management system are relatively simple, it doesn’t take a lot of understanding to find out how something like that works. We are designing the application in such a way that someone that hasn’t used a library management system before can use one without having any prior knowledge. It shouldn’t be that hard to understand and there will be simple help files included in the program for users to look at if they do get confused.

We will also talk to the client and see what they think to better understand features that the program needs to implement.

**Benefit to all persons**

The most benefited person through is project is the library manager. They will be able to run their entire library through this program. Naturally, Ethan and I, the programmers of the project will benefit from the experienced gained by writing the project.

**User Profile**

The user that will be using the program does not need any experience with Access or other programs. Basic computer knowledge should be enough to run the program. There will be help files included with the program that will help the user understand how to use features they are unsure of.

**Usability Testing Strategy**

To test usability, we’ll be using actual books, music, and movies to test the application. The client will also be available to test the application and tell us any issues they are having. We will try to get other people to use the application as well and see what they think of it. Through enough testing, we should be able to understand issues that the program has. We’ll try to make the application as error-proof as possible since the user should not need previous high-end computer knowledge to operate it. Testing will be done on a regular schedule as we write the code for each section of the project.

**Anticipated Problems**

Problem: Challenges with Amazon API

Solution: Research other implemented solutions and read their code

Problem: Issues with printing receipts

Solution: Research other coding solutions that work correctly.

Problem: Issues with adding items

Solution: Research SQL statements and possible issues within app code

Problem: Issues with clocking in/out users

Solution: Research functional coding solutions