# Group01

# **Used Book Sharing System Software Architecture Document**

Version 1.2

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# **Revision History**

Date	Version	Description	Author
21/11/2019	1.0	Initial document	Bui Quang Thang
29/11/2019	1.1	Add Logical View	Dang Duc Trung & Tran Thuan Thanh
30/11/2019	1.2	Edit Use-case model: add new features	Bui Quang Thang

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# **Software Architecture Document**

#### 1. Introduction

#### 1.1 Purpose

This document provides a comprehensive architectural overview of the Used Book Sharing System, using a number of different architectural views to depict different aspects of the system. It is intended to capture and convey the significant architectural decisions which have been made on the system.

#### 1.2 Scope

This Software Architecture Document applies to the Used Book Sharing System which will be developed by Group01.

1.3 Definitions, Acronyms and Abbreviations

# None

- 1.4 References
  - 1. Collegiate Sports Paging System's Software Architecture Document, v1.0 https://sceweb.uhcl.edu/helm/RationalUnifiedProcess/examples/csports/ex\_sad.htm
  - 2. Course Registration System's Software Architecture Document, v1.0 https://sceweb.uhcl.edu/helm/RUP course example/courseregistrationproject/indexcourse.htm

#### 2. Architectural Goals and Constraints

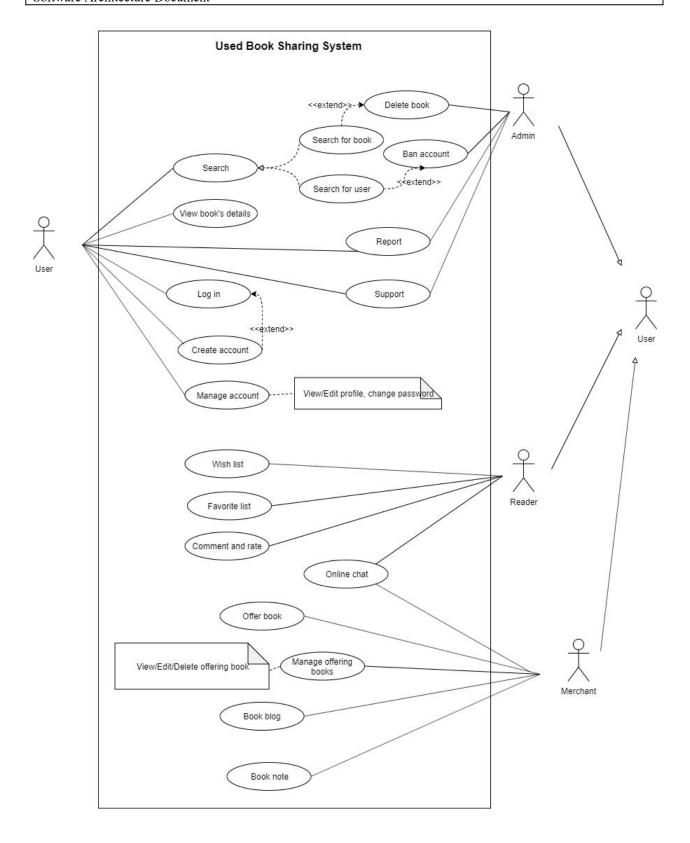
There are some key requirements and system constraints that have a significant bearing on the architecture. They are:

- 1. All components of system must reside on a single server.
  - 2. All functions can be obtained through web browsers.
  - 3. The system must ensure complete protection of data from unauthorized access. All manipulation on data must require user's id and password.
  - 4. System must backup all processing operations when server turns off and restores those operations when server turns on again.
  - 5. All performance and loading requirements, as stipulated in the Vision Document must be taken into consideration as the architecture is being developed.

#### 3. Use-Case Model

(You can also see this use-case model at 'images/All Use-cases.png')

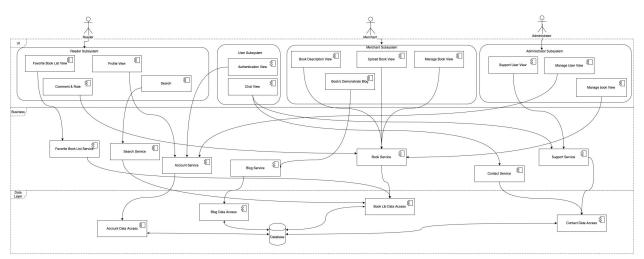
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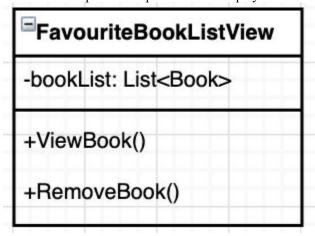
## 4. Logical View

(you can also see this component diagram at 'images/ComponentDiagram.png')



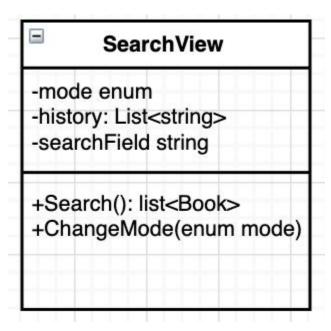
Note: Services can interconnect each other by itself. I don't mention connection lines between services because of visual

- 4.1 Component: Favorite Book List View
  - Description: Component use to display for user about his/her favorite book list.

