

Bound 2 Be

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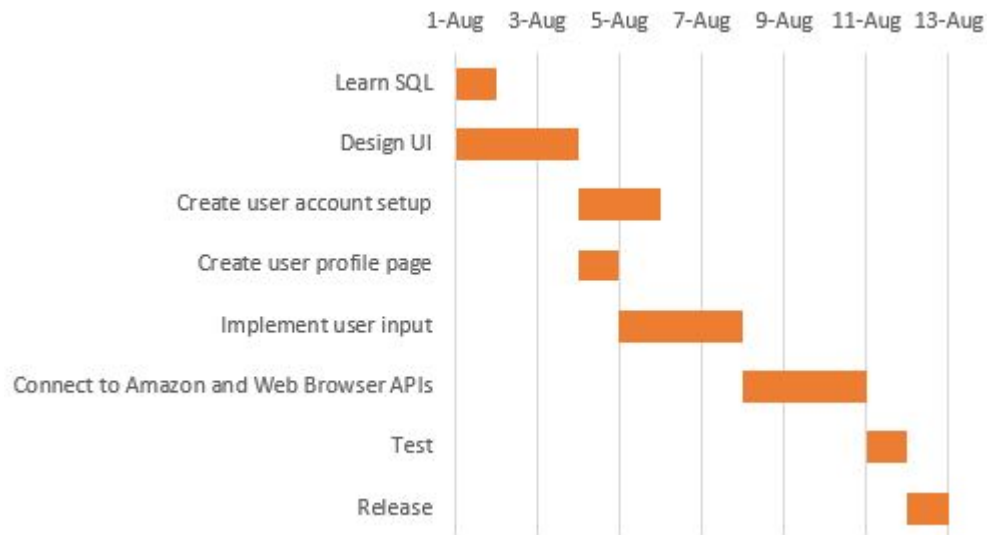
CS 3354 Software Engineering

About Bound 2 Be

A book matching service.



Project Schedule



Hardware, Software, & Personnel Costs



Software Costs:

- \$5,600 per year
 - Cost of MySQL Enterprise [1], Google Play [2] and iOS App Store [3] licenses, web domain cost [4], WebStorm [5] and Postman [6] licensing

Hardware Costs:

- \$444 annually
 - Cost of servers [7] [8]

Personnel Costs:

- Approximately \$15,000
 - Hourly salary of software consults [11], software engineers [12]

Function Point Estimate

	Function Category	Count	Complexity			Count X Complexity
			Simple	Average	Complex	
1	Number of user input	12	3	4	6	36
2	Number of user output	10	4	5	7	40
3	Number of user queries	11	3	4	6	44
4	Number of data files and relational tables	7	7	10	15	70
5	Number of external interfaces	2	5	7	10	14

$$GFP = 36 + 40 + 44 + 70 + 14 = 204 \text{ FP}$$

Number	Complexity Weighting Factor	Value
1	Backup and Recovery	4
2	Data Communications	2
3	Processing Functions	0
4	Performance	4
5	Existing Operating System	4
6	Online Data Entry	3
7	Multiple Screen and Operation Input Transaction	3
8	Online Master Files	3
9	Complexity of Inputs, Outputs, Files, and Inquiries	3
10	Internal Processing	3
11	Reusable Code	3
12	Conversion and Installation	3
13	Multiple Different Organizational Installations	3
14	Ease of Use	5

$$PC = 4 + 2 + 0 + 4 + 4 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 5 = 43$$

