Use Cases

Use Case Name:	Update Database		
Use Case ID:	000001		
Date Created:	3-9-2016	**Date Last Updated:**	3-29-2016
Author:	Zach Comstock	**Last Updated By:**	W.C. Gilbert III

Actors:	IT Worker, Book Database, Checkout, Update Database
Summary:	The Book Database keeps track of inventory, information on each book, and which books are going to be available each semester. The IT Worker will need to be able to update anything in the Book Database via an Excel file (Book Database File or BDF). The Checkout use-case will need to be able to update the quantity of books available in the Book Database after each purchase.
Triggers:	• A User completes Checking out • IT Worker edits the BDF • IT Worker erases the BDF document and uploads a new one
Assumptions:	• The BDF is in the correct location
Pre-conditions:	• BDF already exists • Book Database received book purchase information from Checkout • IT Worker has a new BDF
Post-conditions:	• Book Database will be up-to-date and accurately reflect the online bookstore's inventory
Normal Flow:	1. IT Worker opens a File Transfer Protocol application to view the webstore's main directory 2. IT Worker navigates to the BDF that the Book Database is pointing to a. IT Worker edits a specific part of BDF b. IT Worker deletes BDF I. IT Worker uploads a new, or updated, BDF into the same directory as the old BDF 3. Book Database reads information from the BDF and updates itself
Alternative Flow:	1. Checkout is completed 2. Checkout sends newly created receipt to Update Database 3. Update Database searches BDF for the books listed in the receipt 4. Update Database finds each book in the BDF and adjusts the quantity available accordingly 5. Book Database reads information from the BDF and updates itself
Exceptional Flow 1:	1. Steps 1-2 of Normal Flow 2. New BDF is not formatted correctly 3. Book Database reads information from the BDF and updates improperly
Exceptional Flow 2:	1. Steps 1-2 of Normal Flow 2. Book Database can't read information from the BDF a. The BDF was saved to the wrong location b. The BDF no longer exists

Use Case Name:	Checkout		
Use Case ID:	000002		
Date Created:	3-13-2016	**Date Last Updated:**	3-29-2016
Author:	Zach Comstock	**Last Updated By:**	W.C. Gilbert III

Actors:	User, Shopping Cart, Billing System, Receipt System, Book Database
Summary:	The Shopping Cart is a list of books that the user has added to their cart; this information is stored as cookies. The Checkout use case will need calculate and display the total cost of the user's purchase based on what books are in their Shopping Cart, collect the customer info, use the Billing System to bill the customer, display any download codes to the user, and use the Receipt System to provide the user and accounting with a copy of the receipt.
Triggers:	• Customer has logged-in as a student or guest
Assumptions:	• The User has cookies turned on
Pre-conditions:	• User must be logged-in • User must have objects in their cart
Post-conditions:	• The User will have been billed the correct amount • A receipt will be created and will be displayed for the user • A copy of the receipt will be saved to be viewed by accounting • Checkout will trigger the use-case Update Database
Normal Flow:	4. Collects User's information 5. Reads User Shopping Cart information (this includes a list of books as well as prices for each book) 6. Calculates total cost of Shopping Cart contents 7. Displays Shopping Cart contents and total cost to User 8. Wait for user to confirm purchase 9. Check Book Database to ensure that all books in Shopping Cart are still in stock a. One or more books in Shopping Cart are found to be out of stock I. Alerts user that one or more of their books are no longer in stock II. Removes out of stock books from shopping cart III. User Shopping Cart information is reread IV. Total cost of Shopping Cart contents is recalculated and displayed 10. Use Billing System to bill the user the appropriate amount (total cost + taxes + shipping costs) and deposit the money into the Bookstore's bank account a. User's card is declined I. User is prompted to re-enter User information 11. Use Receipt System to create receipt and display it to the customer 12. Use Receipt System to save a copy of the file for accounting 13. Display download links for any e-books
Exceptional Flow 1:	1. Steps 1-3 of Normal Flow 2. The Shopping Cart contents are displayed to the user with an incorrect total cost a. The wrong Shopping Cart contents are displayed
Exceptional Flow 2:	1. Steps 1-6 of Normal Flow

	2. The Billing System bills the user the wrong amount a. The user is billed for out of stock books b. The user is billed for books removed from the Shopping Cart c. The user is not billed for all of the books in the Shopping Cart

