

# *ITERATION 1* *ARTIFACTS*

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**B**aylor  
blackmarket  
bookstore

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# Project Vision

### *Vision for the Baylor Blackmarket Bookstore*

As a student, trying to shop online for textbooks can be difficult and pricey. Most of the time, students don't need new books and would rather pay less and buy a used book. The problem with other sites, is that you don't know who you are buying from which can put you in danger when meeting up with sellers or buyers that are not students. The Baylor Blackmarket Bookstore is a software designed for students by students, to help buy and sell textbooks safely and with ease. Users of this system can be buyers or sellers. Sellers have to specify what kind of textbook it is they are selling, and buyers are then directed to an email, to help a transaction take place. Students know they are buying from other students and can check the seller's profiles and see their ratings. This will greatly benefit the students of Baylor University by promoting safety along with simplicity and affordability.

# Requirements

## Requirements:

R01: Modify User Profile: A User should be able to modify/delete their account/profile on the B.B.B system.

R02: Search by Title/Author/ISBN: A User should be able to look for a book listing either by Title, Author or ISBN.

R03: Baylor Student Verification: A User should be a current or former student of Baylor University in order to make an account.

R04: User login: A User should be able to log in with their credentials and have their information checked with the login system; as well as being able to recover their account.

R05: User logout: A User should be able to log out.

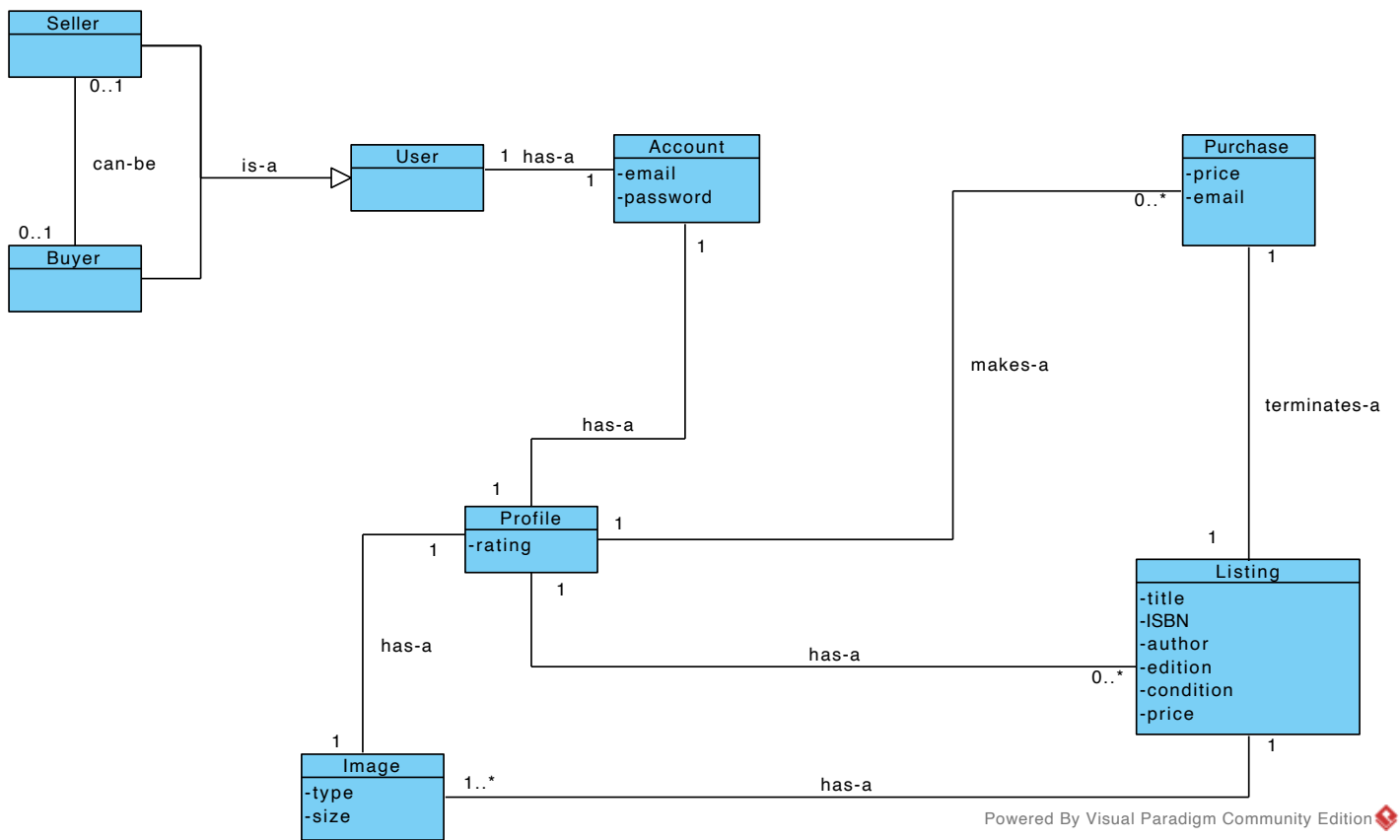
R06: User Registration: A User should be able to register for an account and create their profile on the B.B.B system.

R07: Seller search: A User should be able to search for a specific seller.

R08: Create Book Listing: A User should be able to Modify/Create a Book listing and the B.B.B system should register the new listing into its database.

R09: Seller Ranking: A User should be able to rank and see the ranking of another seller on the system. If a user has already ranked a certain seller, they will not be able to make a separate instance.

# Domain Model





# Wireframes

Login Page:

Email:

Password:

Login

Sign-Up Page:

Email:

Password:

Confirm Password:

Sign-Up

Modify Profile Page:

Choose photo  
from file

Change

Change Name:

Cancel

Make-Listing Page:

Author:

Title:

Make Listing

ISBN:

Cancel

Price:

Book Search Page:

My Account

Book Search

Sellers

Settings

Criteria:

Search By:

Author

ISBN

Title

Book Listings

Author	Title	ISBN	Price	Seller	
Author	Title	ISBN	Price	Seller	
Author	Title	ISBN	Price	Seller	
Author	Title	ISBN	Price	Seller	

Sellers Page:

My Account

Book Search

Sellers

Settings

Seller Name:

Sellers

Seller	
Seller	
Seller	
Seller	

First Screen Page:

My Account

Book Search

Sellers

Settings

Picture

Name:

Make A Listing

Book Listings						
Author	Title	ISBN	Price	Seller	X	
Author	Title	ISBN	Price	Seller	X	
Author	Title	ISBN	Price	Seller	X	
Author	Title	ISBN	Price	Seller	X	

# Use Cases

## USE CASES:

Use Case Name: UC01 - User Sign-In

Scope: Baylor Blackmarket Bookstore

Level: User goal

Primary Actor: User

Stakeholder Interests:

- User: wants to sign into the system
- System: wants new users.

Preconditions:

- User: must have an existing account with B.B.B

Postconditions:

- User: gains entry to B.B.B system and account management.

Main Scenario:

1. User navigates to sign-in page
2. User enters Baylor email and account password.
3. System verifies login information.
4. User gains access to their account and B.B.B.

Extensions:

- 2a. User decides to recover password.
  1. System prompts User for an email.
  2. System verifies email to be valid.
    - 2a. Invalid email detected
  3. System sends recovery email to specified address.
- 3a. User enters an incorrect password/email.
  1. System displays "invalid entry" message
  2. If incorrect attempts = 5, close program.

