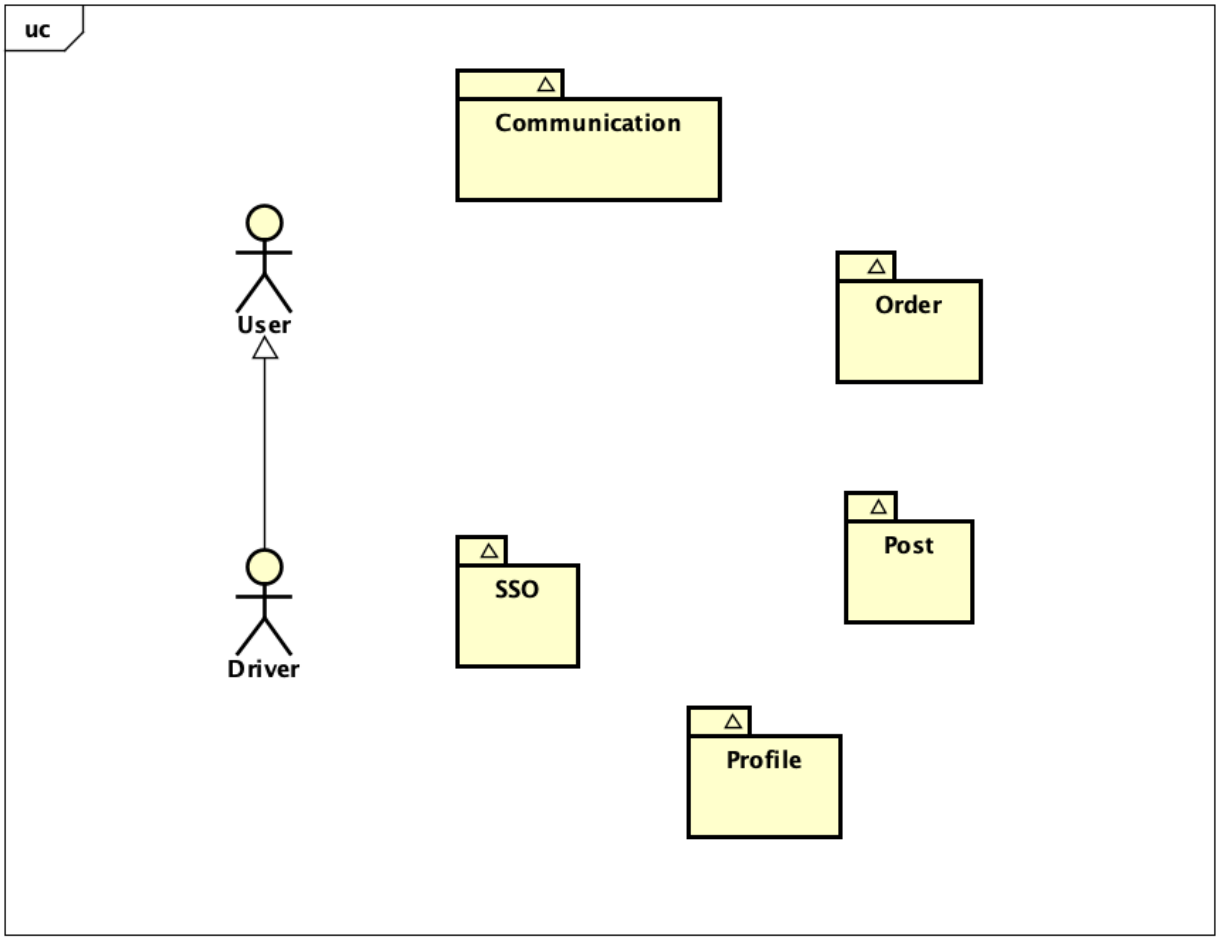
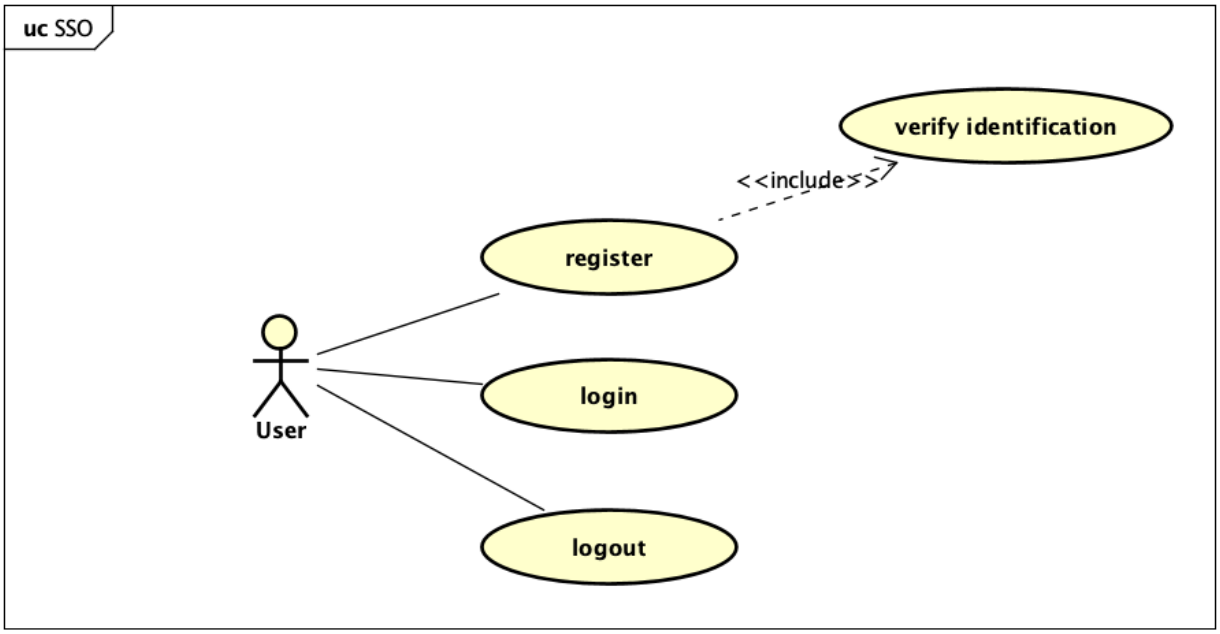
