Therpston County Public Library Database

Design by Ambiguous Declaration (Rashawn Butler, Michael Liao, Pierce Mason) for CSC 362: Databases

# Mission and Objectives

## Mission Statement

The purpose of the Therpston County Public Library database is to maintain the data required for the library's operations and bookkeeping. It also will supply information that helps the library support services for the community and other patrons.

## Objectives

* Maintain information on library patrons.
* Keep track of clubs and their members.
* Track exchanges (loans, renewals, returns) of library materials.
* Keep track of holds placed on library materials.
* Track late fees on unreturned materials.
* Maintain information on stored materials.
* Keep track of reservations placed on rooms.
* Highlight connections between print and multimedia.

# Table of Contents

[Mission and Objectives 1](#_jsi3z6cgzcho)

[Mission Statement 1](#_knb8wb9hsfwq)

[Objectives 1](#_w0vy0xd6fsmb)

[Table of Contents 2](#_i1xnvj7vdvss)

[Tables, Fields, & Explanations 4](#_n64cuskk8tb)

[Selection 4](#_n7e2ijil0oab)

[Fields 4](#_ttx5lw7trsmm)

[Print Materials 4](#_xgaq2z24vbiw)

[Fields 5](#_36f35joj6wbp)

[Print Types 5](#_1lxdwk7fmxsz)

[Fields 5](#_1k9ewi59zyqb)

[Multimedia 5](#_8fs8n5okyko2)

[Fields 5](#_dd16o1r773qk)

[Multimedia Types 6](#_ba5em8umsido)

[Fields 6](#_7mftg489ixc4)

[Narratives 6](#_jaj38uu7w7g8)

[Fields 6](#_jc5ykffqm4zf)

[Adaptations 6](#_c4x1kvlp2i48)

[Fields 6](#_cyj5wige2uug)

[Selection Languages 7](#_e9794xgkteoe)

[Fields 7](#_5g0c39okbr9y)

[Languages 7](#_fhphaxt67us7)

[Fields 7](#_1bhsd3l5u0su)

[Selection Creators 7](#_vceuxh17hny7)

[Fields 8](#_4eal2i893p88)

[Creators 8](#_bnvbvx2aefou)

[Fields 8](#_3m6vis7gpaby)

[Creator Roles 8](#_toi65q7wyr6a)

[Fields 8](#_tk6kythlszxh)

[Selection Genres 8](#_y43vdla9g602)

[Fields 9](#_fduppluul5vs)

[Genres 9](#_lv5nspbi3n1n)

[Fields 9](#_jfsmdhxndon7)

[Patrons 9](#_tspcsqqk2urz)

[Fields 9](#_kd93v1fhzqxy)

[Patron-Selection Interactions 10](#_p7pagtqu6cbg)

[Fields 10](#_2pqo3tu0n2qg)

[Loans 10](#_w7t6minrmkxk)

[Fields 10](#_xmjuy7aiyz7m)

[Holds 10](#_n6uo7ofulosd)

[Fields 11](#_7gf6kus7lyln)

[Clubs 11](#_fvip6q45qk6z)

[Fields 11](#_yefeb02i98dm)

[Club Members 11](#_z055xx1enhbl)

[Fields 11](#_4rb0bpoft262)

[Spaces 12](#_whv12j3c32ur)

[Fields 12](#_798v8nejghbd)

[Space Reservations 12](#_4e7d2kd0mzkx)

[Fields 12](#_1644x6vwryzu)

[Club Reservations 13](#_udabtyhb072e)

[Fields 13](#_wo1345k6rjpk)

[Business Rules & Explanations 14](#_8uko98u7t73i)

[Selection Cascade Delete 14](#_56tvbxjedgc5)

[Patron Cascade Delete 14](#_pvtbnvynvkwg)

[Space Deny Delete 14](#_to1amopx8k6e)

[Space Reservation End Date Must Be After Start Date 14](#_nve82yz9gobp)

[Patron Email or Patron Phone Must Be Non-null 14](#_fvihhiewcn89)

[Hold Date Requested Cannot Be In Future 15](#_7574zpm8eide)

[Loan Return Date Cannot Be In Future 15](#_8lskg1b7odxv)

[Can Only Renew Loan For Print Material Four Times 15](#_uohwrvzb6eob)

[Can Only Renew Loan For Multimedia Material Two Times 15](#_qvboexsn8uer)

[Club Name Must Be Unique 15](#_wi9rztur1bfi)

[Patrons Can Check Out Up To 10 Print Materials At Once 15](#_52rpymx8e4on)

[Patrons Can Check Out Up To 4 Multimedia Materials At Once 16](#_7anc5eqedwz7)

[Entity-Relationship Diagram (on next page) 16](#_k0xi1041vbg)

[Appendix 18](#_wmp1hapbbwbm)

[Field Specification Forms 18](#_ruip441a5w0f)

[Club\_Members.PatronID.txt 18](#_hbz79uojlqg6)

[Creators.Creator\_Last\_Name.txt 19](#_7yiggx9d3d2x)

[Loan.RenewalTally.txt 21](#_7jbiwb252aw6)

[Club\_Members.ClubID.txt 23](#_3ghb0bciynn2)

[Club\_Reservations.ReservationID.txt 24](#_1g1msvywi4rg)

[Selection\_Languages.Material\_ID.txt 26](#_kf2b572g4051)

[PrintTypes.PrintType.txt 28](#_62nlkwk4kwj)

[Patrons.Phone.txt 29](#_u0mpkbgpj0kn)

[Club\_Members.isLeader.txt 31](#_2soozkvgd5gv)

[Selection.MaterialPrice.txt 33](#_cyc7vq10cayq)

[Creator\_Roles.Creator\_Role.txt 34](#_5eq4zulvs9r6)

[Spaces.Space\_ID.txt 36](#_jpl2pirz8u9f)

[PrintMaterials.MaterialID.txt 38](#_52syi6bcwofo)

[Selection.MaterialDateReceived.txt 39](#_kon3xryu8zfr)

[Club.ID.txt 41](#_pbs9ipz5f7vn)

[Patrons.LastName.txt 43](#_u8ufbb2wmz)

[Spaces.Space\_Room\_Number.txt 44](#_391r8pce2kph)

[Club\_Members.MemberInfo.txt 46](#_2l39zcpvoa8g)

[Multimedia.Duration.txt 48](#_l7rfm0vbt3j3)

[Spaces.Space\_Capacity.txt 49](#_bzusq1c9ptpw)

[Patrons.FirstName.txt 51](#_uyhbd5anl7ts)

[SpaceReservations.ReservationNotes.txt 53](#_ascr17dnaaxt)

[Multimedia.MaterialID.txt 54](#_inm0ale3rch6)

[SpaceReservations.SpaceID.txt 56](#_vxs43rqd6rf2)

[Selection\_Creators.Material\_ID.txt 58](#_ng5jrmhva3iz)

[Holds.DateRequested.txt 59](#_yv25se1eps8o)

[Genres.Genre\_Name.txt 61](#_ha76mo6tlair)

[Selection\_Genres.Material\_ID.txt 63](#_zbvnundf7jnj)

[SpaceReservations.EndReservation.txt 64](#_oqsz3iuco2fp)

[Patron-SelectionInteractions.MaterialID.ixt 66](#_hxma31z0ndn3)

[SpaceReservations.StartReservation.txt 68](#_16zufoe3gevo)

[Narratives.NarrativeID.txt 69](#_nifubagtyojs)

[Selection\_Creators.Creator\_ID.txt 71](#_nqobpnaeys4)

[Languages.Language\_Name.txt 73](#_5bu176ckf4q6)

[Multimedia\_Types.MultimediaType.txt 74](#_hlz5e9ic0uj6)