Use Case Name: UC02 - User Sign-Out  
Scope: Baylor Blackmarket Bookstore  
Level: User goal  
Primary Actor: User  
Stakeholder Interests:  
- User: wants to sign out of the system  
- System: wants to maintain security

Preconditions:

- User: must have an existing account with B.B.B and be signed in

Postconditions:

- User: signed out of B.B.B.

Main Scenario:

1. User clicks sign-out button
2. System logs out user

Use Case Name: UC03 - Account Registration

Scope: Baylor Blackmarket Bookstore

Level: User goal

Primary Actor: User

Stakeholder Interests:

- User: wants to create an account
- System: produces an account for user

Preconditions:

- User: must be a new user

Postconditions:

- User: new account is made for user

Main Scenario:

1. User clicks on create new account button on main login screen
2. System prompts for baylor email.
3. User enters baylor email
4. System prompts for password
5. User enters password
6. User enters confirmation password
7. System Creates account for user

Extensions:

- 2a. User enters non-baylor email
  1. System displays "Must be a baylor email address"
  2. System prompts for baylor email again.
- 6a. System needs to verify new password
  1. System confirms first and second password are equal
    - 1a. They are equal
    - 1b. They are not equal
      1. System prints "Passwords do not match"
  1. System confirms that first password contains an upper-case letter, lower-case letter, number, and special character
    - 2a. Requirements met
    - 2b. Requirements not met
      1. System prints requirements to screen



Use Case Name: UC04 - Book Search

Scope: Baylor Blackmarket Bookstore

Level: User goal

Primary Actor: Buyer

Stakeholder Interests:

- Buyer: wants a listing of their book search

Preconditions:

- Buyer: must be on the book search tab and have valid book search criteria.

Postconditions:

- Buyer: is given a listing catered to their search criteria.

Main Scenario (Author Name):

1. Buyer clicks the 'Search by Author' button near the search bar.
2. Buyer enters the Author's name in a 'lastname,firstname' format.
3. System searches for the author, and shows a listing of all books by that author that are available on the B.B.B system.

Main Scenario (ISBN):

1. Buyer clicks the 'Search by ISBN' button near the search bar.
2. Buyer enters the book's ISBN into the search bar.
3. System searches for the ISBN and shows a listing of all books matching that ISBN, sold by different users.

Main Scenario (Book Title):

1. Buyer clicks the 'Search by Title' button near the search bar.
2. Buyer enters the title into the search bar.
3. System searches for the Title and shows a listing of all books that match or contain that title.

Extension (General Case):

3a. If the search criteria were not to be found within the system, the system would display a 'book not found' error message.

Use Case Name: UC05 - Seller Book Listing

Scope: Baylor Blackmarket Bookstore

Level: User goal

Primary Actor: Seller

Stakeholder Interests:

- Seller: wants to list a book for sale
- System: wants to host user sale

Preconditions:

- Seller: must be signed into B.B.B. and have a book to list

Postconditions:

- System: listing published

Main Scenario:

1. Seller navigates to create a listing page
2. Seller enters basic info: book title, author, edition, ISBN, and price
3. Seller clicks "Publish Listing"
4. System verifies title/ISBN/edition/author combination
5. System publishes listing

Extensions:

- 3a. Seller clicks "Cancel"
2. System displays "Are you sure?" prompt
  - 1a. User selects "no"
  - 1b. User selects "yes"
    1. System discards listing and redirects user to homepage
- 4a. Invalid combination of book info
  1. System displays "invalid entry" message

Use Case Name: UC06 - Profile look-up

Scope: Baylor Blackmarket Bookstore

Level: User goal

Primary Actor: User

Stakeholder Interests:

- User: wants to look up profile of another user
- System: provides user with profile of other

Preconditions:

- User: must be on profile search tab

Postconditions:

- User: is on other users profile page

Main Scenario:

1. User enters profile name into profile search tab
2. User hits enter
3. System takes user to other user's profile page

Extensions:

- 1a. User enters incorrect profile name
  1. System displays "Profile not found"
  2. System allows user to try search again

Use Case Name: UC07 - Seller Ranking

Scope: Baylor Blackmarket Bookstore

Level: User goal

Primary Actor: Buyer

Stakeholder Interests:

- Seller: wants a high ranking.
- User: wants to rank a certain seller.

Preconditions:

- User: must be currently on another user's overview tab.

Postconditions:

- User: has his/her/their ranking added to the average ranking of the seller.
- Seller: Has his/her/their ranking modified by the user.

Main Scenario:

1. User clicks the 'Rank Seller' button on the seller overview tab.
2. User enters the Author's rank in a '1-5' format.
3. System records that the user has ranked a specific seller, and the ranking is added to that specific user's rank.

Extension:

- 1a. User is shown 'Change ranking?' message when they click the 'Rank Seller' button, if they have already ranked this seller before.

Use Case Name: UC08 - Account Management

Scope: Baylor Blackmarket Bookstore

Level: User goal

Primary Actor: User

Stakeholder Interests:

- User: wants to edit profile information
- System: wants user to have updated information

Preconditions:

- User: must have an existing account with B.B.B and be signed in

Postconditions:

- User: profile information updated

Main Scenario:

1. User navigates to profile page
2. User chooses field to edit and enters information
3. User chooses "Save"
4. System verifies change and updates profile

Extensions:

- 2a. User edits password
  1. User enters new password
  2. User enters password in second box to confirm
- 2b. User changes picture
  1. User uploads picture
- 3a. User clicks "Cancel"
  1. System displays "Are you sure?" prompt
    - 1a. User selects "no"
    - 1b. User selects "yes"
      1. System discards changes, redirects user to homepage
- 4a. System needs to verify new password
  2. System confirms first and second password are equal
    - 1a. They are equal
    - 1b. They are not equal
      1. System prints "Passwords do not match"
  3. System confirms that first password contains an upper-case letter, lower-case letter, number, and special character
    - 2a. Requirements met
    - 2b. Requirements not met
      1. System prints requirements to screen
- 4b. Verify Profile Picture
  2. System verifies either .png or .jpg
    - 2a. Not valid file type, print message to screen

Use Case Name: UC09 - Listing Management

Scope: Baylor Blackmarket Bookstore

Level: User goal

Primary Actor: Seller

Stakeholder Interests:

- Seller: wants to edit listing information
- System: wants user to have updated listing information

Preconditions:

- Seller: must have a book listing already published

Postconditions:

- Seller: listing information is updated

Main Scenario:

1. Seller navigates to profile page
2. Seller clicks on listing that needs to be edited
3. Seller chooses field they want to change
4. Seller enters new changes
5. Seller chooses save
6. System updates information

Extensions:

- 3a. Seller edits description
  1. Seller enters new description
  2. System updates description
- 3b. Seller edits listing picture
  1. Seller uploads new picture
  2. System updates picture
- 3c. Seller edits ISBN number
  1. Seller enters revised ISBN number
  2. System updates ISBN number
- 3d. Seller edits book condition
  1. User chooses from dropdown
    - 1a. Seller selects "New"
    - 1b. Seller selects "Used"
  2. User updates book condition
- 3e. Seller edits title
  1. Seller enters revised title
- 3f. Seller edits author
  1. Seller enters revised author
- 3g. Seller edits edition
  1. Seller enters revised edition