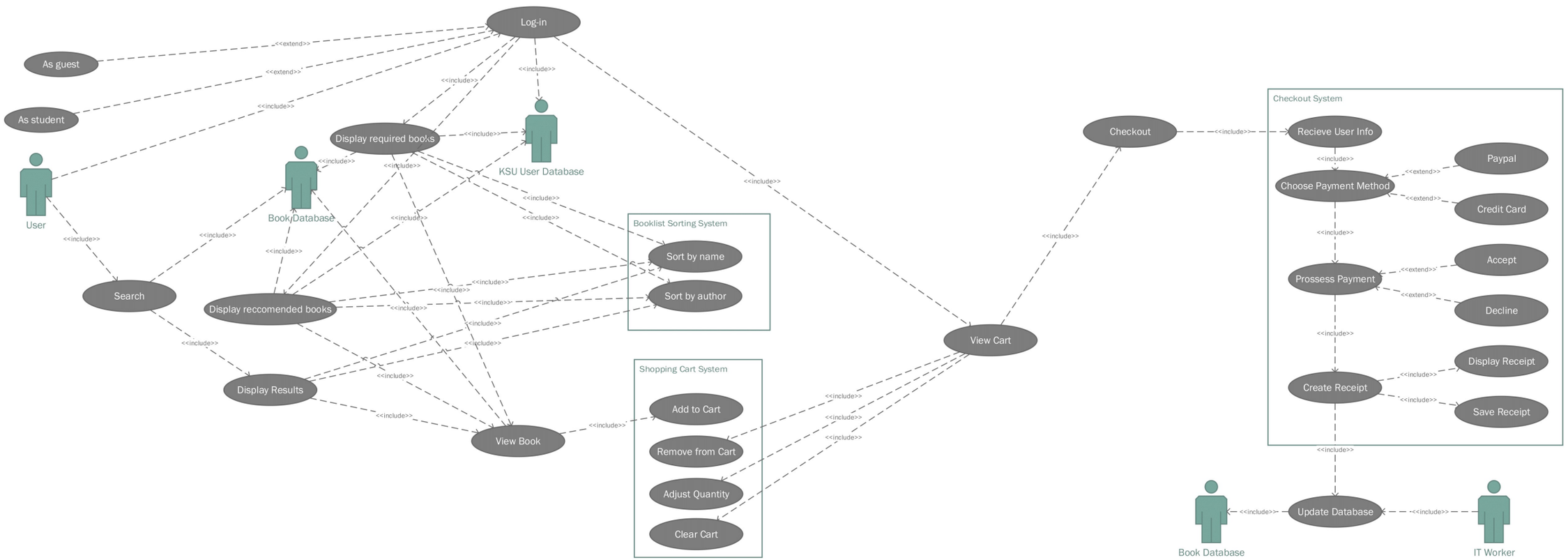
Use Case Name:	Search for Books		
Use Case ID:	000003		
Date Created:	3-15-2016	**Date Last Updated:**	3-29-2016
Author:	Zach Comstock	**Last Updated By:**	W.C. Gilbert III

Actors:	User, Booklist Sorting System, Book Database, Display Results, Booklist
Summary:	When a User types a keyword, author, title, ISBN, professor, or class name into the search bar, the Search for Books use case will need to check the Book Database for matching queries, store the information into the Booklist, sort the Booklist (default: by author), and then display the Booklist on the User's screen.
Triggers:	• User submits new query in search bar
Assumptions:	• The User only used alphanumeric characters in their query
Pre-conditions:	• The Book Database has books in it
Post-conditions:	• A sorted list of books that match the user's query is displayed for the user, each with a link to display the book details
Normal Flow:	1. Query is received 2. Search through Book Database for any matching elements 3. Take matches and temporarily save them in the Booklist 4. Sort the contents of the Booklist in order by Author using the Booklist Sorting System use case 5. After the sort is complete, the Booklist will automatically be displayed using the Display Results use case
Alternative Flow:	6. Query is received 7. Search through Book Database for any matching elements 8. No matches are found 9. Prompt user to enter another query 10. Query is received 11. Search through Book Database for any matching elements 12. Take matches and temporarily save them in the Booklist 13. Sort the contents of the Booklist in order by Author using the Booklist Sorting System use case 14. After the sort is complete, the Booklist will automatically be displayed using the Display Results use case

