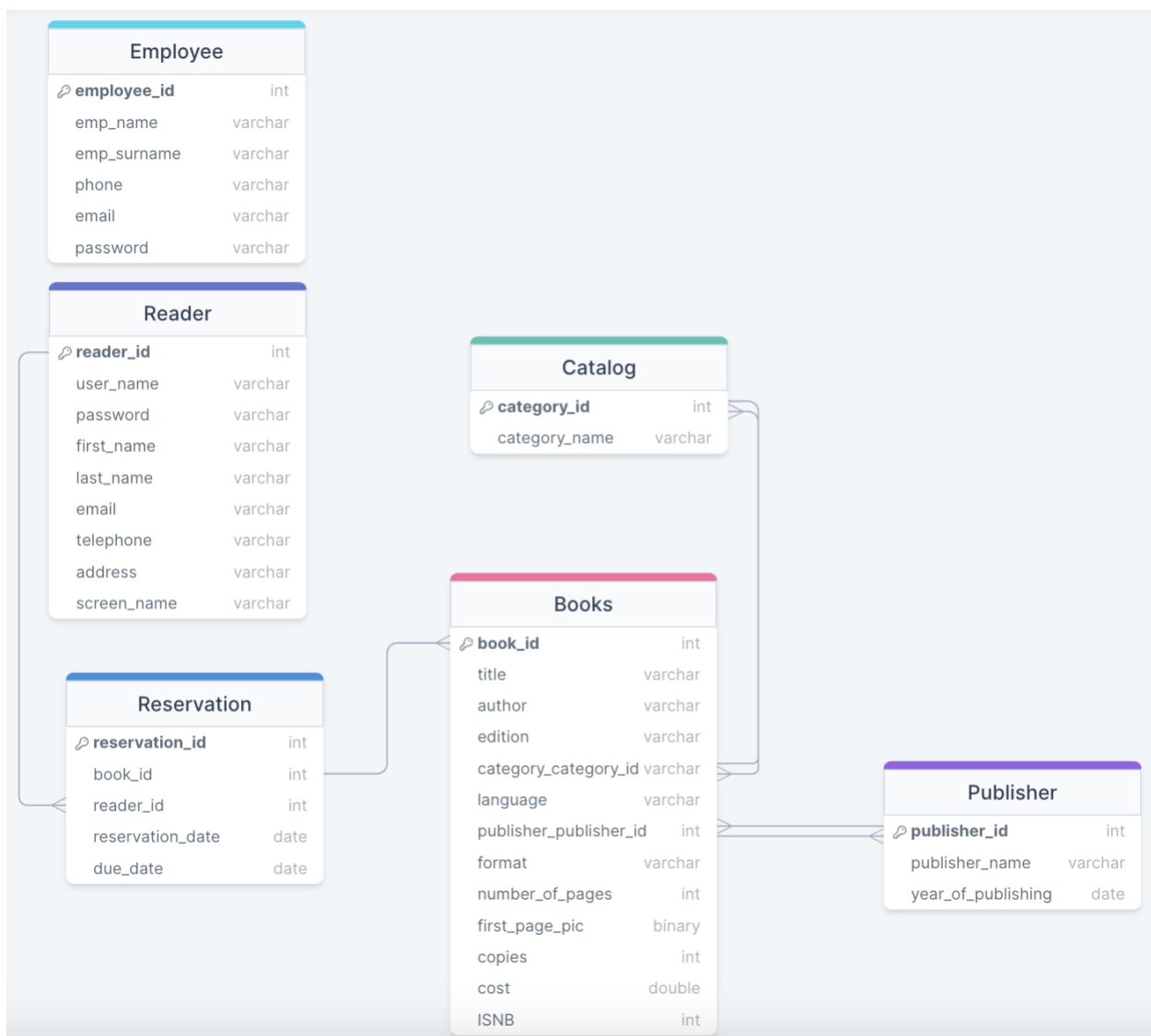# 1.5 Relational Databases: Homework (Advanced)

Draw an ER diagram of a library with the following objects included:

1. Book
2. Catalog
3. Reader
4. Employee
5. Others, up to your choice

What would a potential UI of this hypothetical application look like?
Please describe the UI or draw a picture mapping UI controls to your DB objects.

A public library.
There are 2 options to use this library:

1. Physical at the library (searching books through catalog or physical).
2. Online (searching and reservation of a books) and receiving then in the library.

On the first screen we should see some graphical "hello information", categories of the books (where we can choose category), trending books (some statistical information with further option to choose book), searching engine (there we can get the information about books, authors, publishers) and sing in /log in options (for employee or reader).

Library logo	My Books (information about borrowed books (reservation) for a reader) **just for known (logged in / signed in) reader**	Browse (category) (books) (publisher) **for every visitor**	Search **for every visitor**	Log In (email password) **for every visitor** (after logging in should be a page with an information about user)	Sing In (email password) **for every visitor** (after registration should be a page with an information about user)
	Books Publishers Catalog (search, edit delete) **just for a librarian**	Readers **just for a librarian**	Reservation **just for a librarian**	Reports **just for a librarian**	

An information page for every visitor	Trending books			
	Picture of a book	Picture of a book	Picture of a book	Picture of a book
	Classic books			
	Picture of a book	Picture of a book	Picture of a book	Picture of a book
	Classic books			
	Picture of a book	Picture of a book	Picture of a book	Picture of a book
	Etc.			
	Browse by subject			
	Art	Science Fiction	Fantasy	History

Options for employee (librarian) – sing in / log in (through email and password).

The librarian should have an option:
to search/choose books, publisher or category in the library,
to reserve books for a specific reader,
to get some statistics or reports about borrowed books,
to add / edit / delete books, publishers or categories.

Option for reader – sing in / log in (through email and password).
The reader should have an option:
to search/choose books, publisher or category in the library,
to reserve any books,
to see some statistical information about borrowed books.
Returning of the books should be realized through librarian (who get them physical from the readers and changes status of the borrowed books).