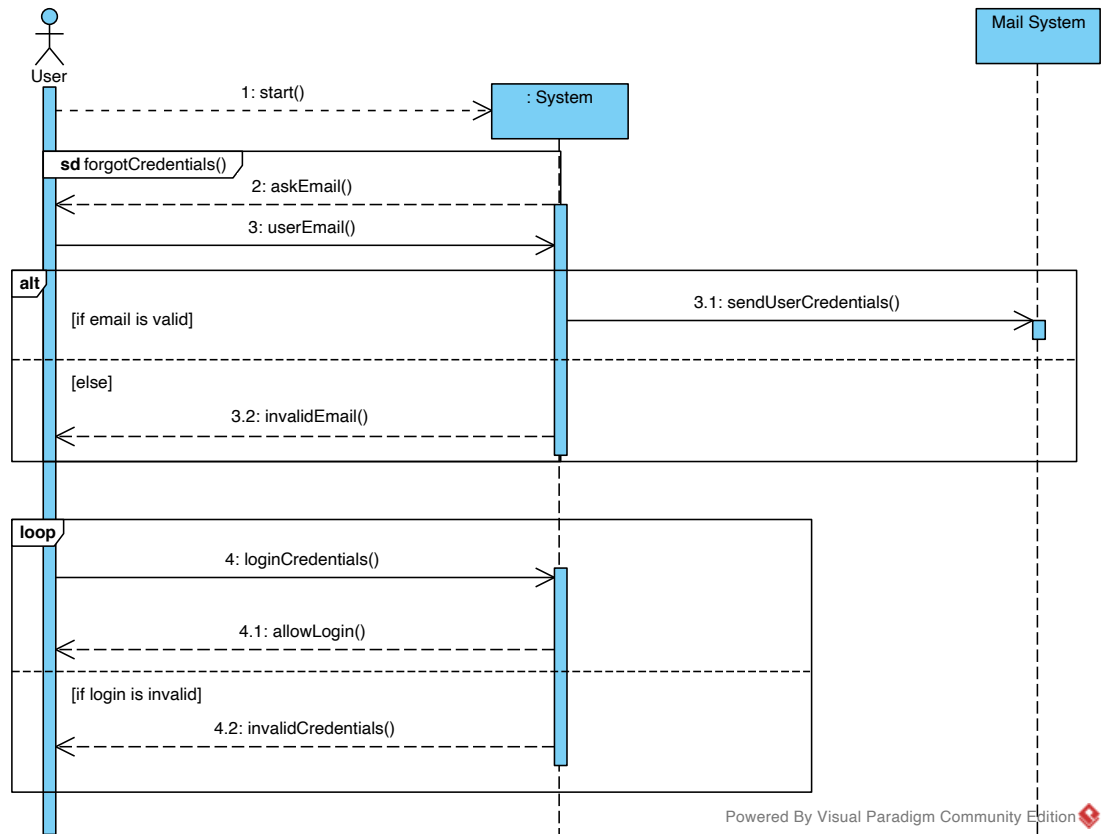
- 3h. Seller edits price
  - 1. Seller enters new price
- 2a. Seller clicks "Cancel"
  - 1. System displays "Are you sure?" prompt
    - 1a. Seller selects "no"
    - 1b. Seller selects "yes"
      - 1. System discards changes, redirects user to homepage
- 4b. Verify Listing Picture
  - 2. System verifies either .png or .jpg
    - 2a. Not valid file type, print message to screen