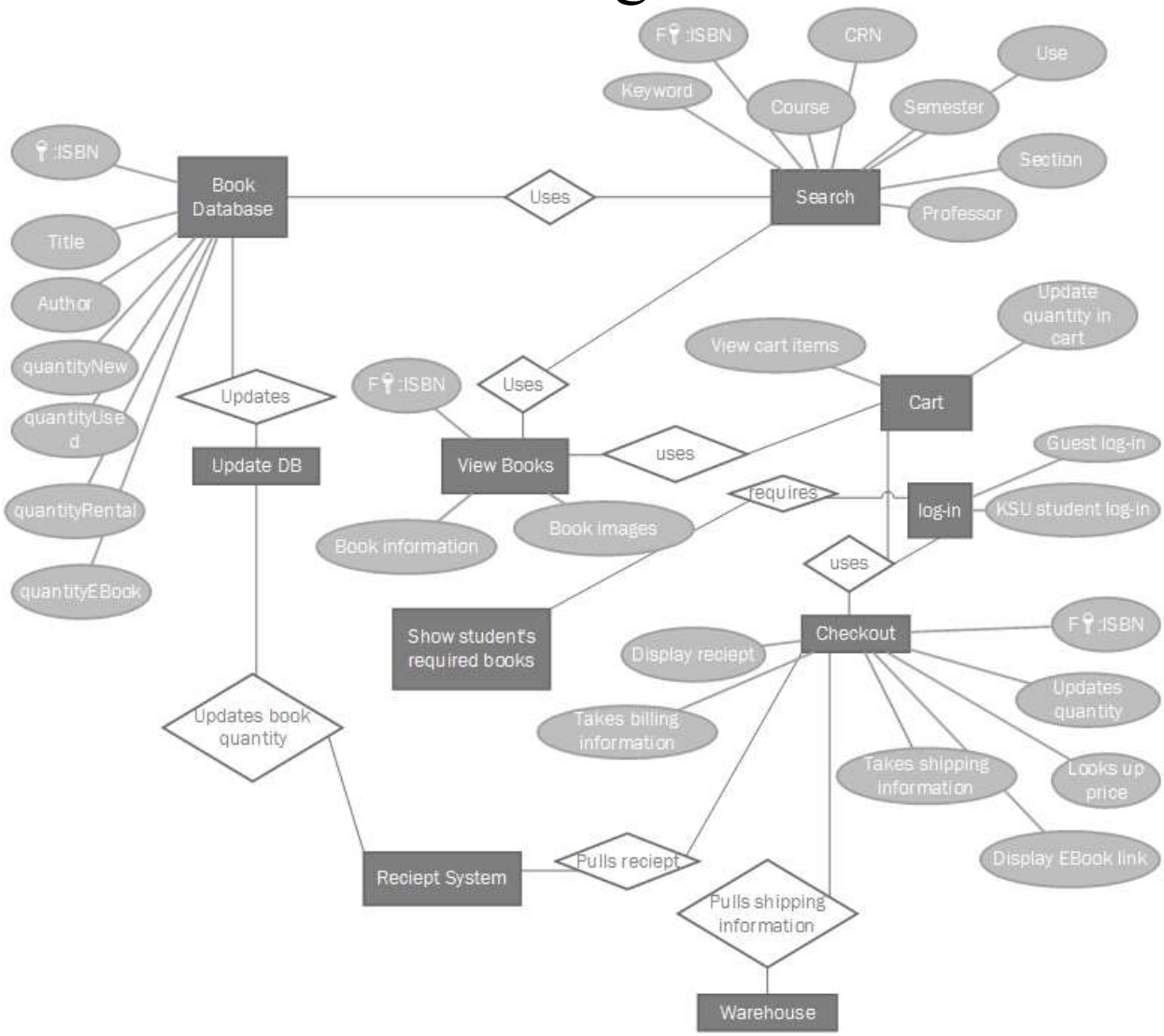
Use Case Name	Shopping Cart		
ID Number	000004		
Author	W.C. Gilbert III	**Last Updated By**	W.C. Gilbert III
Date	3-28-2016	**Date Last Updated**	3-29-2016

