

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 | | | |
|-----------|-----------------|------|-------------------|
| <u>Id</u> | <u>Password</u> | Name | <u>Fake_books</u> |

| Library | | | |
|-------------------|-----------|-----------------|--------------|
| <u>Fake_books</u> | <u>Id</u> | <u>Password</u> | <u>Index</u> |

| Songs | | | |
|--------------|-------|------------------|-------------------|
| <u>Index</u> | Pages | <u>Book_code</u> | <u>Fake_books</u> |

| Books | | | | |
|------------------|--------------|-----------|----------|--------------|
| <u>Book_code</u> | <u>Title</u> | Publisher | Composer | <u>Index</u> |

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