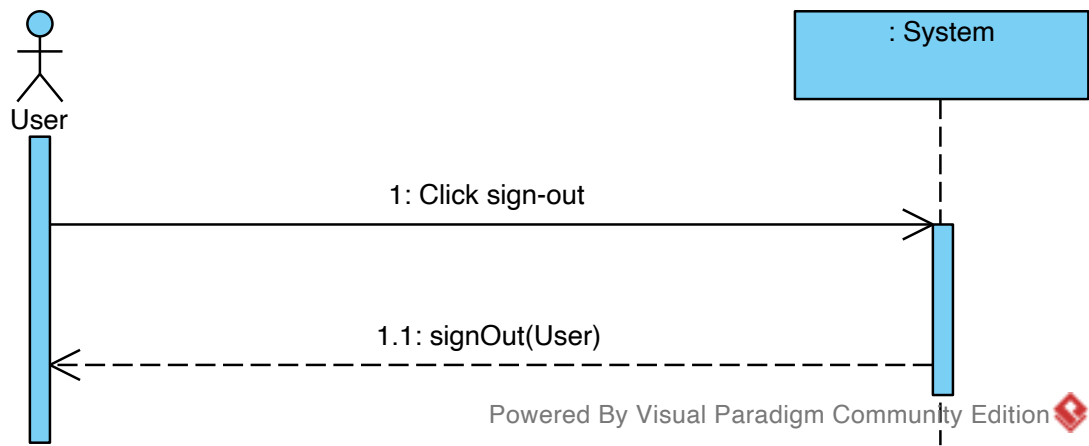
# Traceability Matrix

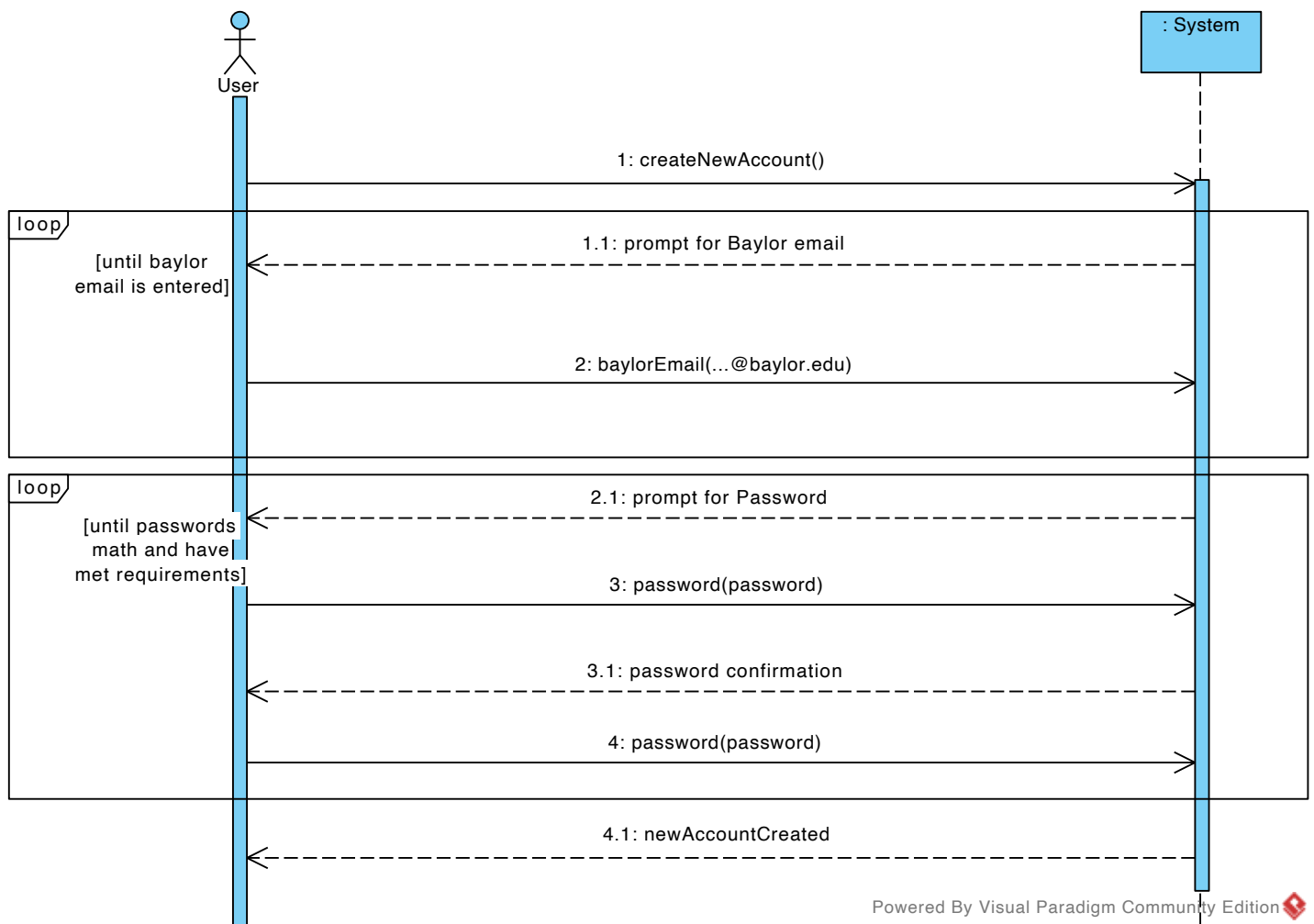


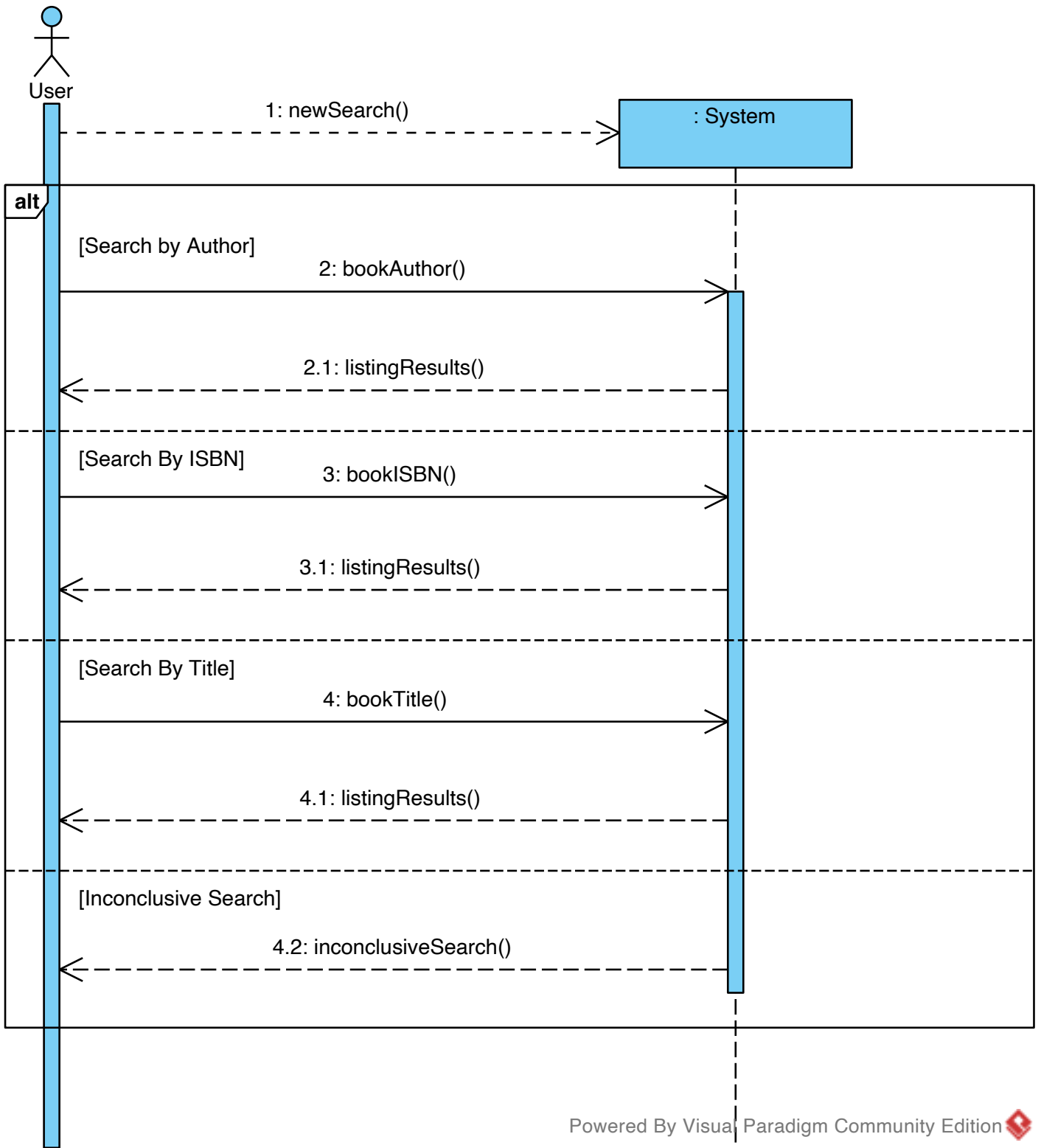
	R01 - Modify User Profile R02 - Search by Title/Author/ISBN R03 - Baylor Student Verification R04 - User Login R05 - User Logout R06 - User Registration R07 - Seller Search R08 - Create Book Listing R09 - Seller Ranking								
UC01 - User Sign-In				X	X	X			
UC02 - User Sign-Out				X	X	X			
UC03 - Account Registration			X	X					
UC04 - Book Search		X						X	
UC05 - Seller Book Listing		X					X		X
UC06 - Profile Look-Up						X	X		X
UC07 - Seller Ranking							X		X
UC08 - Account Management	X					X		X	
UC09 - Listing Management		X						X	