Actors	User, Shopping Cart System, Book Database
Summary	The shopping cart use case details how the user will interact with the shopping cart. The user will be able to add or remove books to a shopping cart with the help of the shopping cart system. Users will also be able to view the contents of their shopping cart. The book database is there to insure that users are not able to select a quantity of books that are unavailable.
Pre-conditions	• The user has decided on a book to purchase • The user no longer wants to purchase a particular book
Post-conditions	• The user has successfully added their desired book(s) to the cart • The user has successfully removed book(s) they no longer desire from their cart
Assumptions	• A user may want to view the contents of their shopping cart
Triggers	• The user has decided to add or remove book(s) in the cart
Normal Flow	1. A user searches for books on the bookstore 2. The user finds a book a. The book is needed for their class b. They are interested in the book 3. The book is added to their cart with the help of the shopping cart system a. The user can enter a desired quantity for the book 4. The user reviews the contents of their cart and proceed to checkout
Alternate Flow	1. Steps 1-3 of the normal flow 2. The user decides to no longer purchase the book a. The book isn't needed for their class anymore b. The user no longer wants the book c. The user may want a different quantity of the book 3. The book is removed from the shopping cart 4A. The user proceeds to checkout with the remaining items in their cart 4B. The user leaves the bookstore without purchasing anything
Exceptional Flow 1	1. Steps 1-2 of the normal flow 2. The user attempts to add a book to their cart a. The book isn't added to the cart b. The wrong book is added to the cart
Exceptional Flow 2	1. Steps 1-2 of normal flow 2. The user attempts to remove a book to their cart a. The book is added again b. The book isn't removed
Exceptional Flow 3	1. Steps 1-2 of normal flow 2. The user attempts to add a desired quantity of a book to the cart 3. The user is able to add a quantity higher than what is actually available