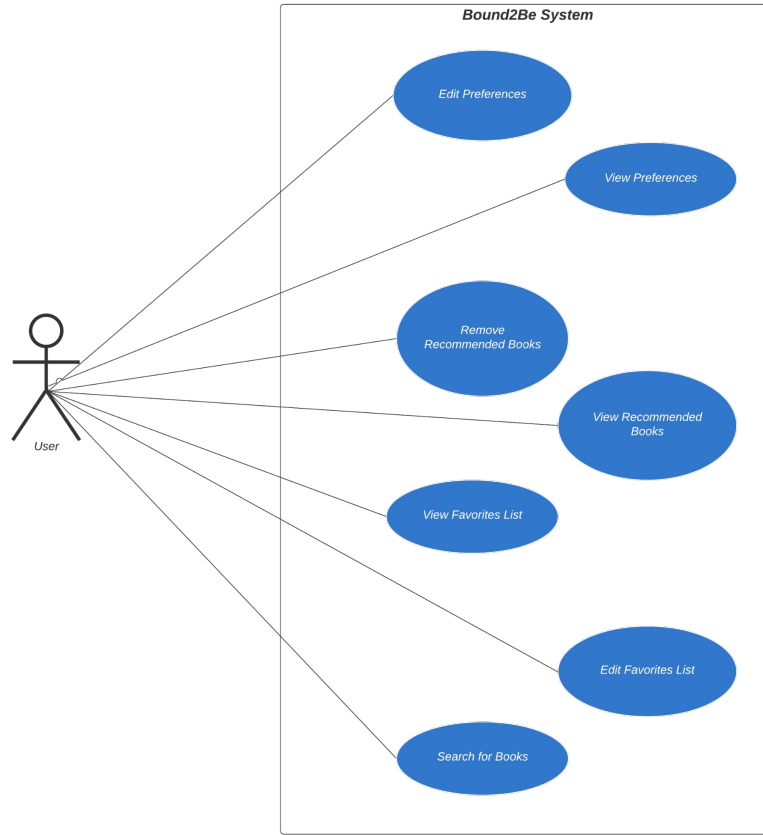
Functional Requirements

1. Hyperlink Simplicity
2. Consistent Recommendation List
Updating
3. Identification System
4. Registration and Login Process
5. Ease of Making Changes
6. Ease of Deletion