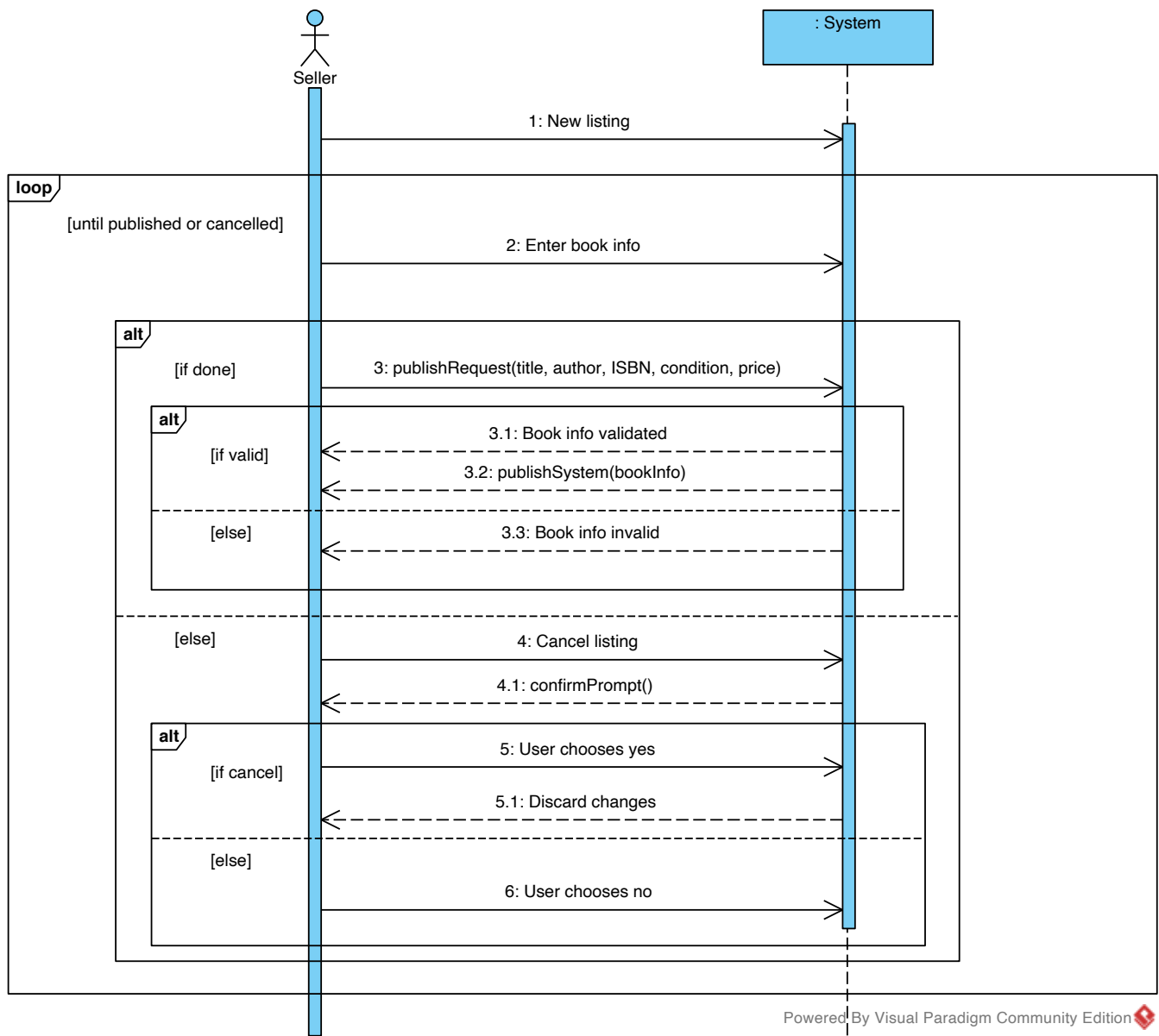
# System Sequence Diagrams

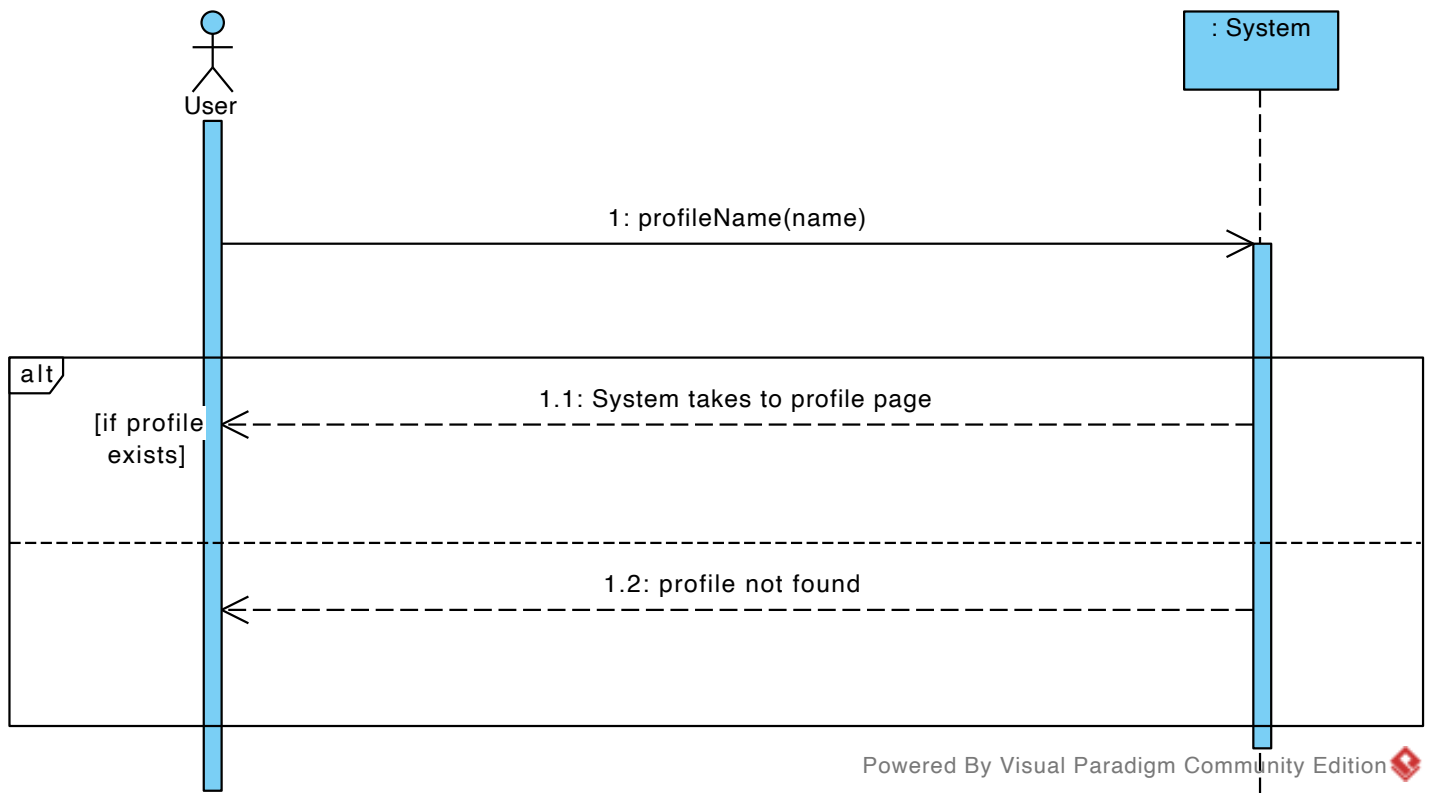




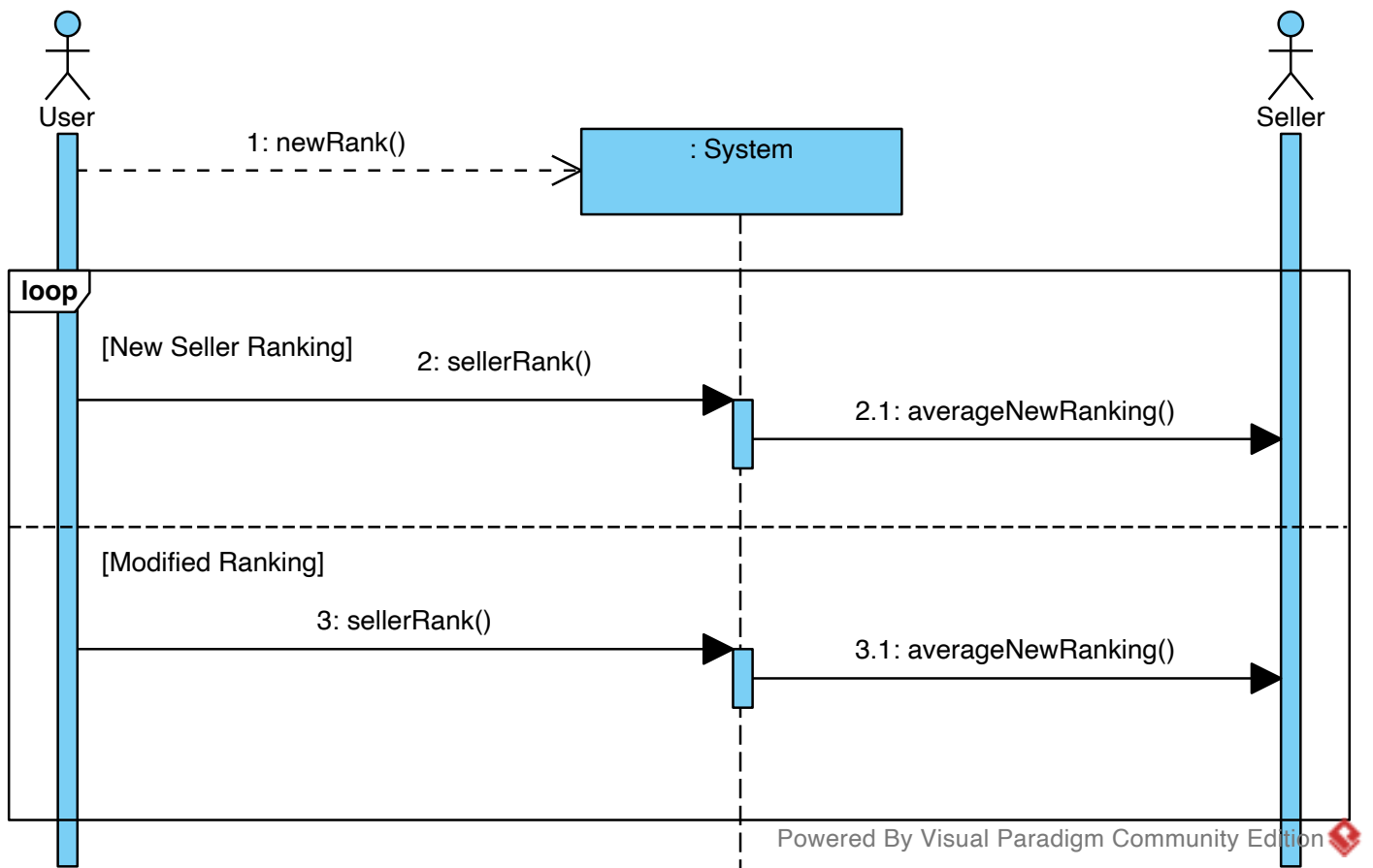


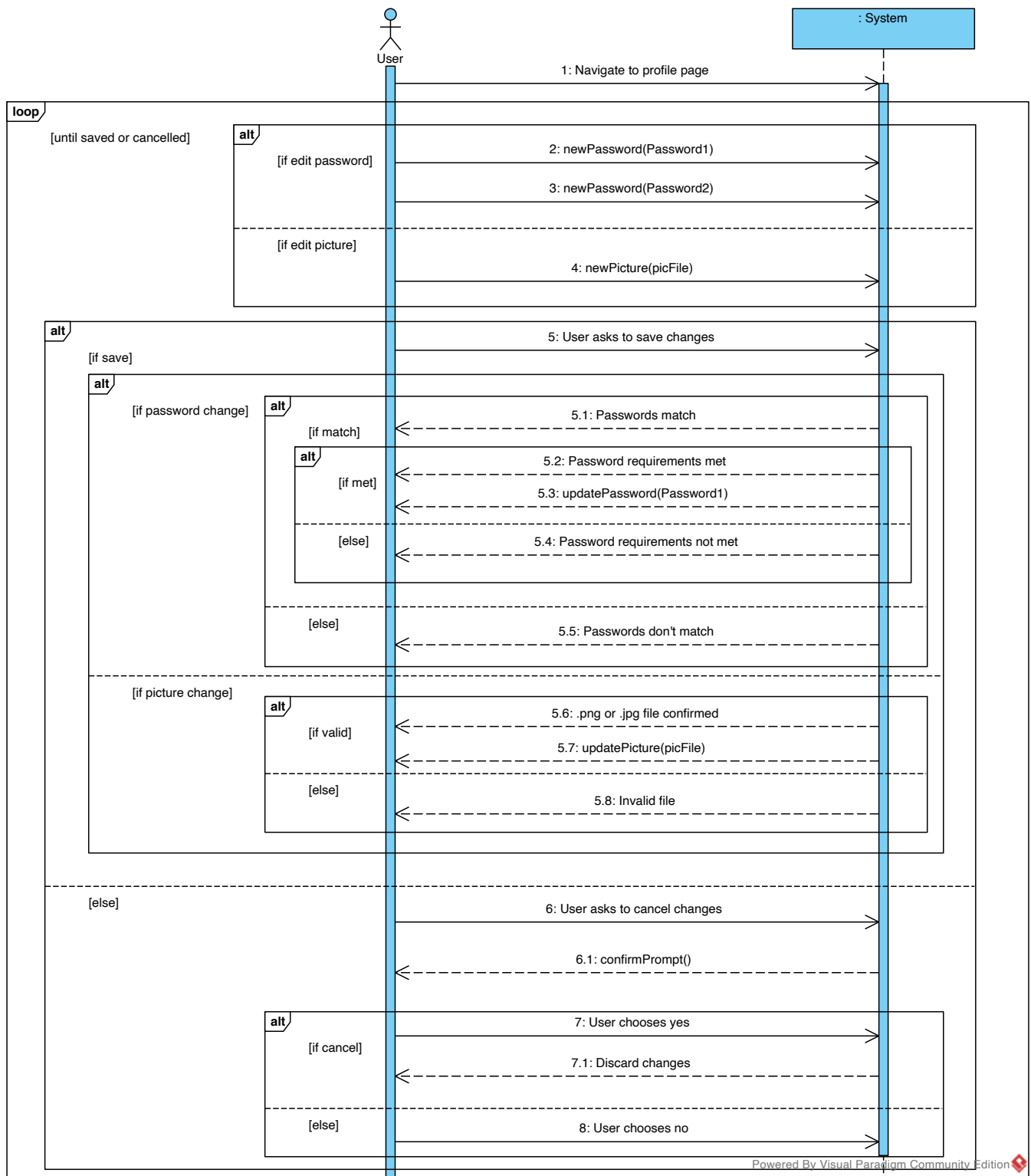














# Operation Contracts

## Operation Contracts:

<b>OC01: login</b>
<b>Operation:</b> login(username: String, password: string) <b>Cross-References:</b> <ul style="list-style-type: none"><li>• UC01: Sign-In.</li></ul> <b>Pre-Conditions:</b> <ul style="list-style-type: none"><li>• B.B.B is open to the login screen.</li></ul> <b>Post-Conditions:</b> <ul style="list-style-type: none"><li>• Users are logged in and taken to their respective profile.</li></ul>
<b>OC02: search</b>
<b>Operation:</b> search(criteria: String/Int, type: String) <b>Cross-References:</b> <ul style="list-style-type: none"><li>• UC04: Book Search.</li></ul> <b>Special Requirements:</b> <ul style="list-style-type: none"><li>• User input for criteria varies based on the type of search they want to use: ISBN, Author or Title.</li></ul> <b>Pre-Conditions:</b> <ul style="list-style-type: none"><li>• B.B.B is open to the book listing search tab.</li></ul> <b>Post-Conditions:</b> <ul style="list-style-type: none"><li>• Users are taken to the results of their query.</li></ul>
<b>OC03: rankSeller</b>
<b>Operation:</b> rankSeller(rank: Integer) <b>Cross-References:</b> <ul style="list-style-type: none"><li>• UC07: Seller Ranking.</li></ul> <b>Pre-Conditions:</b> <ul style="list-style-type: none"><li>• B.B.B is open to the account of a seller</li></ul>

**Post-Conditions:**

- User's rank is logged and User's rank is added to average total ranking of the seller.