UML Use Case Diagram



ER Diagram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Show student's required books
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Update quantity in cart
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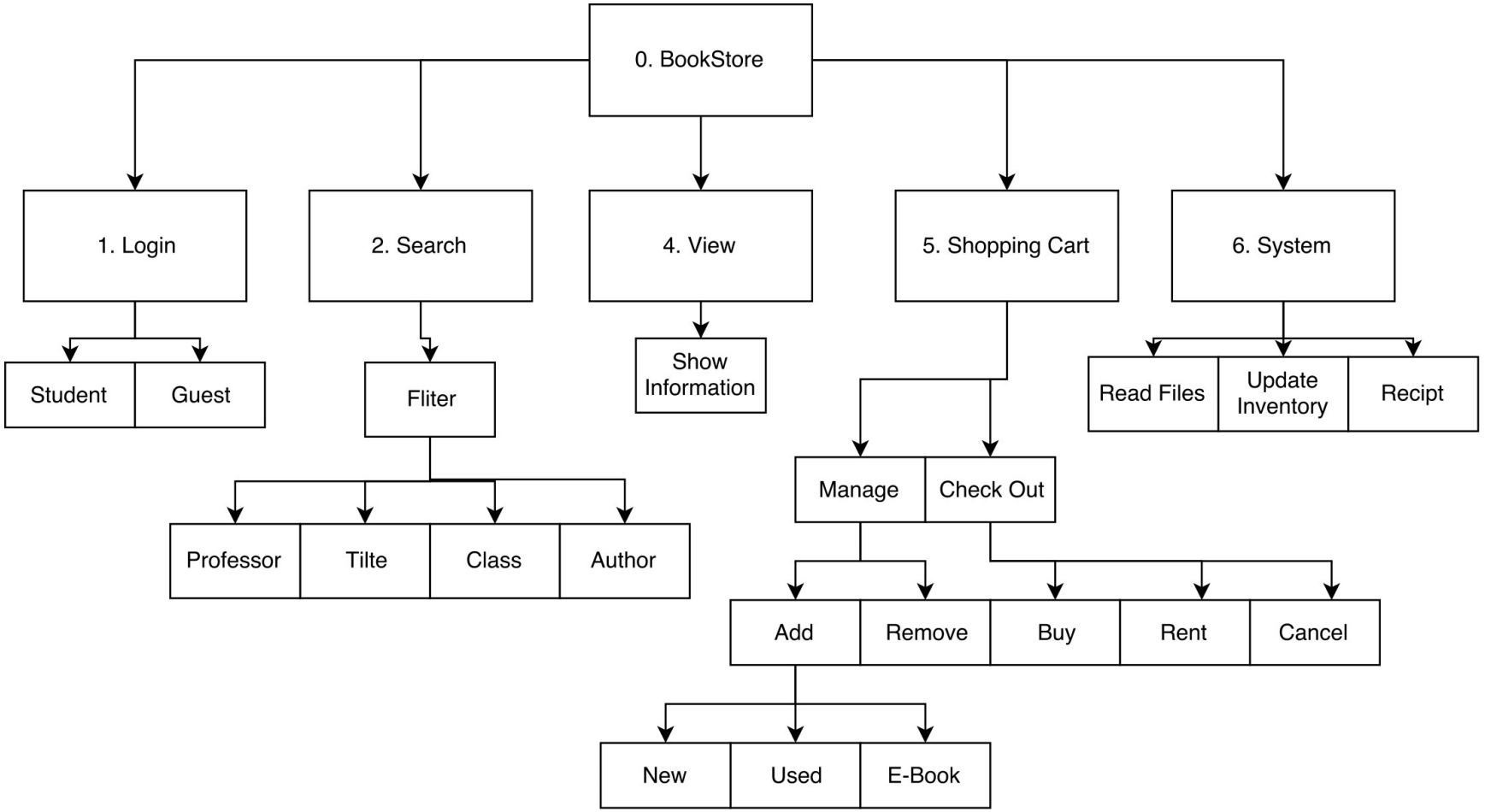
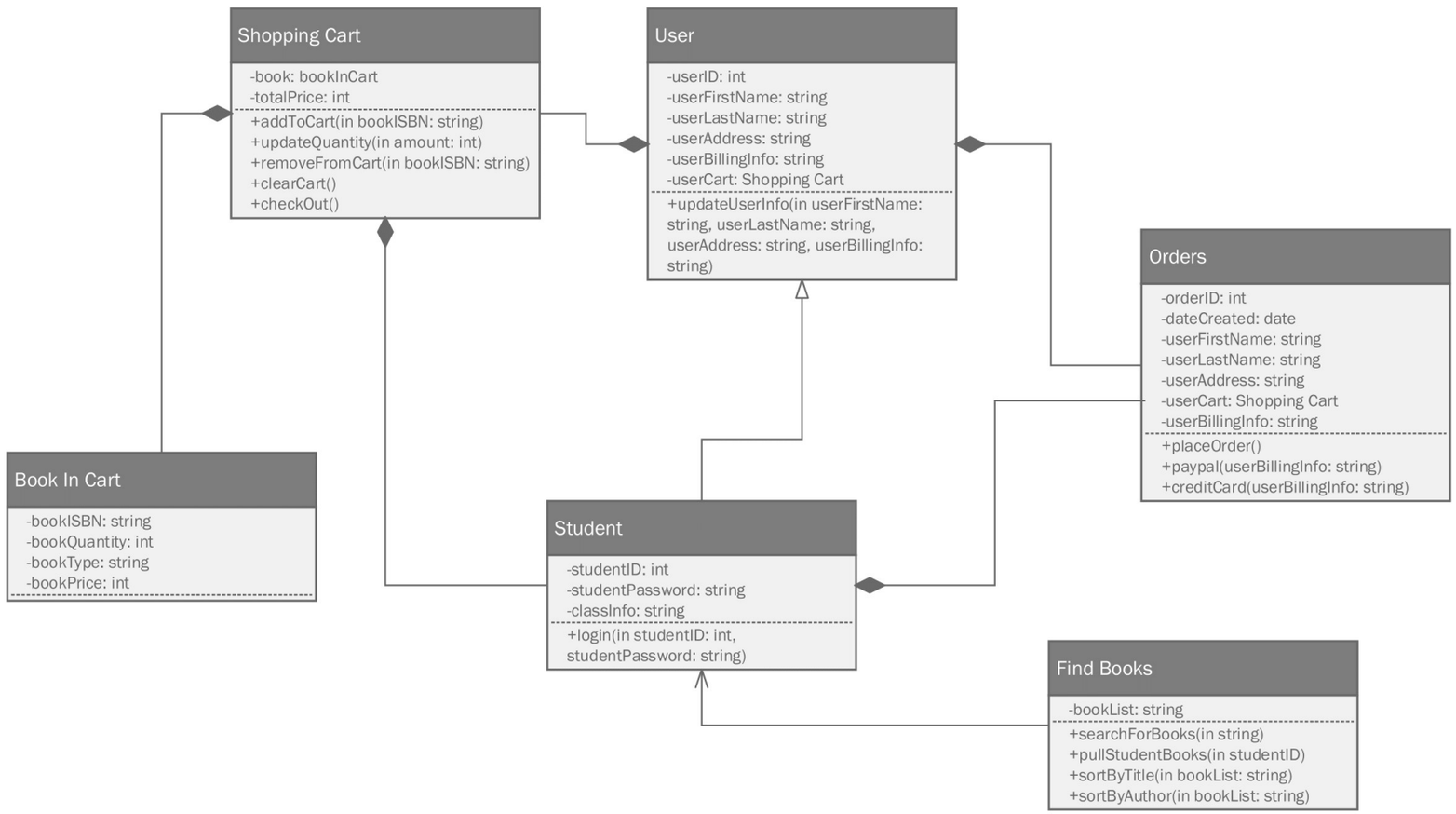
Takes shipping information
Looks up price
Display EBook link
Pulls reciept
Pulls shipping information
Warehouse