[Selection\_Creators.Creator\_Role.txt 76](#_859ifqrskr4v)

[Club\_Reservations.ClubID.txt 78](#_1bcb9xa0q5ng)

[Club.Name.txt 79](#_9mdvhigkd09p)

[Selection\_Genres.Genre\_Name.txt 81](#_ag17ecmgx2vt)

[Selection.MaterialTitle.txt 83](#_y6t41xyedlf8)

[Adaptations.MaterialID.txt 84](#_fq191ckwtlf5)

[PrintMaterials.PrintType.txt 86](#_y7n2igr5xey2)

[Selection\_Languages.Language\_Name.txt 88](#_xvh8ol4s9d01)

[PrintMaterials.PageCount.txt 91](#_qi1ibrvyxey)

[Patron-SelectionInteractions.ID.txt 94](#_45fposi7lhcv)

[Patrons.ID.txt 114](#_7rtmqbib0cqp)

[Selection.MaterialIsPending.txt 116](#_nfl0m3o61xfa)

[Business Rule Specification Forms 130](#_xafe5wgiprjd)

# 

# 

# Tables, Fields, & Explanations

## Selection

The materials (both current and soon-to-be) held by the library meant to be loaned out. This will reflect only the materials the library has currently or soon will have; past materials are not of importance. Storing this information is key to managing the collection of materials the library can lend out.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Material ID | A unique numeric identifier for materials stored in the library’s selection, to help distinguish between them. |
| Material Title | The variable-character title of a material stored in the library’s selection. Multiple items could share a name, but regardless this is a key attribute of any stored materials. |
| Material Date Received | The date a material arrives at the library. Note that at this point the item has not been guaranteed to have been entered into the selection for general perusal. |
| Material Date Created | The date a material is first officially published and ready for consumption, an identifying attribute for items with multiple editions. |
| Material isPending | A boolean indicating whether or not a material is ready for checking out. |
| Material Price | A cost (in American USD) represented by a float that keeps track of how much it costs to purchase this item (discounts disregarded). This will enable us to issue lost item fees if the need arises. |

## Print Materials

The printed materials like traditional and comic books or magazines, journals, and other periodicals that are (both current and soon-to-be) held by the library meant to be loaned out. This will reflect only the materials the library has currently or soon will have; past materials are not of importance. Storing this information is key to managing the collection of materials the library can lend out.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Material ID | A unique numeric identifier (from the Selection table) for (particularly) print materials stored in the library’s selection, to help distinguish between them. |
| Print Type | A variable-character type (from the Print Types table) that indicates what kind of print material it is. |
| Page Count | The number of pages in the specific piece print material. |

## Print Types

Stores the types of print materials offered by the library, such as text, articles, and periodicals. Ensures consistent nomenclature of this field in relation to every print material that fulfills this requirement.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Print Type | A unique variable-character type that a print material can be. This can help the library categorize print materials. |

## Multimedia

The materials that are not printed or otherwise are nontraditional items the library has or will have for loaning; like films, TV show episodes, audiobooks, etc. This will reflect only the materials the library has currently or soon will have; past materials are not of importance. Storing this information is key to managing the collection of materials the library can lend out.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Material ID | A unique numeric identifier (from the Selection table) for (particularly) multimedia materials stored in the library’s selection, to help distinguish between them. |
| Multimedia Type | A variable-character type (from the Multimedia Types table) that indicates what kind of multimedia material it is. |
| Duration | The time a multimedia material takes to consume in completion when done so at normal speed. |

## Multimedia Types

Stores the types of multimedia materials offered by the library, such as film and audiobook. Ensures consistent nomenclature of this field in relation to every print material that fulfills this requirement.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Multimedia Type | A unique variable-character type that a multimedia material can be. This can help the library categorize multimedia materials. |

## Narratives

The core stories behind or depicted by the materials the library has stored. This is vital to maintaining connections of different versions of the same story, as identifying the underlying original narrative can help in that regard.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Narrative ID | A unique numeric identifier that distinguishes between different narratives. |
| Narrative Name | The variable-character name of a given narrative (often the common use one, e.g. *Cinderella*) that allows the library to track different adaptations of the same story. |
| Narrative Description | A variable-character description that provides a summary or synopsis of what the narrative entails, for further clarity. |

## Adaptations

The connections between items in the library and their narratives. This depicts the connections between print stories and their different multimedia versions, or indeed between print and other print versions, multimedia and other multimedia versions, important to the goals set out by the library.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Narrative ID | A numeric identifier (from the Narratives table) to indicate which narrative is being adapted. |
| Material ID | A numeric identifier (from the Selection table) to indicate which material in the library’s collection actually contains an adaptation. |
| Material isSource | A boolean indicator of whether or not the material adapting the linked narrative happens to be the progenitor of it. |

## Selection Languages

The languages in which a selection can be offered. This is important to store to identify which language a selection is offered.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Material ID | A numeric identifier (from the Selection table) to indicate which material in the library’s collection has the linked languages. |
| Language Name | A variable character identifier (from the Languages table) that indicates what language the linked material is in. |

## Languages

The languages in which something in the library's database may be stored. This is important for quick reference on which languages are extensively offered in the library's selection.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Language Name | A unique variable-character language that the library is aware of and could potentially be the languages used in stored materials. |

## Selection Creators

The creators or otherwise significantly-involved individuals that are related to a given material stored in the library’s selection. This will hold relevant data to individuals interested in a particular figure and their works, e.g. a director or an author.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Material ID | A numeric identifier (from the Selection table) to indicate which material has which linked creators participating in which linked roles. |
| Creator ID | A numeric identifier (from the Creators table) to indicate which creator is involved in the creation of a linked material in what linked role. |
| Creator Role | A variable-character role that an individual linked creator might play in the creation of a linked material. |

## Creators

The people involved in creating works that the library has an interest in storing and keeping track of; e.g. Martin Scorcese.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Creator ID | A unique numeric identifier that distinguishes between different creators of works that may be in the library or be of interest to patrons. |
| Creator First Name | The variable-character first name of a person who is involved in the creation of media the library might store. |
| Creator Last Name | The variable-character last name of a person who is involved in the creation of media the library might store. |

## Creator Roles

The different roles a person can take on in the act of making a piece that the library can store. This will help distinguish between writers on a show from the director, for example.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Creator Role | A unique variable-character role that a person can play in creating a piece of media. |

## Selection Genres

The genres in which a selection is categorized. This is important to store so a patron can identify which genres a selection is offered, and potentially narrow their search on the selection.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Material ID | A numeric identifier (from the Selection table) to indicate which material in the library’s collection has the linked genres. |
| Genre Name | A variable-character identifier (from the Genres table) to indicate which genres linked materials fall under. |

## Genres

The genres in which something in the library's database may be categorized. This is important for quick reference on which genres are recognized in the library's selection.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Genre Name | A unique variable-character name of a genre the library is categorizing its materials under. |

## Patrons

The individuals who have accounts with the library and can access its services. Information stored here is useful to the library for identifying who may check out what materials and for contacting them regarding those materials.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Patron ID | A unique numeric identifier for the patrons of the library. This helps to separate patrons with similar names, emails, or phone numbers. |
| Patron First Name | A variable-character first name of a patron. |
| Patron Last Name | A variable character last name of a patron. |
| Patron Email | A variable-character email contact for a patron. This field can be null; however, Patron Phone must not be null. |
| Patron Phone | A variable-character contact for a patron. This field can be null; however, Patron email must not be null. |