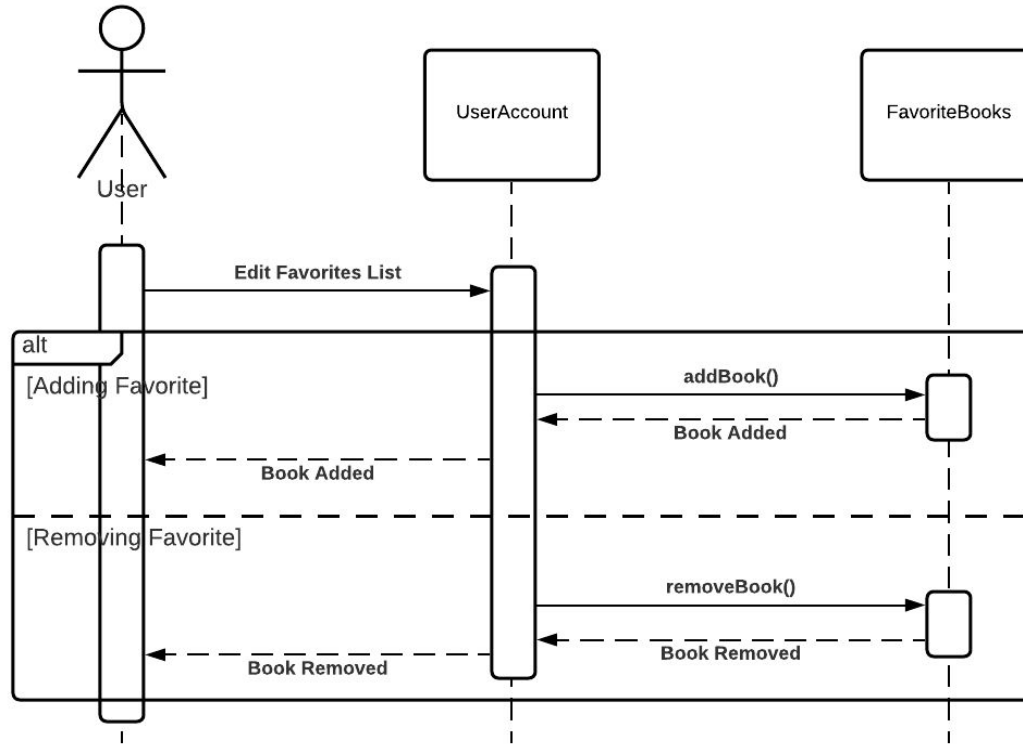


Nonfunctional Requirements

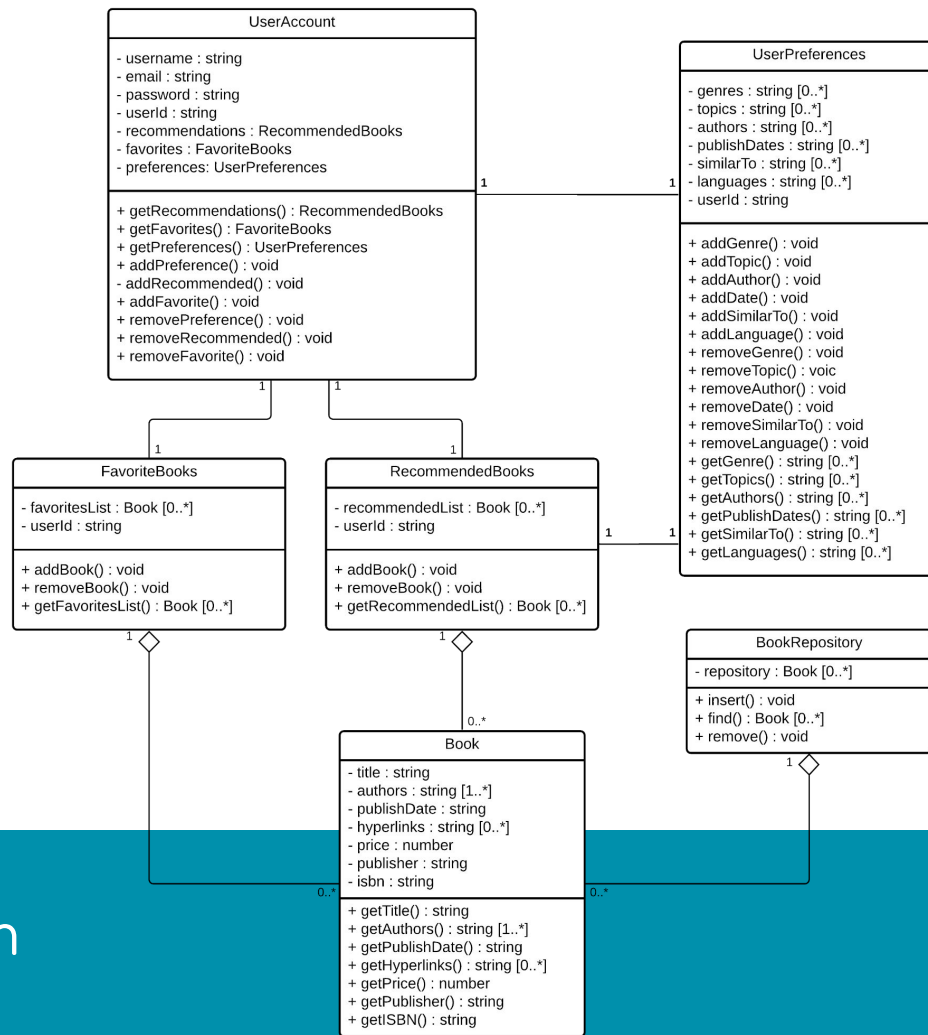
1. **Usability requirement:** first time usability
2. **Performance requirement:** database fetch speed
3. **Space requirement:** required storage space
4. **Dependability requirement:** maintenance and down time
5. **Security requirement:** login credential authentication