Functional Decomposition Diagram



UML Class Diagram



Time Sheets

	Zach Comstock		W.C. Gilbert		Coleman Stewart		Randolph Wilson	
Week 1	**Task**	**Hours Spent**	**Task**	**Hours Spent**	**Task**	**Hours Spent**	**Task**	**Hours Spent**
2/15/2016								
2/16/2016								
2/17/2016	Created Meeting Minutes Sheet and Time Sheet	0.5						
2/18/2016	Worked on Project Vision	1	Created User Stories	1	Created User Stories	1	Created User Stories	1
2/19/2016							Flushed out vision statement	1
2/20/2016			Worked on project vision and some grammar mistakes	0.5				
2/21/2016								
Week 2								
2/22/2016								
2/23/2016								
2/24/2016								
2/25/2016	Worked on workflow breakdown structure	0.5	Worked on workflow breakdown structure	0.5	Worked on workflow breakdown structure	0.5	Worked on workflow breakdown structure	0.5
2/26/2016								
2/27/2016								
2/28/2016								
Week 3								
2/29/2016								
3/1/2016								
3/2/2016								

3/3/2016	Edited User Stories	1	Edited User Stories	1	Edited Project Vision	1	Edited Project Vision	1
3/4/2016								
3/5/2016								
3/6/2016								
Week 4								
3/7/2016								
3/8/2016	Created Resume	0.5						
3/9/2016								
3/10/2016	Created UML Usecase Diagram	2	Created ES, EF, LS, LF Table	1.5			WBS graphic	2
3/11/2016	Created Written Usecase 1	1					Created Resume / Revised WBS	1
3/12/2016								
3/13/2016	Created Written Usecase 2	1.5	Created Resume and Revised ES, EF, LS, LF Table	1	Created Stakeholder proflies	.5		
Week 5								
3/14/2016								
3/15/2016								
3/16/2016								
3/17/2016					Create Resume	0.5		
3/18/2016								
3/19/2016								
3/20/2016								
Week 6								
3/21/2016								
3/22/2016								
3/23/2016			Worked on Written Use Cases	1				
3/24/2016								

3/25/2016							Worked on ER Diagram	1.5
3/26/2016					Worked on Functional Decomposition Diagram	1.5		
3/27/2016								
Week 7								
3/28/2016	UML Class Diagram	1.5						
3/29/2016			Revised Written Use Cases	1.5			Worked on ER Diagram	1
3/30/2016							Complied documents together	3
3/31/2016								
4/1/2016								
4/2/2016								
4/3/2016								
Week 8								
4/4/2016								
4/5/2016								
4/6/2016								
4/7/2016								
4/8/2016								
4/9/2016								
4/10/2016								

Meeting Logs

Meeting Name:	Meeting #1		
Date of Meeting: (MM/DD/YYYY)	2-18-2016	Location:	Student Center
Minutes Prepared By:	Zach Comstock	Charge time to:	3 hours

1. Purpose of Meeting

To establish a solid base for the project.

2. Attendance at Meeting

Name	Attended	Time Arrived	Material Presented
Zach Comstock	Y	12:00 PM	
Coleman Stewart	Y	12:00 PM	
W.C. Gilbert	Y	12:00 PM	
Randolph Wilson	Y	12:00 PM	

3. Meeting Agenda

The purpose of today's meeting is to collaborate and create a minimum of 24 different user-stories. We also need to compose a list of all relevant stakeholders and a project description. Assign roles for the members. Plan dates and times for regular meetings. Collect each member's Skype info. Setup a sharable developing environment if we have time.

4. Meeting Notes, Decisions, Issues

Things not discussed this meeting:

- Assign any roles
- Setup a shareable developing environment.

5. Action Items *(add rows as necessary)*

Action	Assigned to	Due Date
Finish Project Vision	Randolph Wilson	2-21-16

6. Next Meeting

Date:	2-21-2016	Time:	4:00 PM	Location:	Discord (online)
Agenda:	Complete pdf for turning assignment in. Discuss above issues.				

Review Action Items for completion during the next meeting.