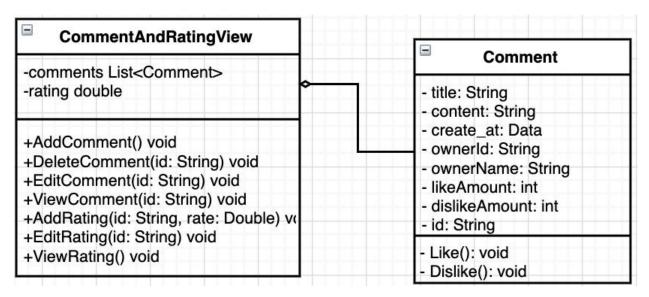


- **4.2** Component: Search View
  - Description: Component use to display for user can search book with some option.

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- **4.3** Component: Comment & Rate View
  - Description: Component use to display for user comment and rating for book or merchant.



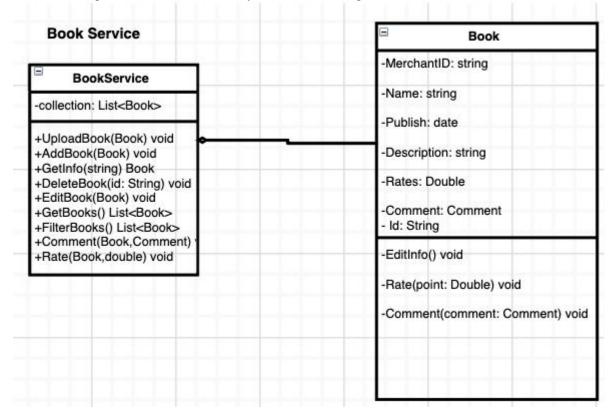
- 4.4 Component: Profile View
  - Description: Component use to display user's profile.

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ProfileView
name: string -avatar: Image -phone: int -email string
+ShowProfile() void
+EditProfile() void

4.5 Component: Book Service

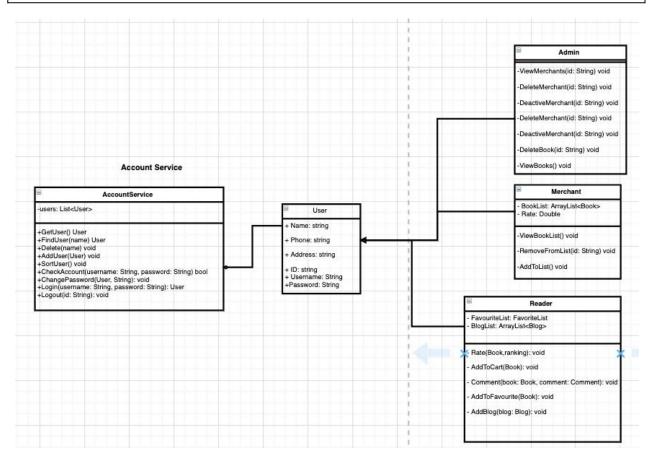
- Description: Provide service for any function have using book.



4.6 Component: Account Service

- Description: Provide service for any function have using user information.

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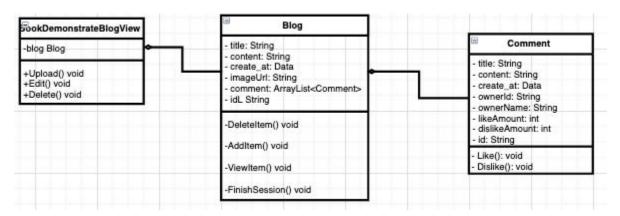
#### 4.7 Component: Search Service

- Description: Provide service for any function have using search engine.

	SearchS	ervice
-keywo	rd: string	- 1
+Searc	hByName() Lis hByMerchant() hByAuthor() Li	List <book></book>

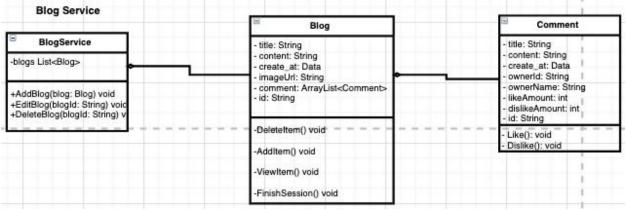
- 4.8 Component: Book Demonstrate Blog View
  - Description: UI display for merchant can write blog to demonstrate about book.