**OC04: signOut**

**Operation:** signOut(user: String)

**Cross-References:**

- UC02: User Sign-Out

**Pre-Conditions:**

- User is signed in to B.B.B. already

**Post-Conditions:**

- User is logged out.

**OC05: publishRequest**

**Operation:** publishRequest(title: String, author: String, ISBN: int, price: double)

**Cross-References:**

- UC05: Seller Book Listing.

**Pre-Conditions:**

- Seller has a book they want to sell

**Post-Conditions:**

- The system creates a book with the entered information and verifies it with the list

**OC06: publishSystem**

**Operation:** publishSystem(bookInfo: book)

**Cross-References:**

- UC05: Seller Book Listing.

**Pre-Conditions:**

- Seller enters valid information

**Post-Conditions:**

- The listing is created with the information

**OC05:** confirmPrompt

**Operation:** confirmPrompt()

**Cross-References:**

- UC05: Seller Book Listing.

**Pre-Conditions:**

- User has opted to discard changes

**Post-Conditions:**

- The system discards changes if the user confirms the choice

**OC06:** newPassword

**Operation:** newPassword(password: String, password2: String)

**Cross-References:**

- UC08: Account Management.

**Pre-Conditions:**

- User enters a password following requirements

**Post-Conditions:**

- System stores password to check against requirements

**OC07:** newPicture

**Operation:** newPicture(picFile: String)

**Cross-References:**

- UC08: Account Management.

**Pre-Conditions:**

- User enters a .png or .jpg file

**Post-Conditions:**

- System stores file to check against requirements

**OC08:** updatePassword**Operation:** updatePassword(password: String)**Cross-References:**

- UC08: Account Management.

**Pre-Conditions:**

- User's password matches requirements

**Post-Conditions:**

- System updates user's password

**OC09:** updatePicture**Operation:** updatePicture(picFile: String)**Cross-References:**

- UC08: Account Management.

**Pre-Conditions:**

- User's picture matches requirements

**Post-Conditions:**

- System updates user's profile picture

**OC10:** changeTitle**Operation:** updateTitle(title: String)**Cross-References:**

- UC09: Listing Management.

**Pre-Conditions:**

- User wants to edit listing title

**Post-Conditions:**



- System updates listing title

**OC11: changeISBN**

**Operation:** updateISBN(isbn: String)

**Cross-References:**

- UC09: Listing Management.

**Pre-Conditions:**

- User wants to edit listing ISBN

**Post-Conditions:**

- System updates listing ISBN

**OC12: changeEdition**

**Operation:** updateEdition(edition: String)

**Cross-References:**

- UC09: Listing Management.

**Pre-Conditions:**

- User wants to edit listing edition

**Post-Conditions:**

- System updates listing edition

**OC13: changeCondition**

**Operation:** updateCondition(condition: String)

**Cross-References:**

- UC09: Listing Management.

**Pre-Conditions:**

- User wants to edit listing condition

**Post-Conditions:**

- System updates listing condition

**OC14:** changeDescription

**Operation:** updateDescription(description: String)

**Cross-References:**

- UC09: Listing Management.

**Pre-Conditions:**

- User wants to edit listing description

**Post-Conditions:**

- System updates listing description

**OC15:** changePrice

**Operation:** updatePrice(price: Double)

**Cross-References:**

- UC09: Listing Management.

**Pre-Conditions:**

- User wants to edit listing price

**Post-Conditions:**

- System updates listing price

**OC16:** changePicture

**Operation:** updatePicture(picFile: jpg/png)

**Cross-References:**

- UC09: Listing Management.

**Pre-Conditions:**

- Listing picture matches requirements

**Post-Conditions:**

- System updates listing picture

**OC17: profileSearch**

**Operation:** profileSearch(profile: String)

**Cross-References:**

- UC06: Profile Search.

**Pre-Conditions:**

- B.B.B is open to the profile search tab.

**Post-Conditions:**

- Users are taken to the profile.

**OC18: createAccount**

**Operation:** createAccount(email: String, password: String, password2: String)

**Cross-References:**

- UC03: Account Registration.

**Pre-Conditions:**

- Password meets criteria and passwords match

**Post-Conditions:**

- System creates account for user

**OC19: listingSaveEdit**

**Operation:** saveEdit()

**Cross-References:**

- UC09: Listing Management.

**Pre-Conditions:**

- No user errors in listing edits

**Post-Conditions:**

- System updates listing information

# Time Sheet

Time Sheet								
Member	Hours	9/11/20	9/13/20	9/15/20	9/16/20	9/17/20	9/18/20	9/21/20
Tyler Crumrine	10	1	2	2	1	1		3
Chris Torres	11	1	2	2	2	1		3
Tom Pechulis	11	1	1	2	2	1	1	3

# Gant Diagram

# Baylor Blackmarket Bookstore

Sep 17, 2020

[http://](#)

Project manager  
Project dates

Tom Pechulis  
Sep 11, 2020 - Nov 25, 2020

Completion  
Tasks  
Resources

15%  
32  
3

## Tasks

Name	Begin date	End date
Iteration 1	9/11/20	9/21/20
Fully Dressed Use Cases	9/11/20	9/13/20
System Sequence Diagrams	9/11/20	9/13/20
Requirements	9/15/20	9/15/20
Gantt Diagram	9/15/20	9/18/20
Wire Frame Diagrams	9/15/20	9/18/20
Traceability Matrix	9/15/20	9/18/20
Domain Model	9/15/20	9/18/20
Operation Contracts	9/15/20	9/21/20
Presentation	9/18/20	9/21/20
Website Set-Up	9/18/20	9/21/20
Iteration 2	9/24/20	10/29/20
Sequence Diagrams	9/26/20	9/30/20
Design Model	9/30/20	10/3/20
Package Diagram and Architecture	10/3/20	10/7/20
GRASP Patterns	10/7/20	10/11/20
Prototype Implementation	9/24/20	10/15/20
Testing	10/8/20	10/19/20
Updated Analysis	10/21/20	10/23/20
Updated Website	10/23/20	10/27/20
Presentation	10/27/20	10/29/20
Iteration 3	10/31/20	11/24/20
Persistence + Business Layer	10/31/20	11/6/20
OCL	11/6/20	11/11/20
User Guide	11/11/20	11/15/20
Revised Analysis	11/18/20	11/22/20
Use Case Video	11/15/20	11/22/20



Tasks

Name	Begin date	End date
UI	10/31/20	11/12/20
Implementation	10/31/20	11/21/20
Testing	11/16/20	11/22/20
Website	11/16/20	11/22/20
Presentation	11/21/20	11/24/20