Meeting Name:	**Meeting #2**		
Date of Meeting: (MM/DD/YYYY)	2-21-2016	**Location:**	Discord Chat (online)
Minutes Prepared By:	Zach Comstock	**Charge time to:**	

1. Purpose of Meeting

The purpose of todays' meeting is to finalize our Project Vision, user-stories, and list of stakeholders into an acceptable PDF format. We will also need to setup a sharable development environment. And plan our next meeting accordingly.

2. Attendance at Meeting

Name	Attended	Time Arrived	Material Presented
Zach Comstock	Y	4:00 PM	
Coleman Stewart	Y	4:00 PM	
W.C. Gilbert	Y	4:00 PM	
Randolph Wilson	Y	4:00 PM	

3. Meeting Agenda

Get PDF turned in.

4. Meeting Notes, Decisions, Issues

Meeting next time to setup Virtual Machines and assign roles.

5. Action Items

Action	Assigned to	Due Date

6. Next Meeting

Date:	2-25-16	**Time:**	12:00pm	**Location:**	Student Center
Agenda:	Setup virtual machines and assign roles				

Review Action Items for completion during the next meeting.

Meeting Name:	**Meeting #3**		
Date of Meeting: (MM/DD/YYYY)	2-25-2016	**Location:**	Student Center
Minutes Prepared By:	Zach Comstock	**Charge time to:**	2

1. Purpose of Meeting

Create a workflow breakdown structure for a prototype. Estimate project costs in time and discuss what technology to use. Assign roles for each member. Set milestones and a final deadline for the project prototype.

2. Attendance at Meeting

Name	Attended	Time Arrived	Material Presented
Zach Comstock	Y	12:00 PM	
Coleman Stewart	Y	12:00 PM	
W.C. Gilbert	Y	12:00 PM	
Randolph Wilson	Y	12:00 PM	

3. Meeting Agenda

4. Meeting Notes, Decisions, Issues

Created workflow breakdown structure.

Estimated costs and prototype finish date.

Assigned roles for prototype creation.

Assigned work for each individual with due dates.

Set first milestone.

Need to meet with IT to receive copy of Excel Sheet – Monday 2-29-2016 @ 1:00PM

5. Action Items *(add rows as necessary)*

Action	Assigned to	Due Date
Database creation (SQL)	Zach Comstock	3-7-2016
Database creation (SQL)	Randolph Wilson	3-7-2016
Webpage creation (html)	W.C. Gilbert	3-7-2016
Webpage creation(html)	Coleman Stewart	3-7-2016

6. Next Meeting

Date:	3-3-2016	**Time:**	12:00 PM	**Location:**	Student Center
Agenda:	Assess progress				

Review Action Items for completion during the next meeting.

Meeting Name:	**Meeting #4**		
Date of Meeting: (MM/DD/YYYY)	3-3-2016	**Location:**	Student Center
Minutes Prepared By:	Zach Comstock	**Charge time to:**	2 hours

1. Purpose of Meeting

Ensure correct user stories and create early draft of requirements.

2. Attendance at Meeting

Name	Attended	Time Arrived	Material Presented
Zach Comstock	Y	12:00 PM	
Coleman Stewart	Y	12:00 PM	
W.C. Gilbert	Y	12:00 PM	
Randolph Wilson	Y	12:00 PM	

3. Meeting Agenda

- ✓ Convert prototype model to waterfall model.
- ✓ Go over waterfall model, establish next logical steps.
- ✓ Re-do user stories, stake holders, and project description.

Listen to record to ensure user stories are accurate

Make early draft of requirements

4. Meeting Notes, Decisions, Issues

- Create team member resumes

Current step of waterfall model – Requirements analysis and verification

- Create Stakeholder Profiles
- Transcribe original requirements for analysis
- Verify that all the original requirements are represented in current user-stories
- Create draft of Requirements Specification

Next step of waterfall model – System design

5. Action Items

Action	Assigned to	Due Date
Create Resume - Transcribe Requirements	Zach Comstock	3-10-2016
Create Resume	W.C. Gilbert	3-10-2016
Create Resume	Coleman Stewart	3-10-2016
Create Resume – Transcribe Requirements	Randolph Wilson	3-10-2016

6. Next Meeting

Date:	3-10-2016	Time:	12:00 PM	Location:	Student Center
Agenda:	Finish Requirements and review resumes				

Review Action Items for completion during the next meeting.

