Project LIB OPAC
Software Architecture

Submitted to:

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Revision Control

History Revision:

Revision Date	***Person Responsible***	***Version Number***	***Modification***
12/01/17	Francis Zac dela Cruz	1.0	Initial Document; Included Data Design classes
12/01/17	Nicko Pangarungan	1.0	Included UI classes
12/01/17	Angelo Jurquina	1.0	Included Control classes

Purpose:

This document contains the consolidated classes from the User Interface (screens), Analysis Model (control classes), and Data Design (DBclasses and persistent classes) in a diagram that shows their structure and interaction.

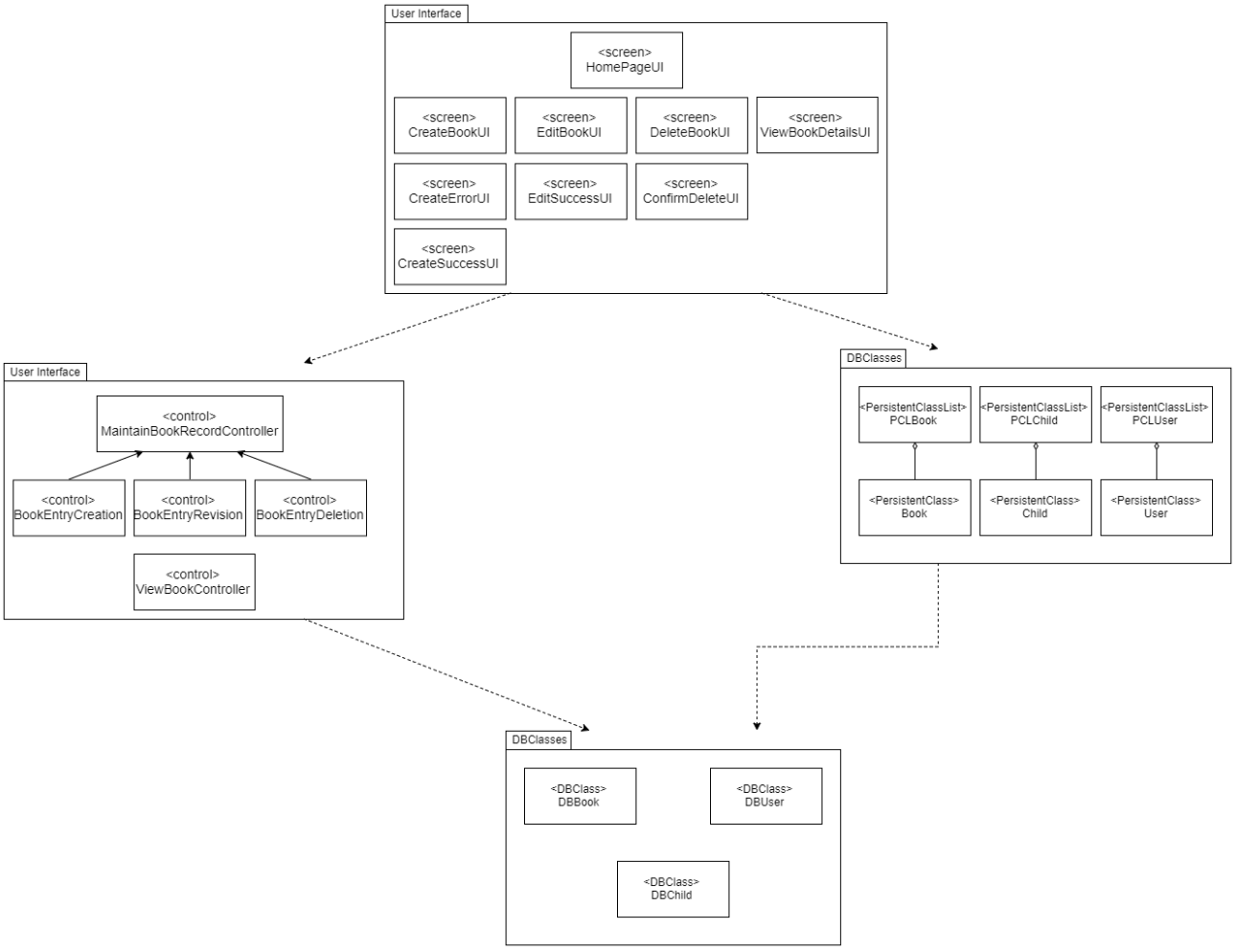
Audience:

Developers, clients

System Name: Project LIB OPAC

Description: This system aims to track and maintain the status of a library of books as it is borrowed from and updated. It includes a librarian and admin system responsible for managing the catalog of books available, as well as the borrowing and returning of books. It also includes a database of children records to keep track of the library visitors and borrowers.

Software Architecture Diagram:



User Interface Design Classes:

Screen Name	Description
HomePageUI	Displays all the function links available to the user such as search bar, filter, create book entry, edit book entry, delete book entry, profile badge, etc.
CreateBookUI	UI to create book entries in the database by inputting complete book details into fields (i.e. title, author, keywords, quantity). Shows when the Create Book Entry on the home page is clicked.
EditBookUI	UI to edit book entries in the database, searched using the book ID, by changing at least one detail in the given fields (i.e. title, author, keywords, quantity). Shows when the Edit Book Entry on the home page is clicked.
DeleteBookUI	UI to delete book entries in the database, searched using the book ID. Shows when the Delete Book Entry on the home page is clicked.
CreateErrorUI	UI notifying user about failure to create the entry due to incomplete provided book details. Shows when the Create button on the CreateBookUI is pressed with at least one field of the book details is left blank.
CreateSuccessUI	UI notifying user that creating the book entry succeeded. Shows when the Create button on the CreateBookUI is pressed with all fields filled out.
EditSuccessUI	UI notifying user that editing the book entry succeeded. Shows when the Save button on the EditBookUI is pressed.
ConfirmDeleteUI	UI prompting the user for the final confirmation to delete book entry. Shows when the Delete button on the DeleteBookUI is pressed.
ViewBookDetailsUI	UI displaying the details (i.e. title, author, keywords, quantities of each status - on shelf, on loan, not allowed for borrowing) of the book. Shows when the title of the book in the search results is clicked.

Business Logic Classes:

Control	**Description**
MaintainBookRecordController	Controller that handles which specific controller to call to handle the request made by a system admin pertaining to the book record management.
BookEntryCreation	Controller that handles the request passed by the CreateBookEntryUI. Calls the createBookEntry method of the Book class and populates the entry with the supplied book details.
BookEntryRevision	Controller that handles the request passed by the BookEntryRevisionUI. Calls the editBookEntry method of the book class.
BookEntryDeletion	Controller that deletes book entries using the book ID passed by the DeleteBookEntryUI.
ViewBookController	Controller that handles the request passed by the ViewBookUI. Calls the viewBook method of the book class passing as argument the provided search criteria input from the UI.

Data Design Classes:

Class Name	Description
Book	Book model, contains information on a Book record like author, state, etc.
PCLBook	Persistent class list for obtaining Book records sets for queries.
Child	Child model, contains information on a Child record like chapel, name, etc.
PCLChild	Persistent class list for obtaining Child records sets for queries.
User	User model, contains information on a User record like email, password, etc.
PCLUser	Persistent class list for obtaining User records sets for queries.
DBBook	Database object for interacting with the Book table.
DBChild	Database object for interacting with the Child table.
DBUser	Database object for interacting with the User table.