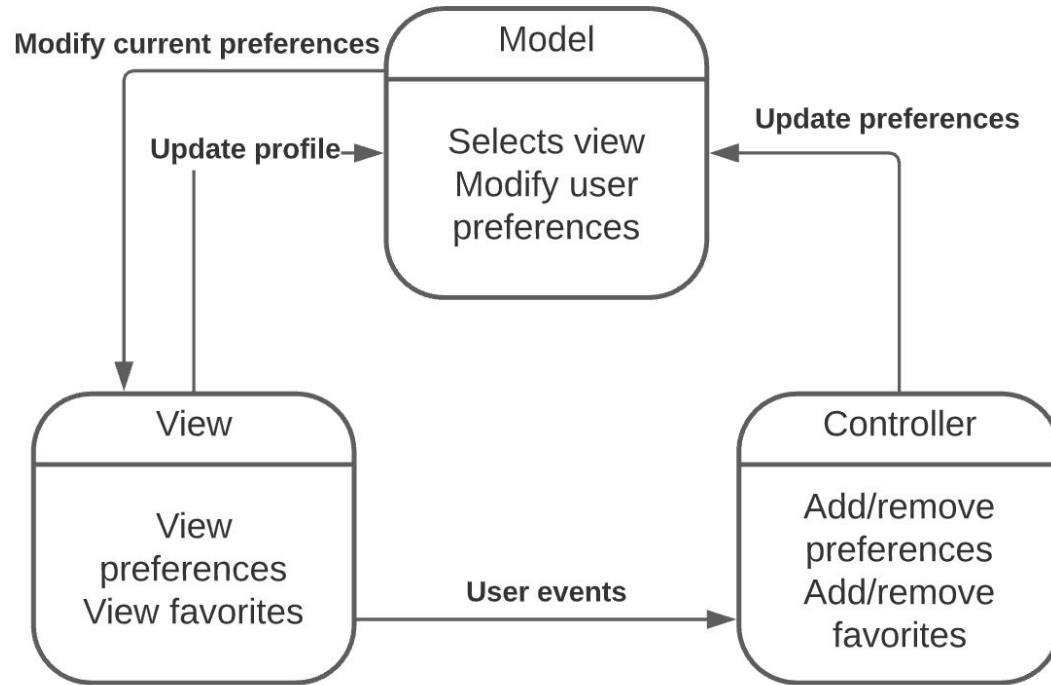
Use Case Diagram



Sequence Diagram: Edit Favorites

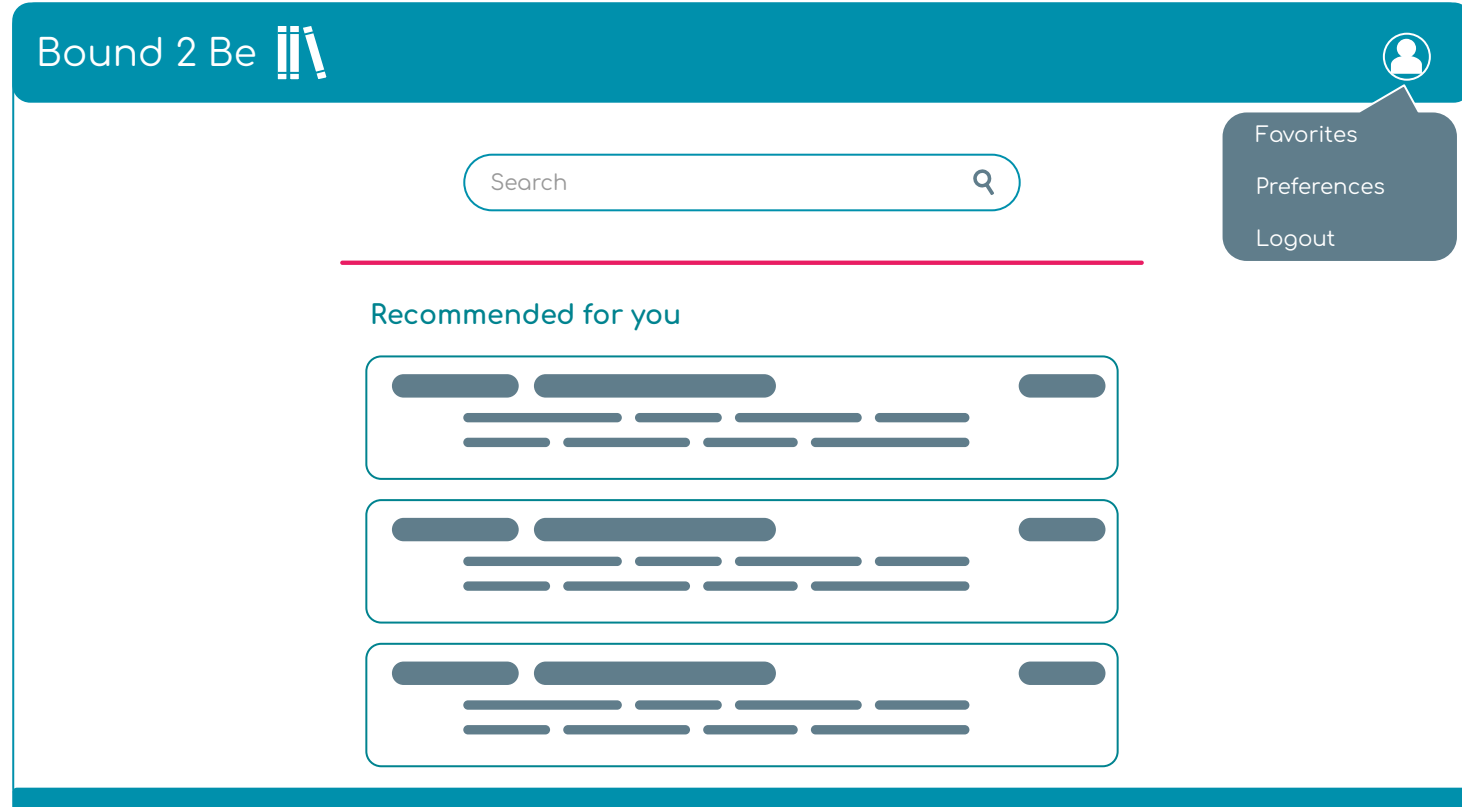


Class Diagram



Architectural Design

User Interface Concept



Comparison of Similar Work

Goodreads:

- Free to use service
 - Questionnaire for recommendations
 - Book database
-
- In-depth questionnaire
 - Themes and tropes

[9]

Tailored Book Recommendations:

- Subscription-based service
 - 3 recommendations every 3 months
 - Personal Bibliologist
-
- Dynamic recommendation algorithm
 - Personal recommendation
 - Cut costs

[10]

References

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