## Patron-Selection Interactions

The interactions between patrons of the library and the materials held by the library. This kind of information is important to store so that there is an active and ongoing record of exchanges of materials with patrons, for maintenance of the services the library can provide.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Interaction ID | A unique numeric identifier for an interaction a patron can have with the library’s materials. |
| Material ID | A numeric identifier (from the Selection table) to indicate which material is participating in a given interaction. |
| Patron ID | A numeric identifier (from the Patrons table) that indicates which patron has interacted with linked materials. |

## Loans

The specific checkings-out of materials the library holds to the patrons at the library. This kind of information is important to store so that there is an active and ongoing record of exchanges of materials with patrons, for maintenance of the services the library can provide.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Interaction ID | A unique numeric identifier (from the Patron-Selection Interactions table) that distinguishes between specifically loan interactions. |
| Loan Start Date | A date for when a loan of a library material began, for tracking the loan itself. |
| Loan Return Date | The date when a patron has actually returned a given loaned material back to the library. |
| Loan Renewal Tally | A numeric tally of the amount of times a loan has been renewed. This will be limited according to the library’s wishes. |

## Holds

The people waiting for materials that are already checked out. Storing this information allows the library to determine who is next in line for high-demand materials and enable a smooth transfer process between them.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Interaction ID | A unique numeric identifier (from the Patron-Selection Interactions table) that distinguishes between specifically hold interactions. |
| Hold Date Requested | A date and time showing at what time a hold request was made. This allows us to keep track of the queue (first come first serve) for holds placed on a book. |

## Clubs

The groups of people that meet at the library to engage in various activities. This information allows the library to see what their patrons are actively engaged in and better support their needs.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Club ID | An unique numeric identifier that distinguishes between clubs. ID is kept for consistency’s sake across the database. |
| Club Name | A unique variable-character club name that identifies the club to humans. |
| Club Description | A variable-character description detailing the purpose of a club and the activities that they partake in. |

## Club Members

Stores the clubs and associated members. It is important to store to streamline communication between a patron and the clubs they may be a part of. Furthermore, we can keep track of who the point person for a club is by specifying whether or not a member might lead their club.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Club ID | A numeric identifier (from the Clubs table) that associates a club with its linked members. |
| Patron ID | A numeric identifier (from the Patrons table) that stores which patron is a member of a linked club. |
| Member Info | A variable-character description detailing specific notes about a member. For example: If a food club has a patron with an allergy, then that would be detailed here. |
| Member isLeader | A boolean value that shows if a club member is a leader in that club. |

## Spaces

The spaces that are physically present in the library. Storing this information differentiates the (past and current) physical spaces of the library that may be of use to administration or patrons.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Space ID | A unique numerical identifier used to distinguish physical spaces in the library from one another. |
| Space Name | A variable-character name which is the common-use name of the space. |
| Space Room Number | A variable-character number that describes the floor number and location, according to building code in Therpston County. |
| Space Capacity | The maximum number of people a space can hold without violating fire code. |

## Space Reservations

The reservations in which patrons plan to use the spaces in the library. Storing this information allows for reservations of spaces in advance, and tracking which areas were used for which purposes.

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Reservation ID | A unique numerical identifier used to separate reservations from one another. |
| Patron ID | A numerical identifier (from the Patrons table) indicating which patron has reserved a linked space. |
| Space ID | A numerical identifier (from the Spaces table) indicating which space has been reserved by the linked patron. |
| Start Reservation | The date and time of the beginning of a reservation. This helps the library keep track of when a space should be blocked off. |
| End Reservation | The date and time of the end of a reservation. This signals to the library when a space is free. |
| Reservation Notes | A variable-character note that allows the space-reserving patron to request certain things or warn ahead of time of special needs. For example, if a reservation for an event will likely be loud, it is important to know that beforehand. |

## Club Reservations

The reservations for spaces (on behalf of a club) for a given period. Storing this information allows for a more transparent display of how a space might be used, and whether it is for work more directly affiliated with the library (i.e. a club) or more independent (in the case that the reservation does not have a record in this table).

### Fields

| **Field Name** | **Specifications & Rationale** |
| --- | --- |
| Reservation ID | A unique numeric identifier (from the Reservations table) used to show which reservation we’re referring to. |
| Club ID | A numeric identifier indicating which club had made the reservation. |

### 

# Business Rules & Explanations

*Descriptions of how you will implement each of your client's stated business rules. This description amounts to an enhanced version of the "Action Taken" part of the business rule specification form. As much as possible, this description should be at a high level appropriate for your non-expert client. If you must reference implementation details like triggers, you can avoid using technical terms by saying, for example, that certain actions will be taken, or checks will be performed before a record is added to a table.*

## Selection Cascade Delete

If any material from our selection is deselected, we want to delete all records relating to that material. We have no more need for that information because we no longer have that piece of material. If there is a hold or an active loan on a material, we will avoid deselecting it.

## Patron Cascade Delete

Under most circumstances, we will implement a deny deletion for inactive patrons. This way we can reactivate their account if needed. However, if asked, we will delete all records pertaining to a certain patron and then records in related tables that relate to that patron.

## Space Deny Delete

If the library is ever renovated and a room is removed or changed, we want to keep hold of the data stored on that room. This allows us to keep track of which clubs and patrons have reserved these rooms. Furthermore, this allows us to keep track of how much each room is getting reserved.

## Type Nullify Delete

We would not want to delete our current data on the selection of materials whenever we reclassify types. Even if we decide that it is incorrect to classify e.g. journals differently from magazines, we would rather leave the type field blank than remove all data on it.

## Space Reservations Cannot Overlap

If a patron reserves a space for a given time, we must not allow other patrons to schedule over top of them. We are offering these resources on a first-come-first-serve basis, and to prevent consternation and confusion, we ought to block reservations that interfere with existing ones on the same space.

## Loans Cannot Overlap

A material, once checked out to a patron, cannot also be checked out by a different patron (or for that matter, again by the existing patron - that should better be served as a renewal). It would be quite frustrating to check out a book only to find that it has already been promised to another; we should block this case from occurring. Materials cannot be checked out if they have not been returned yet.

## Cannot Place Hold on Unloaned Material

We don’t want to allow patrons to “pre-order” materials – they must authentically be ready for their material at the moment they want to check it out. Otherwise, a patron might be able to place holds on too many materials to lock out other patrons who might want the material right away. Therefore, it is best to disallow placing holds on materials that aren’t currently unavailable.

## Patron Cannot Place Hold on Their Own Loan

In order to stop patrons from exploiting the hold system, we don’t want to let them place holds on a material they’ve already checked out (in order to immediately get it again after they’ve returned it).

## Patron Cannot Place Multiple Holds on the Same Item

This rule is here to ensure that a patron cannot exploit the hold system - each patron can only place a single hold on a single checked-out loan. We want to prevent the case where a patron can check a material out indefinitely by having multiple holds queued up (since when their first hold resolves and they are made to return the material, their next hold would allow them to re-check out the item).

## Space Reservation End Date Must Be After Start Date

This rule is in place to prevent time paradoxes. It wouldn't be of use to any patron if the start of their reservation was tomorrow but the reservation ended yesterday. This rule helps with making a reservation easier as patrons don't have to worry about dates in the past.

## Patron Email or Patron Phone Must Be Non-null

This rule is in place to ensure that the library has some way of contacting any patron for notifications and reminders of returns. These fields don't have to be unique, as multiple patrons can be tied to a single email or number. Furthermore, we can allow both to be filled; as the more ways to contact a patron, the better.

## Hold Date Requested Cannot Be In Future

This rule is in place to keep the possible queue for patrons in order. We want to specifically know when a patron submitted a request and nothing else. Allowing this time to be in the future simply disadvantages any patron who would want to put a hold for some material at the moment.

