**Question 3 Schema**

**Assumptions:**

* The pages attribute takes the offset into account
* The library can only exist if there are books added to the database or books are uploaded by a user
* A fake\_books is an instance of user’s books that are both accessed and uploaded
* An uploaded book can only be accessed by the user who uploaded it (stored in fake\_books)

|  |  |  |  |
| --- | --- | --- | --- |
| **Users** | | | |
| Id | Password | Name | Fake\_books |

|  |  |  |  |
| --- | --- | --- | --- |
| **Library** | | | |
| Fake\_books | Id | Password | Index |

|  |  |  |  |
| --- | --- | --- | --- |
| **Songs** | | | |
| Index | Pages | Book\_code | Fake\_books |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Books** | | | | |
| Book\_code | Title | Publisher | Composer | Index |

**Foreign Keys:**

*Table* attribute -> *table* attribute

*Users* Fake\_books -> *Library* Fake\_books

*Library* Id -> *Users* Id

*Library* Password -> *Users* Password

*Library* Index -> *Songs* Index

*Songs* Fake\_books -> *Library* Fake\_books

*Songs* Book\_code -> *Books* Book\_code

*Books* Index -> *Songs* Index