Assumptions that were made during the design process, proposed domains for selected attributes, and discussion on reasons for any design decisions made.

Assumptions:

- 1. Antiquarians only collect published books.
- 2. Country entity will contain countries that no longer exists.
- 3. The Antiquarian can only collect one copy of a book (no duplicates).

| ATTRIBUTE | Datatype, domain | Reasons/Assumptions |
|--------------|------------------------|---|
| COUNTRY | | |
| country_name | Character, VARCHAR(60) | Domain Reasons: Country names are composed of characters Assumptions: Maximum length of country name is 60 characters |
| GDP | Numeric, integer | Domain Reasons: Gross Domestic Product is represented as a number Assumptions: Maximum size of a country's GDP can be represented by an INTEGER |
| population | integer, | Domain Reasons: Population is represented as a number Assumptions: Population can be represented by an INTEGER |
| capital | Character, VARCHAR(50) | Domain Reasons: Capital is composed of characters Assumptions: Maximum size of any city name will be represented by a maximum of 50, if any longer the name will be abbreviated |

| AUTHOR | Datatype, Domain | Reasons/Assumptions |
|------------|------------------------|--|
| author id | integer(8) | Domain Reasons: Generic Id that will automatically be populated Assumptions: Auto generated |
| first_name | Character, VARCHAR(20) | Domain Reasons: First_name is composed of characters Assumptions: Length of first name does not exceed 20 characters |
| last_name | Character, VARCHAR(20) | Domain Reasons: Last_name is composed of characters Assumptions: Length of last name does not exceed 20 characters |

| PUBLISHED_BY | Datatype, Domain | Reasons/Assumptions |
|---------------------|------------------|--|
| <u>publisher_id</u> | integer(8) | Domain Reasons: Generic Id that will automatically be populated Assumptions: Auto generated |
| <u>ISBN</u> | integer(13) | Domain Reasons: ISBN's are represented by a numeric value Assumptions: Max and min length of 13 digits |

| PUBLISHER | Datatype, Domain | Reasons/Assumptions |
|-----------|------------------|---------------------|
|-----------|------------------|---------------------|

| publisher_id | integer(8)H | Domain Reasons: Generic Id that will automatically be populated Assumptions: Auto generated |
|----------------|------------------------|---|
| publisher_name | Character, VARCHAR(40) | Domain Reasons: Names are represented by characters Assumptions: Maximum length of name will be 40 characters, uniqueness will be held by the publisher id. |

| BORN_IN | Datatype, Domain | Reasons/Assumptions |
|--------------|------------------------|---|
| author_id | integer(8) | Domain Reasons: Generic Id that will automatically be populated Assumptions: Auto generated |
| country name | Character, VARCHAR(60) | Domain Reasons: Country names are composed of characters Assumptions: Maximum length of country name is 60 characters |

| воок | Datatype, Domain | Reasons/Assumptions |
|-------------|------------------------|---|
| <u>ISBN</u> | integer(13) | Domain Reasons: A book will have a 13 digit unique ISBN Assumptions: Must be 13 digits in length |
| title | Character, VARCHAR(60) | Domain Reasons: A book title composed of a sequence of characters Assumptions: Book title does not exceed 60 characters |
| synopsis | Character, CHAR(500) | Domain Reasons: Short summary of the book Assumptions: |

| | | Must not exceed 500 characters |
|-----------------------------|------------------------|--|
| is_translation | Boolean, | Domain Reasons: A book will either be translated or not Assumptions: not null |
| original_language | Character, VARCHAR(40) | Domain Reasons: Languages are represented by characters Assumptions: Languages length is maximum of 40 characters, if longer then will be abbreviated |
| binding_type | Character, VARCHAR(20) | Domain Reasons: Description of the binding Assumptions: does not exceed 20 characters |
| book_grade | Character, VARCHAR(20) | Domain Reasons: Book grade is the reading level Assumptions: does not exceed 20 characters |
| origin_pubilication_country | Character, VARCHAR(60) | Domain Reasons: Country name is composed of characters Assumptions: Maximum size of any city name will be represented by a maximum of 60, if any longer the name will be abbreviated |
| publisher_year | integer (4) | Domain Reasons: Our database may not live past 9999 Assumptions: Does not exceed 4 digits |
| edition | Character, VARCHAR(20) | Domain Reasons: Specifies the version of the book Assumptions: Must not exceed 20 characters |

| HEADQUARTERED_IN | Datatype, Domain | Reasons/Assumptions |
|------------------|------------------------|---|
| publisher_id | integer(8) | Domain Reasons: Generic Id that will automatically be populated Assumptions: Auto generated |
| country_name | Character, VARCHAR(60) | Domain Reasons: Country names are composed of characters Assumptions: Maximum length of country name is 60 characters |

| WRITTEN_BY | Datatype, Domain | Reasons/Assumptions |
|-------------|------------------|--|
| author_id | integer(8) | Domain Reasons: Generic Id that will automatically be populated Assumptions: Auto generated |
| <u>ISBN</u> | integer(13) | Domain Reasons: A book will have a 13 digit unique ISBN Assumptions: Must be 13 digits in length |

| PUBLISHED_IN | | Reasons/Assumptions |
|---------------------|-------------|--|
| <u>publisher_id</u> | integer(8) | Domain Reasons: Generic id generated for each publisher Assumptions: Does not exceed 8 digits |
| <u>ISBN</u> | integer(13) | Domain Reasons: A book will have a 13 digit unique ISBN Assumptions: Must be 13 digits in length |