## Loan Return Date Cannot Be In Future

This rule is in place to prevent time paradoxes. The library has no way of knowing for certain when a loan will be returned, or indeed if it will be returned at all. As such we aren't allowing this field to be filled with times in the future, and will only fill in the date when the materials are actually returned and properly processed by a librarian.

## Can Only Renew Loan For Print Material Four Times

This rule is in place to maintain the circulation of print materials. We want to give patron plenty of time to embrace the content in a material, but also ensure that other patrons will be able to get the material in a timely fashion. The number of renewals is greater than multimedia as it typically takes longer to finish.

## Can Only Renew Loan For Multimedia Material Two Times

This rule is in place to maintain the circulation of multimedia materials. We want to give patron plenty of time to embrace the content in a material, but also ensure that other patrons will be able to get the material in a timely fashion. The number of renewals is lower for multimedia because it typically takes less time to consume.

## Club Name Must Be Unique

This rule is in place to prevent two clubs from having the same name. In most circumstances, if two clubs have the same name, they serve the same purpose. So here we want club names to accurately reflect what the club does. This also will prevent confusion amongst patrons when they go to see what clubs are available.

## Patrons Can Check Out Up To 10 Print Materials At Once

This rule is in place to prevent a single patron from checking out too many print materials. While we encourage patrons to read as much as they can, checking out anything over 10 print materials makes it harder for other patrons to find materials that they want. Furthermore, it means there is a higher chance of materials being lost or damaged the longer it takes for materials to be returned.

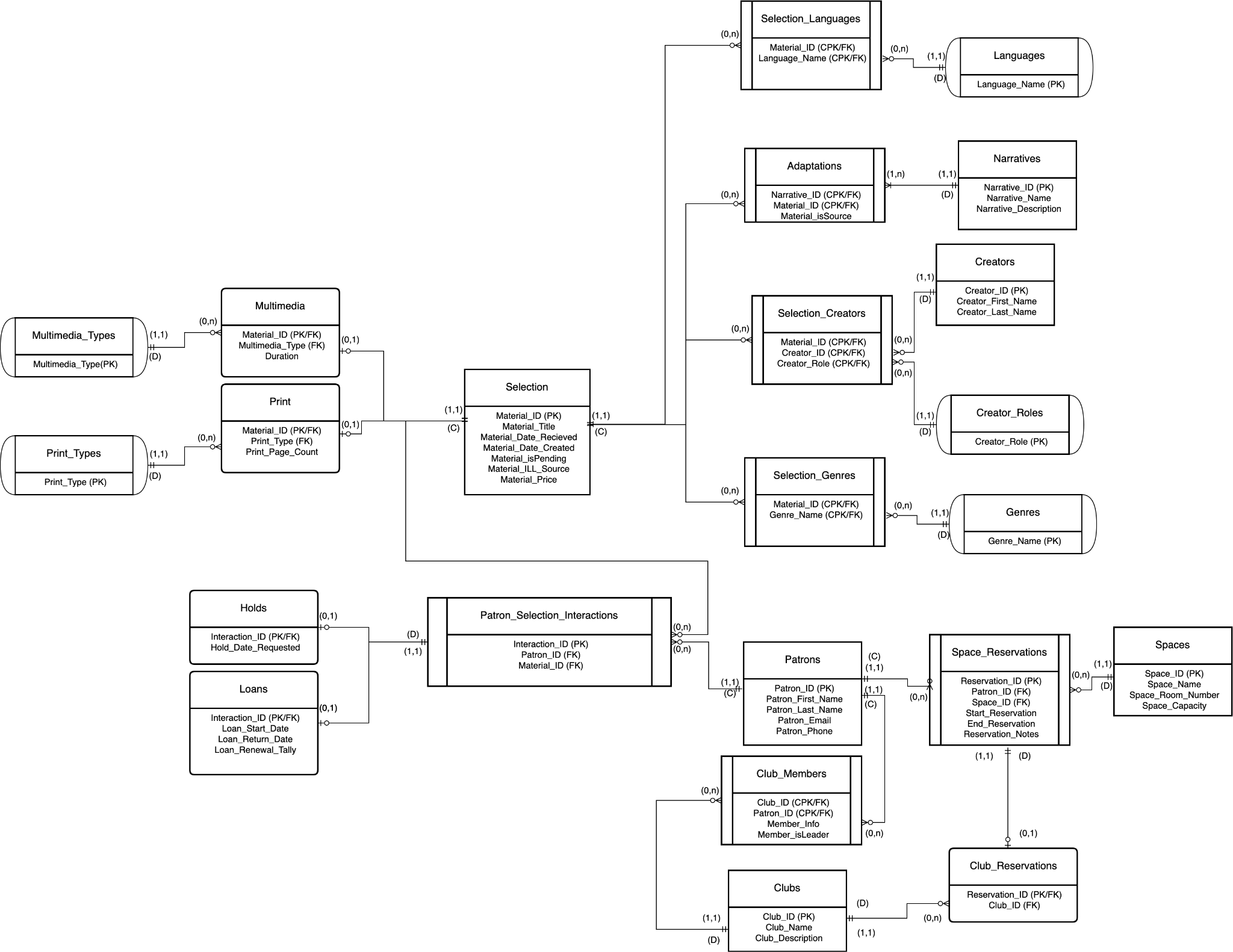
## Patrons Can Check Out Up To 4 Multimedia Materials At Once

This rule is in place to prevent a single patron from checking out too many multimedia materials. While we encourage patrons to access our materials as much as they can, checking out anything over 4 multimedia materials makes it harder for other patrons to find materials that they want. Furthermore, it means there is a higher chance of materials being lost or damaged the longer it takes for materials to be returned. The number of materials is lower in this rule because multimedia materials are typically more expensive to replace multimedia material than print material.

# Entity-Relationship Diagram (on next page)

You can also find [an SVG version of it linked below and here](https://drive.google.com/file/d/1EBxzYug2tFoyb1miyy766kAmjPpsaQUn/view?usp=sharing).

<https://drive.google.com/file/d/1EBxzYug2tFoyb1miyy766kAmjPpsaQUn/view?usp=sharing>



# Appendix

## Field Specification Forms

### Club\_Members.PatronID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Patron ID

Parent Table: Club\_Members

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: Patrons

Description: An identifier used to indicate which patron is a member of a linked club.

PHYSICAL ELEMENTS

Data Type: INT

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: X

Alternate: \_

Key Structure: Simple: \_

Composite: X

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid Patron ID from the home Patrons table.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Creators.Creator\_Last\_Name.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Creator Last Name

Parent Table: Creators

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: \_

Shared By: \_

Description: The last name of a creator of a particular material. Helpful for colloquial identification.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): X

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid string within the length.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Loan.RenewalTally.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Loan Renewal Tally

Parent Table: Loans

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: N/A

Shared By: \_

Description: Tallys the amount of renewals a loan has.

PHYSICAL ELEMENTS

Data Type: INT

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Whatever value the library decides on

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Club\_Members.ClubID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Club ID

Parent Table: Club\_Members

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: Clubs

Description: An identifier used to indicate which club the members of the table are linked to.

PHYSICAL ELEMENTS

Data Type: INT

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: X

Alternate: \_

Key Structure: Simple: \_

Composite: X

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid Club ID from the home Clubs table.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Club\_Reservations.ReservationID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Reservation ID

Parent Table: Club\_Reservations

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: Space\_Reservations

Description: A unique identifier that distinguishes between different reservations posted for spaces from clubs.

PHYSICAL ELEMENTS

Data Type: INT

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: An existing Reservation ID from the home Space\_Reservations table.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection\_Languages.Material\_ID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material ID

Parent Table: Selection Languages

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Selection Print Materials Multimedia Adaptations

Description: Stores the ID of a material for identifying which material can be consumed in a particular language.