**Resources**

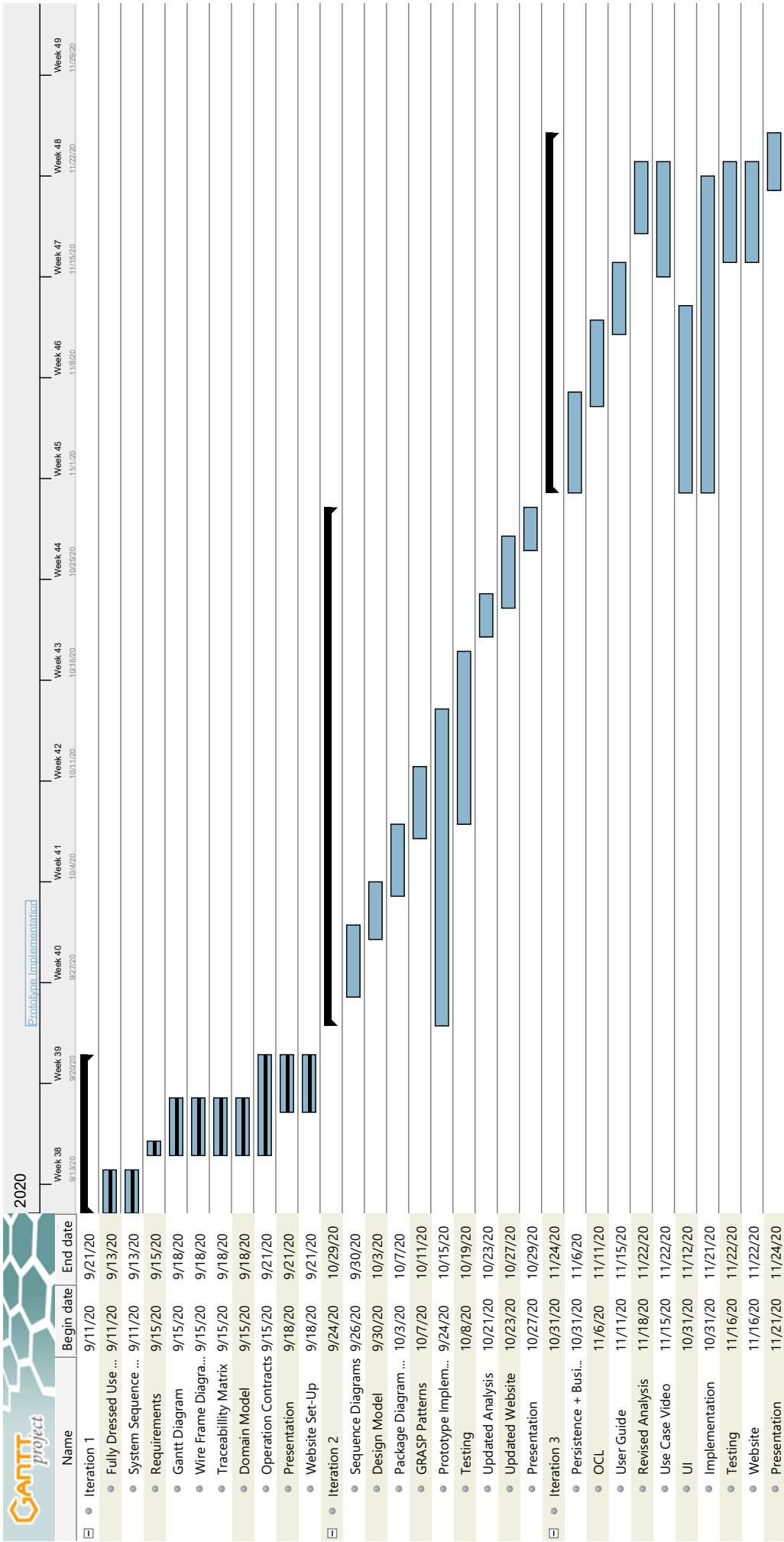
Name	Default role
Tyler Crumrine	developer
Chris Torres	developer
Tom Pechulis	project manager

# Baylor Blackmarket Bookstore

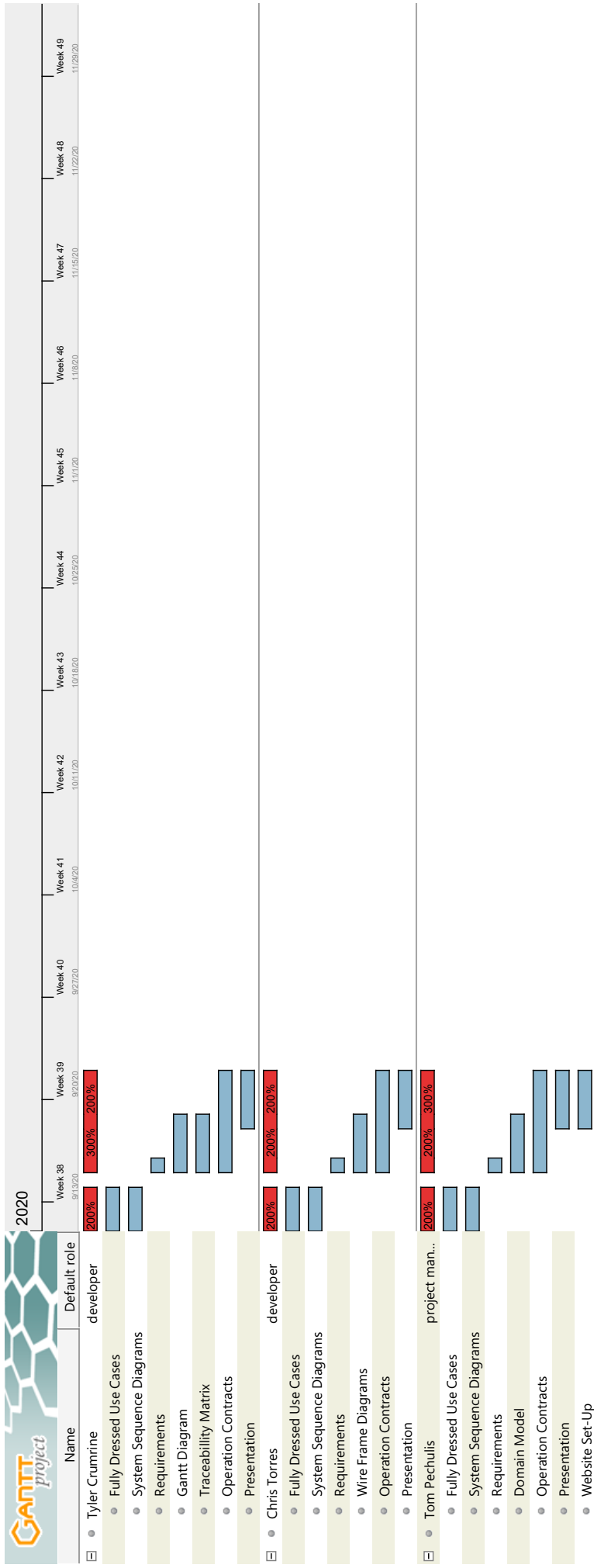
Sep 17, 2020

## Gantt Chart

5



# Resources Chart



# Website Link

<https://tompechulis.github.io/BBB.github.io/>

# Github Link

<https://github.com/TomPechulis/BBB.github.io>