Meeting Name:	Meeting #5		
Date of Meeting: (MM/DD/YYYY)	3-9-16	Location:	Student Center
Minutes Prepared By:	Zach Comstock	Charge time to:	4 hours

1. Purpose of Meeting

To Prepare for the upcoming presentation.

2. Attendance at Meeting

Name	Attended	Time Arrived	Material Presented
Zach Comstock	Y	4:00 PM	
Coleman Stewart	Y	4:00 PM	
W.C. Gilbert	Y	4:00 PM	
Randolph Wilson	Y	4:00 PM	

3. Meeting Agenda

Rewrote User Stories, Project Vision, and Stakeholders.
Created Work Breakdown Structure

4. Meeting Notes, Decisions, Issues

Need to make Activity Graph, UML Diagram, Written Use cases.

5. Action Items

Action	Assigned to	Due Date

5. Action Items

6. Next Meeting

Date:	3-10-16	**Time:**	12:00 PM	**Location:**	Student Center
Agenda:	**Need to make Activity Graph, UML Diagram, Written Use cases.**				

Meeting Name:	**Meeting #6**		
Date of Meeting: (MM/DD/YYYY)	3-10-16	**Location:**	Student Center
Minutes Prepared By:	Zach Comstock	**Charge time to:**	3 hours

1. Purpose of Meeting

To Prepare for the upcoming presentation.

2. Attendance at Meeting

Name	Attended	Time Arrived	Material Presented
Zach Comstock	Y	12:00 PM	
Coleman Stewart	Y	12:00 PM	
W.C. Gilbert	Y	12:00 PM	
Randolph Wilson	Y	12:00 PM	

3. Meeting Agenda

Began working on Activity Graph, Milestones, ES EF LS LF chart, UML Usecase Diagram.

4. Meeting Notes, Decisions, Issues

Need to make Stakeholder profiles, Written use cases.

4. Meeting Notes, Decisions, Issues

5. Action Items

Action	Assigned to	Due Date
Finish Activity Graph	Randolph Wilson	3-13-16
Finish Milestones, ES EF LS LF chart. Revise WBS	W.C. Gilbert	3-13-16
Finish UML Usecase Diagram. Create 2 written usecases	Zach Comstock	3-13-16
Create stakeholder profiles	Coleman Stewart	3-13-16

6. Next Meeting

Date:	3-1316	**Time:**	1:00 PM	**Location:**	Library
Agenda:	**Prepare for presentation**				

Meeting Name:	**Meeting #7**		
Date of Meeting: (MM/DD/YYYY)	3-13-16	**Location:**	Student Center
Minutes Prepared By:	Zach Comstock	**Charge time to:**	6 hours

1. Purpose of Meeting

To Prepare for the upcoming presentation.

2. Attendance at Meeting

Name	Attended	Time Arrived	Material Presented
Zach Comstock	Y	12:00 PM	
Coleman Stewart	Y	12:00 PM	
W.C. Gilbert	Y	12:00 PM	
Randolph Wilson	Y	12:00 PM	

3. Meeting Agenda

Finished Activity Graph, Milestones, ES EF LS LF chart, UML Usecase Diagram, Written Usecases, and Stakeholder profiles.

Compiled work into single PDF for presentation.

Practiced presentation.

4. Meeting Notes, Decisions, Issues

Need to print copy of PDF for instructor.

5. Action Items

Action	Assigned to	Due Date

6. Next Meeting

Date:		Time:		Location:	
Agenda:					

Meeting Name:	Meeting #8		
Date of Meeting: (MM/DD/YYYY)	3-29-2016	Location:	Student Center
Minutes Prepared By:	Zach Comstock	Charge time to:	3

1. Purpose of Meeting

To prepare for the upcoming deliverable due 3-30-16.

2. Attendance at Meeting

Name	Attended	Time Arrived	Material Presented
Zach Comstock	Y	12:00 PM	UML Class Diagram
Coleman Stewart	Y	12:00 PM	Functional Decomposition
W.C. Gilbert	Y	12:00 PM	4 Written Use Cases
Randolph Wilson	Y	12:00 PM	ER Diagram

3. Meeting Agenda

Need to make a second draft of the Use Case Diagram.

4. Meeting Notes, Decisions, Issues

Use Case Diagram not completed, still needs to be finished.

5. Action Items

Action	Assigned to	Due Date
Finish Use Case Diagram	Zach Comstock	3-30-2016

6. Next Meeting

Date:	n/a	**Time:**	n/a	**Location:**	n/a
Agenda:	n/a				