PHYSICAL ELEMENTS

Data Type: Int

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Valid number in the list of MaterialIDs

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### PrintTypes.PrintType.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Print Type

Parent Table: Print Types

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: Type

Shared By: \_

Description: An indicator of role or category to help delineate between kinds of some subject that do not substantially change the characteristic -- mostly for organizing sections of data for filtering reasons.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 32

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Valid strings in the character limit.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Patrons.Phone.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Patron Phone

Parent Table: Patrons

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: A phone number used to contact a patron of the library.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 14

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: X

No nulls: \_

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: A valid ten-digit phone number, in the format (XXX) XXX-XXXX.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: Only one of Patron.Email or Patron.Phone can be null.

### Club\_Members.isLeader.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: isLeader

Parent Table: Club\_Members

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: An indicator of whether or not a patron is a leader of the associated club.

PHYSICAL ELEMENTS

Data Type: BOOLEAN

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: FALSE or TRUE.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection.MaterialPrice.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material Price

Parent Table: Selection

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: N/A

Shared By: Print Materials, Multimedia

Description: The price of the material. This is important when computing fees for losing items.

PHYSICAL ELEMENTS

Data Type: DECIMAL

Length: \_

Decimal Places: 2

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid price (nonnegative)

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Creator\_Roles.Creator\_Role.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Creator Role

Parent Table: Creator Roles

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: The role a creator filled in creating the content of a material.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 32

Decimal Places: \_

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any alphabetical string.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Spaces.Space\_ID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Space ID

Parent Table: Spaces

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: N/A

Shared By:

Description: The integer used to uniquely identify a space in our library. It is important because

it allows us to identify between renovation periods where room numbers can be reassigned.

PHYSICAL ELEMENTS

Data Type: Int

Length: N/A

Decimal Places: 0

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: 0-\*

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### PrintMaterials.MaterialID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material ID

Parent Table: Print Materials

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: \_

Shared By: Selection

Description: The ID of a material stored by the library, which can be used to identify it.

PHYSICAL ELEMENTS

Data Type: INT

Length: \_

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid integer from 1 onward.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection.MaterialDateReceived.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material Date Received

Parent Table: Collection

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: N/A

Shared By: Print Materials, Multimedia

Description: Stores the time the library gains access to this particular material.

PHYSICAL ELEMENTS

Data Type: DATE

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Valid times in the past

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Club.ID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Club ID

Parent Table: Clubs

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: This is the unique ID we will use to identify each Club

PHYSICAL ELEMENTS

Data Type: Int

Length: \_

Decimal Places: \_

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: 1 to any number

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Patrons.LastName.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Patron Last Name

Parent Table: Patrons

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: \_

Shared By: \_

Description: The last name of a patron.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): X

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid string within the length.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Spaces.Space\_Room\_Number.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Space Room Number

Parent Table: Spaces

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: \_

Shared By: \_

Description: The room number of the space.

PHYSICAL ELEMENTS

Data Type: INT

Length: \_

Decimal Places: \_

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: X

No nulls: \_

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X (b/c null)

Range of Values: Any valid (positive) integer.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Club\_Members.MemberInfo.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Member Info

Parent Table: Club\_Members

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: A note on a member that holds important or otherwise noteworthy details about them for club to be aware of.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): X

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: X

No nulls: \_

Values Entered By: User: X

System: \_

Required Value: No: X

Yes: \_

Range of Values: Any valid string.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Multimedia.Duration.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Multimedia Duration

Parent Table: Multimedia

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: The watchtime or length of a multimedia piece.

PHYSICAL ELEMENTS

Data Type: TIME

Length: \_

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid duration represented by hours, minutes, and seconds.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Spaces.Space\_Capacity.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Space Capacity

Parent Table: Spaces

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: \_

Shared By: \_

Description: The number of people the space can hold.

PHYSICAL ELEMENTS

Data Type: INT

Length: \_

Decimal Places: \_

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: X

No nulls: \_

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X (b/c null)

Range of Values: Any valid (positive) integer.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Patrons.FirstName.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Patron First Name

Parent Table: Patrons

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: \_

Shared By: \_

Description: The first name of a patron.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): X

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid string within the length.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### SpaceReservations.ReservationNotes.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Reservation Notes

Parent Table: Space Reservations

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: A note that allows the space-reserving patron to request certain things or warn ahead of time of special needs.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 1024

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): X

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: X

No nulls: \_

Values Entered By: User: X

System: \_

Required Value: No: X

Yes: \_

Range of Values: Any valid string.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Multimedia.MaterialID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material ID

Parent Table: Multimedia

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: \_

Shared By: Selection

Description: The ID of a material stored by the library, which can be used to identify it.

PHYSICAL ELEMENTS

Data Type: INT

Length: \_

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid integer from 1 onward.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### SpaceReservations.SpaceID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Space ID

Parent Table: Space Reservations

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: Spaces

Description: A numerical identifier indicating which space has been reserved by the linked patron.

PHYSICAL ELEMENTS

Data Type: INT

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: An existing Space ID from the home Spaces table.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection\_Creators.Material\_ID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material ID

Parent Table: Selection Creators

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Selection

Description: Stores the ID of a material for identifying which material has a particular associated creator.

PHYSICAL ELEMENTS

Data Type: Int

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Valid number in the list of MaterialIDs

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Holds.DateRequested.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Hold Date Requested

Parent Table: Holds

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: N/A

Shared By: \_

Description: Stores the original date which the hold was submitted.

PHYSICAL ELEMENTS

Data Type: DATE

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Valid times in the future

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Genres.Genre\_Name.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Genre Name

Parent Table: Genres

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: The name of a genre a particular material in the library falls under.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: \_

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any alphabetical string.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection\_Genres.Material\_ID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material ID

Parent Table: Selection Genres

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Selection

Description: Stores the ID of a material for identifying which material has a particular associated genre.

PHYSICAL ELEMENTS

Data Type: Int

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Valid number in the list of MaterialIDs

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### SpaceReservations.EndReservation.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: End Reservation

Parent Table: Space Reservations

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: The date and time of the end of a reservation. This signals to the library when a space is free.

PHYSICAL ELEMENTS

Data Type: DATETIME

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: A valid time that occurs after the corresponding End Reservation.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Patron-SelectionInteractions.MaterialID.ixt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material ID

Parent Table: Patron Selection Interactions

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Selection Print Materials Multimedia Adaptations

Description: Stores the ID of a media for identifying who had this interaction.

PHYSICAL ELEMENTS

Data Type: Int

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Valid numebr in the list of MaterialIDs

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### SpaceReservations.StartReservation.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Start Reservation

Parent Table: Space Reservations

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: The date and time of the beginning of a reservation. This helps the library keep track of when a space should be blocked off.

PHYSICAL ELEMENTS

Data Type: DATETIME

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid time before the corresponding End Reservation time.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Narratives.NarrativeID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Narratives Narrative ID

Parent Table: Narratives

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Adaptations

Description: Stores the ID of any narrative added to the Field.

PHYSICAL ELEMENTS

Data Type: INT

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Any valid number in the list of narrative id's

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection\_Creators.Creator\_ID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Creator ID

Parent Table: Selection Creators

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Creators

Description: Stores the ID of a creator for identifying which material has a particular associated creator.

PHYSICAL ELEMENTS

Data Type: Int

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Valid number in the list of CreatorIDs

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Languages.Language\_Name.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Language Name

Parent Table: Languages

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: The name of a language a particular material in the library can be consumed in.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: \_

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any alphabetical string.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Multimedia\_Types.MultimediaType.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Multimedia Type

Parent Table: Multimedia Types

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: Type

Shared By: \_

Description: An indicator of role or category to help delineate between kinds of some subject that do not substantially change the characteristic -- mostly for organizing sections of data for filtering reasons.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 32

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Valid strings in the character limit.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection\_Creators.Creator\_Role.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Creator Role

Parent Table: Selection Creators

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Creator Roles

Description: Stores the role a particular creator had in making a material.