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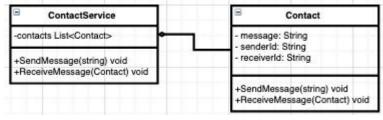
#### 4.9 Component: Blog Service

- Description: Provide service for any function using blog.



#### 4.10 Component: Contact Service

- Description: Provide service for any function using contact.



# 4.11 Component: Book Description View

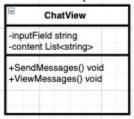
Description: display information about book for reader can read.

■ BookDescriptionView	
-name: string -image: List <lmage> -author: string -publish: date</lmage>	
+Show() void	
+Edit() void	

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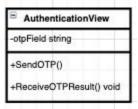
#### 4.12 Component: Chat View

- Description: Display UI for reader/ merchant can chat with each other or report error for administrator.



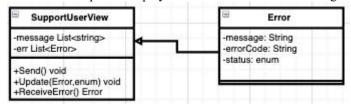
#### 4.13 Component: Authentication View

- Description: Display UI for user can verify user's account before user can use this account.



## 4.14 Component: Support User View

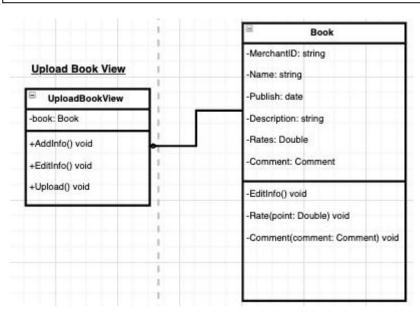
Description: Display UI for administrator can manage error, fix and update error status.



#### 4.15 Component: Upload Book View

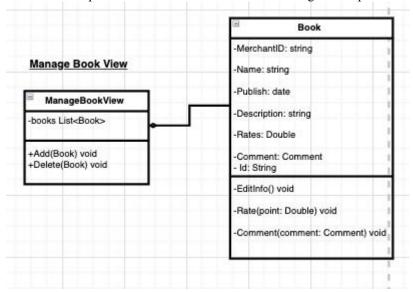
- Description: Display UI for merchant update book into website.

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#### 4.16 Component: Manage Book View

- Description: Provide UI for merchant can manage their uploaded book.



## 4.17 Component: Support Service

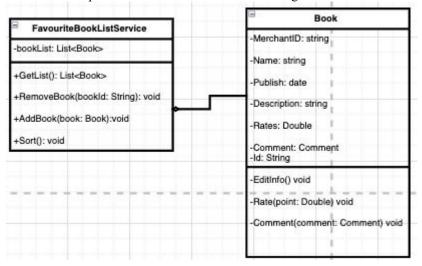
- Description: Notification error when user report for administrator and update status of error into system to manage.

3	SupportService
+Upda	rtError(Error) void steErrorStatus(Error,enum) void y(Error) void

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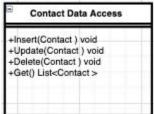
#### 4.18 Component: Favorite Book List Service

- Description: Provide UI for reader can manage their favorite book list.



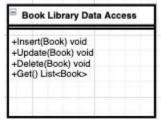
#### 4.19 Component: Contact Data Access

- Description: Connect to database to get or edit data about contact.



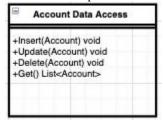
#### 4.20 Component: Book Library Data Access

- Description: Connect to database to get or edit data about book.



#### 4.21 Component: Account Data Access

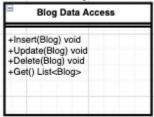
- Description: Connect to database to get or edit data about account.



#### 4.22 Component: Blog Data Access

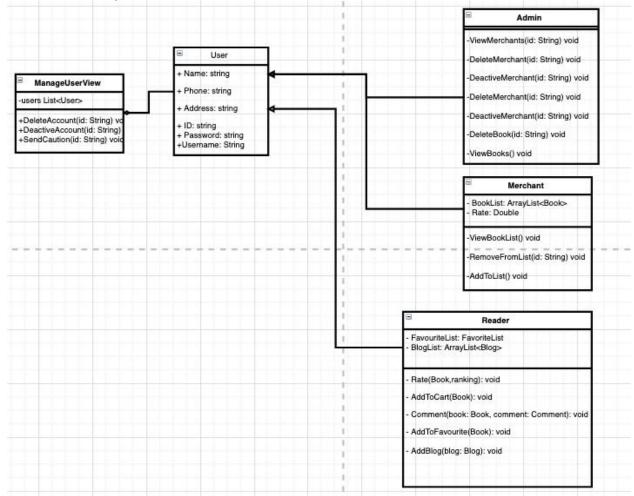
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- Description: Connect to database to get or edit data about blog.



# 4.23 Component: Manage User View

- Description: Provide UI for administrator can manage reader/merchant account to prevent illegal action immediately.



# 5. Deployment

[Leave this section blank for PA3.]

#### 6. Implementation View

[Leave this section blank for PA3.]

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