PHYSICAL ELEMENTS

Data Type: Varchar

Length: 32

Decimal Places: N/A

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Valid value in the list of Creator Roles

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Club\_Reservations.ClubID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Club ID

Parent Table: Club\_Reservations

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: Clubs

Description: An identifier that indicates which club is associated with a given reservation.

PHYSICAL ELEMENTS

Data Type: INT

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: An existing Club ID from the home Clubs table.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Club.Name.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Club Name

Parent Table: Clubs

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: This is another way in which patrons can identify clubs.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: \_

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): X

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any combination of 256 characters

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection\_Genres.Genre\_Name.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Genre Name

Parent Table: Selection Genres

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Genres

Description: Stores the genre for which the linked material falls under.

PHYSICAL ELEMENTS

Data Type: Varchar

Length: 256

Decimal Places: N/A

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Valid value in the list of Genres

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection.MaterialTitle.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material Title

Parent Table: Selection

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: N/A

Shared By: Print Materials, Multimedia

Description: The full title of the material. This is important as it is the colloquial identifier for

most books, and so it will be a common way to recognize/search for a book.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: N/A

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Anything <256 characters that isn't the empty string

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Adaptations.MaterialID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Adaptations Material ID

Parent Table: Adaptations

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Selection, Print Materials, Narratives, Patron Selection Interactions

Description: Stores the ID of the material to trace back media.

PHYSICAL ELEMENTS

Data Type: INT

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: X

Alternate: \_

Key Structure: Simple: \_

Composite: X

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid number in the list of material id's

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### PrintMaterials.PrintType.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Print Type

Parent Table: Prin

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: Type

Shared By: Print Types

Description: An indicator of what type of multimedia a particular material is -- mostly for organizing sections of data for filtering reasons.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 32

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Strings in multimedia\_types table.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection\_Languages.Language\_Name.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Language Name

Parent Table: Selection Languages

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Languages

Description: Stores the language for which the linked material can be consumed in.

PHYSICAL ELEMENTS

Data Type: Varchar

Length: 256

Decimal Places: N/A

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Valid value in the list of Languages

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Multimedia.MultimediaType.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Multimedia Type

Parent Table: Multimedia

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: Type

Shared By: Multimedia Types

Description: An indicator of what type of multimedia a particular material is -- mostly for organizing sections of data for filtering reasons.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 32

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Strings in multimedia\_types table.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### PrintMaterials.PageCount.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Print Page Count

Parent Table: Print Materials

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: The number of pages in a printed piece.

PHYSICAL ELEMENTS

Data Type: INT

Length: \_

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any positive number.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Type.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Type

Parent Table: \_

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: \_

Shared By: \_

Description: An indicator of role or category to help delineate between kinds of some subject that do not substantially change the characteristic -- mostly for organizing sections of data for filtering reasons.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Will be used only in relation to validation tables - limited to values established there

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Patron-SelectionInteractions.ID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Interaction ID

Parent Table: Patron Selection Interactions

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: Loans Holds

Description: This will track every interaction of holds and loans from the library

PHYSICAL ELEMENTS

Data Type: Int

Length: \_

Decimal Places: \_

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: 1 to any number

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection.MaterialDateCreated.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material Date Created

Parent Table: Collection

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: N/A

Shared By: Print Materials, Multimedia

Description: Stores the original publishing date or release of a material.

PHYSICAL ELEMENTS

Data Type: DATE

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Valid times in the past

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Club.Description.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Club Description

Parent Table: Clubs

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: This will give a description of what the club does

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 1024

Decimal Places: \_

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): X

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: X

No nulls: \_

Values Entered By: User: X

System: \_

Required Value: No: X

Yes: \_

Range of Values: \_

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Loan.ReturnDate.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Loan Return Date

Parent Table: Loans

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: N/A

Shared By: \_

Description: Stores the original date which a piece of media is returned from a loan.

PHYSICAL ELEMENTS

Data Type: DATE

Length: 10

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Valid times in the past

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Creators.Creator\_ID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Creator ID

Parent Table: Languages

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: The unique identifier of a creator of a particular material. Helpful when they share the same name but have different projects they have worked on.

PHYSICAL ELEMENTS

Data Type: INT

Length: \_

Decimal Places: \_

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any unique integer.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Loan.EndDate.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Loan Start Date

Parent Table: Loans

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: N/A

Shared By: \_

Description: Stores the original end date of the loan.

PHYSICAL ELEMENTS

Data Type: DATE

Length: 10

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Valid times in the future

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Spaces.Space\_Name.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Space Name

Parent Table: Spaces

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: \_

Shared By: \_

Description: The name of the space, if it has a more specific one than its room number.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: X

No nulls: \_

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X (b/c null)

Range of Values: Any valid string within the length.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### SpaceReservations.PatronID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Patron ID

Parent Table: Space Reservations

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: Patrons

Description: A unique numerical identifier used to separate reservations from one another.

PHYSICAL ELEMENTS

Data Type: INT

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: An existing Patron ID from the home Patrons table.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Loans.InteractionID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Loans Interaction ID

Parent Table: Loans

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Patron Selection Interactions, Holds

Description: Stores the ID of the interaction to store this interaction as a loan.

PHYSICAL ELEMENTS

Data Type: INT

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid number in the list of interaction id's

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Narratives.NarrativeDescription.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Narratives Narrative Description

Parent Table: Narratives

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: \_

Description: Stores the description of the narrative.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 1024

Decimal Places: N/A

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): X

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: X

No nulls: \_

Values Entered By: User: X

System: \_

Required Value: No: X

Yes: \_

Range of Values: Any combination of characters <256.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Adaptations.NarrativeID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Adaptations Narrative ID

Parent Table: Adaptations

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Narratives

Description: Stores the ID of the narrative to know it's Adaptations.

PHYSICAL ELEMENTS

Data Type: INT

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: X

Alternate: \_

Key Structure: Simple: \_

Composite: X

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid number in the list of narrative id's

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### SpaceReservations.ReservationID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Reservation ID

Parent Table: Space Reservations

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: A unique numerical identifier that distinguishes between reservations made by the same patron or on the same space.

PHYSICAL ELEMENTS

Data Type: INT

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: 1 to any number

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Patrons.ID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Patron ID

Parent Table: Patrons

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: A number used to uniquely identify each patron of the library.

PHYSICAL ELEMENTS

Data Type: INT

Length: \_

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Any valid integer from 1 onwards.

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection.MaterialIsPending.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material Is Pending

Parent Table: Collection

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: N/A

Shared By: Print Materials, Multimedia

Description: Stores whether the library has approved a book to be a part of the selection.

PHYSICAL ELEMENTS

Data Type: BOOLEAN

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: True/False

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: Default value could be True

### Holds.InteractionID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Holds Interaction ID

Parent Table: Holds

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Loans, Patrons Selection Interactions

Description: Stores the ID of the interaction between patron and media

PHYSICAL ELEMENTS

Data Type: INT

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Valid number in the list of interaction ID's

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Patron-SelectionInteractions.PatronID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Patron ID

Parent Table: Patron Selection Interactions

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: Patrons

Description: Stores the ID of a patron for identifying who had this interaction.

PHYSICAL ELEMENTS

Data Type: Int

Length: N/A

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: \_

Foreign: X

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: Valid number in the list of patronIDs

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Selection.MaterialID.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material ID

Parent Table: Collection

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: N/A

Shared By: Print Materials, Multimedia

Description: The integer used to uniquely identify a material in our selection. It is important because

we may have two otherwise-identical copies of a book that we wish to distinguish between.

PHYSICAL ELEMENTS

Data Type: Int

Length: N/A

Decimal Places: 0

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: \_

Primary: X

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: X

Required Value: No: \_

Yes: X

Range of Values: 0-\*

Edit Rule:

Enter now, edits allowed: \_

Enter now, edits not allowed: X

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Narratives.NarrativeName.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Narratives Name

Parent Table: Narratives

Alias(es): \_

Specification Type:

Unique: \_

Generic: \_

Replica: X

Source Specification: N/A

Shared By: \_

Description: Stores the name of the narrative.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: N/A

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: \_

Unique: X

Null Support: Nulls OK: X

No nulls: \_

Values Entered By: User: X

System: \_

Required Value: No: X

Yes: \_

Range of Values: Any valid combination of characters <256 characters.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Loan.StartDate.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Loan State Date

Parent Table: Loans

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: N/A

Shared By: \_

Description: Stores the original start date of a loan

PHYSICAL ELEMENTS

Data Type: DATE

Length: 10

Decimal Places: N/A

Character Support:

Letters (A-Z): \_

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: X

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Valid times in the past

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Creators.Creator\_First\_Name.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Creator First Name

Parent Table: Creators

Alias(es): \_

Specification Type:

Unique: \_

Generic: X

Replica: \_

Source Specification: \_

Shared By: \_

Description: The first name of a creator of a particular material. Helpful for colloquial identification.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): X

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Any valid string within the length.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Adaptations.MaterialisSource.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Material isSource

Parent Table: Adaptations

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: A boolean indicator of whether or not the material adapting the linked narrative happens to be the progenitor of it.

PHYSICAL ELEMENTS

Data Type: BOOLEAN

Length: None

Decimal Places: None

Character Support:

Letters (A-Z): \_

Numbers (0-9): \_

Keyboard (.,/$#%): \_

Special (©®™Σπ): \_

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: X

Values Entered By: User: \_

System: \_

Required Value: No: X

Yes: \_

Range of Values: FALSE or TRUE.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: \_

### Patrons.Email.txt

FIELD SPECIFICATIONS

GENERAL ELEMENTS

Field Name: Patron Email

Parent Table: Patrons

Alias(es): \_

Specification Type:

Unique: X

Generic: \_

Replica: \_

Source Specification: \_

Shared By: \_

Description: The email address of an individual patron, which can be used to contact them regarding library matters.

PHYSICAL ELEMENTS

Data Type: VARCHAR

Length: 256

Decimal Places: None

Character Support:

Letters (A-Z): X

Numbers (0-9): X

Keyboard (.,/$#%): X

Special (©®™Σπ): X

LOGICAL ELEMENTS

Key Type: Non: X

Primary: \_

Foreign: \_

Alternate: \_

Key Structure: Simple: \_

Composite: \_

Uniqueness: Non-unique: X

Unique: \_

Null Support: Nulls OK: \_

No nulls: \_

Values Entered By: User: X

System: \_

Required Value: No: \_

Yes: X

Range of Values: Null or any valid email address.

Edit Rule:

Enter now, edits allowed: X

Enter now, edits not allowed: \_

Enter later, edits allowed: \_

Enter later, edits not allowed: \_

Not determined at this time: \_

NOTES: Only one of Patron.Email or Patron.Phone can be null.

## Business Rule Specification Forms

### ReservationEndDateAfterStartDate.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: The date when a room will no longer be reserved must be after the start date for that reservation

Constraint: start\_reservation < end\_reservation

Type: Database Oriented: \_

Application Oriented X

Category: Field Specific: X

Relationship Specific: \_

Test On: Insert: X

Delete: \_

Update: X

STRUCTURES AFFECTED

Field Names: start\_reservation, end\_reservation

Table Names: space\_reservations

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: X

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

We will have a CHECK start\_reservation< end\_reservation

NOTES: \_

### EndDateAfterStartDate.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: For space reservations and loans from our selection, they must have

a valid time interval for insertion, i.e. they will be returned after

initially given.

Constraint: end\_date must be a datetime succeeding start\_date for all relevant fields.

Type: Database Oriented: \_

Application Oriented X

Category: Field Specific: X

Relationship Specific: \_

Test On: Insert: X

Delete: \_

Update: X

STRUCTURES AFFECTED

Field Names: Start\_Reservation, End\_Reservation

Table Names: space\_reservations

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: X

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

Check constraint on addition and update that these values are consistent per record.

end\_date > start\_date

NOTES: \_

### SpaceDenyDelete.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: Incase the library is ever renovated in the future, we want to keep track of data which references old rooms which may no longer be in use.

Constraint: We will have a field in spaces which tells the database if the space is active or not.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: \_

Relationship Specific: X

Test On: Insert: \_

Delete: X

Update: \_

STRUCTURES AFFECTED

Field Names:

Table Names: Spaces

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: \_

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: X

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

We will add a field called "Space\_Is\_Active" which will be a boolean that reflects if a space is active or not.

NOTES:

### PatronEmailOrNumberCannotBeNull.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: patron\_email or patron\_phone\_number cannot be null in order to have some way to contact a patron

Constraint: patron\_email or patron\_phone\_number cannot be null

Type: Database Oriented: \_

Application Oriented X

Category: Field Specific: X

Relationship Specific: \_

Test On: Insert: X

Delete: \_

Update: X

STRUCTURES AFFECTED

Field Names: patron\_email, patron\_phone\_number

Table Names: patrons

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: X

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

Putting a NOT NULL during declaration

NOTES: \_

### MaxFourMultimediaAtATime.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: A patron can have at most four multimedia materials checked out

from the library at a time.

Constraint: A single Patron can only be related to four Multimedia where

the LoanStartDate and LoanReturnDate overlap.

Type: Database Oriented: \_

Application Oriented X

Category: Field Specific: \_

Relationship Specific: \_

Test On: Insert: X

Delete: \_

Update: X

STRUCTURES AFFECTED

Field Names: \_

Table Names: \_

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: X

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: X

ACTION TAKEN

New Loan records involving Multimedia with the same PatronID

cannot have a LoanStartDate that is between another record's

(with the same PatronID) LoanStartDate and LoanReturnDate if there

are already four records with such requirements in the table.

NOTES: \_

### ClubNamesUnique.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: Club names must be unique in order to minimize confusion amongst patrons.

Constraint: ClubName must be unique.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: X

Relationship Specific: \_

Test On: Insert: X

Delete: \_

Update: X

STRUCTURES AFFECTED

Field Names: ClubName

Table Names: \_

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: X

Null Support: \_

Values Entered By: \_

Range of Values: \_

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

ClubName now has UNIQUE constraint.

NOTES: \_

### SelectionCascadeDeletion.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: If a piece of material is removed from the selection, we will delete information from the other tables that pertains to the material that was removed.

Constraint: If the material\_id, that is being deleted, appears within another table, such as selection\_genres and selection\_creators, than that data will be deleted as well.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: \_

Relationship Specific: X

Test On: Insert: \_

Delete: X

Update: \_

STRUCTURES AFFECTED

Field Names: material\_id, material\_title, material\_date\_recieved, material\_date\_created, material\_isPending, material\_ILL\_source

Table Names: Selection, multimedia, Print, Patron\_Selection\_Interaction, Selection\_Genres, Selection\_Creators, Selection\_Languages, Adaptations

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: \_

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: X

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

We will implement a cascade deletion rule for this situation.

NOTES:

### MaxTenPrintMaterialsAtATime.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: A patron can have at most ten print materials checked out

from the library at a time.

Constraint: A single Patron can only be related to ten PrintMaterials where

the LoanStartDate and LoanReturnDate overlap.

Type: Database Oriented: \_

Application Oriented X

Category: Field Specific: \_

Relationship Specific: \_

Test On: Insert: X

Delete: \_

Update: X

STRUCTURES AFFECTED

Field Names: \_

Table Names: \_

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: X

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: X

ACTION TAKEN

New Loan records involving PrintMaterials with the same PatronID

cannot have a LoanStartDate that is between another record's

(with the same PatronID) LoanStartDate and LoanReturnDate if there

are already ten records with such requirements in the table.

NOTES: \_

### HoldDateRequestedCannotBeFuture.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: A patron cannot place a hold on material in the library's selection

in advance. It must already be checked out by another patron and must accurately

reflect the time a patron requested a hold on that material, and therefore must

occur at a time before or during the present.

Constraint: HoldDateRequested cannot be in the future.

Type: Database Oriented: \_

Application Oriented X

Category: Field Specific: \_

Relationship Specific: \_

Test On: Insert: X

Delete: \_

Update: X

STRUCTURES AFFECTED

Field Names: \_

Table Names: \_

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: X

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

Allowed range of values is maxed out at TODAY.

NOTES: \_

### PatronCascadeDelete.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: If a patron asks for their infromation to be removed from the database, we will delete all the information that has any connection to that patron

Constraint: If the patron\_id, that is being deleted, appears within another table, such as club\_memebrs or space\_reservations, than that data will be deleted as well.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: \_

Relationship Specific: X

Test On: Insert: \_

Delete: X

Update: \_

STRUCTURES AFFECTED

Field Names: patron\_id, patron\_email, patron\_phone\_number

Table Names: Patrons, Patron\_Selection\_Interaction, club\_memebrs, space\_reservations

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: \_

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: X

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

We will implement a cascade deletion rule for this situation.

NOTES:

If the patron is simply inactive, we will use deny and we will have a "is\_active" to let the databse know if it should show the patron or not.

### LoanReturnDateCannotBeFuture.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: A loaned-out material cannot be returned in the future; the patron must

actually bring the material to the library and have it be processed in order for

the return to be logged. It is not a promised date; it is the actual return date.

Constraint: LoanReturnDate cannot be in the future.

Type: Database Oriented: \_

Application Oriented X

Category: Field Specific: \_

Relationship Specific: \_

Test On: Insert: X

Delete: \_

Update: X

STRUCTURES AFFECTED

Field Names: \_

Table Names: \_

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: X

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

Allowed range of values is maxed out at TODAY.

NOTES: \_

### RenewalTallyMaxValues.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: A print book can be renewed four times before being returned, and a

multimedia source can be reneweed twice before being returned.

Constraint: Maximum on renewal\_tally for print and multimedia.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: X

Relationship Specific: \_

Test On: Insert: X

Delete: \_

Update: X

STRUCTURES AFFECTED

Field Names: loan\_renewal\_tally

Table Names: loans

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: X

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

We'll need a function to check if the record is for print and multimedia,

and then ensure that we aren't updating a tally above its max valid value.

for print books, loan\_renewal\_tally <= 4

for multimedia, loan\_renewal\_tally <= 2

NOTES: \_

### CannotPlaceHoldOnUnloanedMaterial.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: A currently unloaned material should not be eligible for holds: in that case, a patron should check the material out.

Constraint: If a material is not currently checked out (in the Loans table only with non-null Return Dates), it cannot be a member of the Holds table.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: \_

Relationship Specific: X

Test On: Insert: X

Delete: \_

Update: \_

STRUCTURES AFFECTED

Field Names: \_

Table Names: Holds

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: \_

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: X

ACTION TAKEN

Implemented a trigger no\_hold\_if\_not\_loaned to restrict adding holds in there.

NOTES: \_

### SpaceReservationsNoOverlap.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: Reservation times must not overlap for the same resource. This is to say, if a person has reserved a room for some time, someone else should not be able to reserve the room for the same time (for any overlap).

Constraint: Start Reservation and End Reservation for one record cannot have any overlap with another record. This includes record A encompassing record B entirely and vice versa, as well as A overlapping B's Start Reservation but not End Reservation and vice versa, and same for End Reservation but not Start Reservation and vice versa.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: X

Relationship Specific: \_

Test On: Insert: X

Delete: X

Update: \_

STRUCTURES AFFECTED

Field Names: Reservation Start Time, Reservation End Time

Table Names: \_

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: X

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

Implemented WITHOUT OVERLAPS for the period.

NOTES: \_

### TypeNullifyDelete.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: We want to preserve materials in the selection even if we change/delete the type they are associated with.

Constraint: We need a Nullify deletion rule to maintain material data.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: \_

Relationship Specific: \_

Test On: Insert: \_

Delete: X

Update: \_

STRUCTURES AFFECTED

Field Names: \_

Table Names: Multimedia Types, Print Types

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: \_

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: X

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

Implemented the deletion rule with a SET NULL.

NOTES: \_

### LoansNoOverlap.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: Reservation times must not overlap for the same resource. This is to say, if a material has checked out for some time, someone else should not be able to check out the material for the same time (for any overlap).

Constraint: Loan Start Date and Return Date for one record cannot have any overlap with another record. This includes record A encompassing record B entirely and vice versa, as well as A overlapping B's Start Date but not Return Date and vice versa, and same for Return Date but not Start Date and vice versa.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: X

Relationship Specific: \_

Test On: Insert: X

Delete: X

Update: \_

STRUCTURES AFFECTED

Field Names: Loan Start Date, Loan Return Date

Table Names: \_

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: X

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: \_

ACTION TAKEN

Implemented a series of TRIGGERs to check that materials do not have an overlapping loan time.

NOTES: WITHOUT OVERLAPS is tied to the primary key of Loans, which is the Interaction ID, not the Material ID. We need another solution.

### PatronsCannotPlaceHoldOnOwnLoan.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: A patron should not be able to place a hold on their own loan, so to prevent repeated and potentially infinite reservations on the same item.

Constraint: If a patron is already related to a material in the Loans table that has a NULL Loan Return Date, they cannot be related to the same material in the Holds table.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: \_

Relationship Specific: X

Test On: Insert: X

Delete: \_

Update: \_

STRUCTURES AFFECTED

Field Names: \_

Table Names: Holds

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: \_

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: X

ACTION TAKEN

Implemented a trigger no\_hold\_if\_your\_own\_loan that will halt any attempts to place a hold on a loan sharing the same patron id.

NOTES: \_

### PatronCannotPlaceMultipleHoldsOnSameItem.txt

BUSINESS RULE SPECIFICATIONS

RULE INFORMATION

Statement: A patron cannot place multiple holds on the same item in order to repeatedly reserve it for a loan.

Constraint: A single patron can only be related to a given material once in the Holds table.

Type: Database Oriented: X

Application Oriented \_

Category: Field Specific: \_

Relationship Specific: X

Test On: Insert: X

Delete: \_

Update: \_

STRUCTURES AFFECTED

Field Names: \_

Table Names: Loans

FIELD ELEMENTS AFFECTED

Physical Elements: Data Type: \_

Length: \_

Character Support: \_

Logical Elements: Key Type: \_

Key Structure: \_

Uniqueness: \_

Null Support: \_

Values Entered By: \_

Range of Values: \_

Edit Rule: \_

RELATIONSHIP CHARACTERISTICS AFFECTED

Deletion rule: \_

Type of participation: \_

Degree of participation: X

ACTION TAKEN

Implemented a trigger no\_hold\_if\_already\_held to block new holds if one already exists.

NOTES: \_