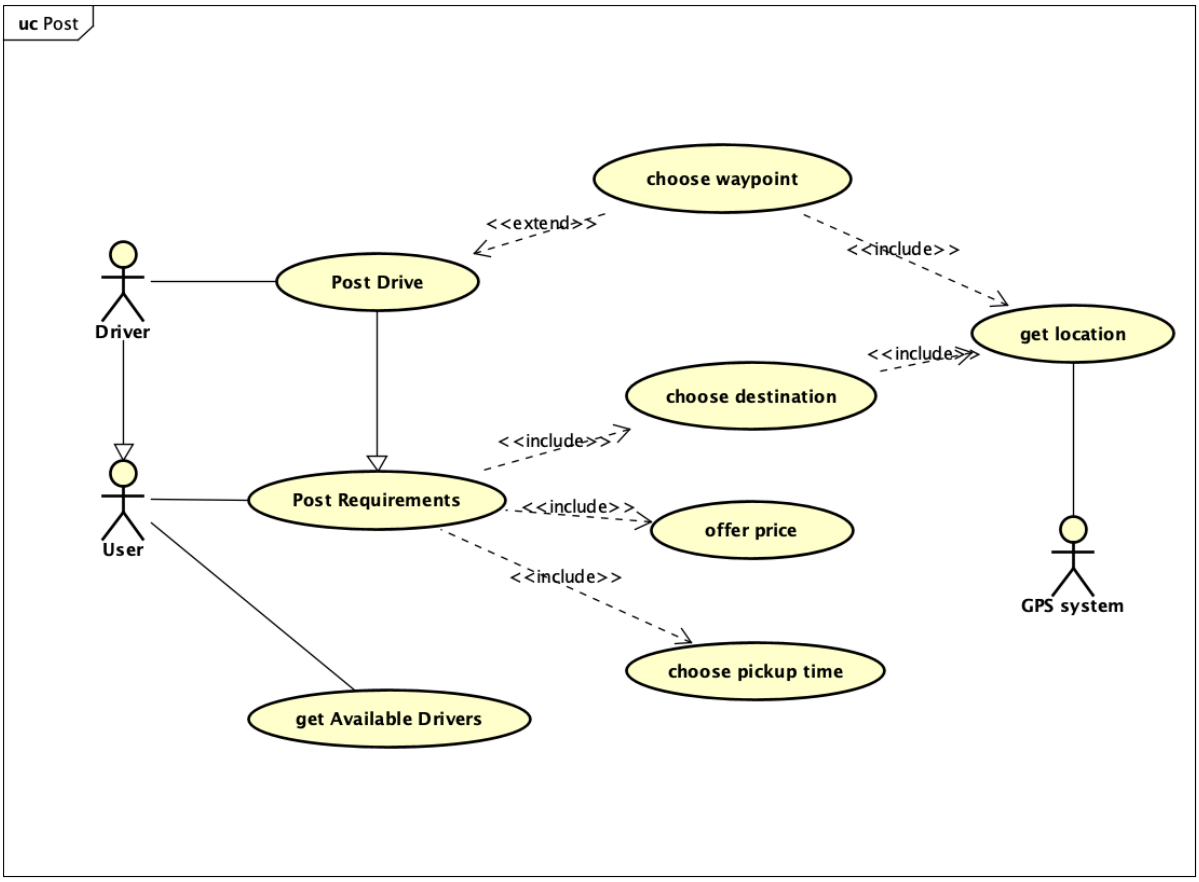
1. Use Case Diagram



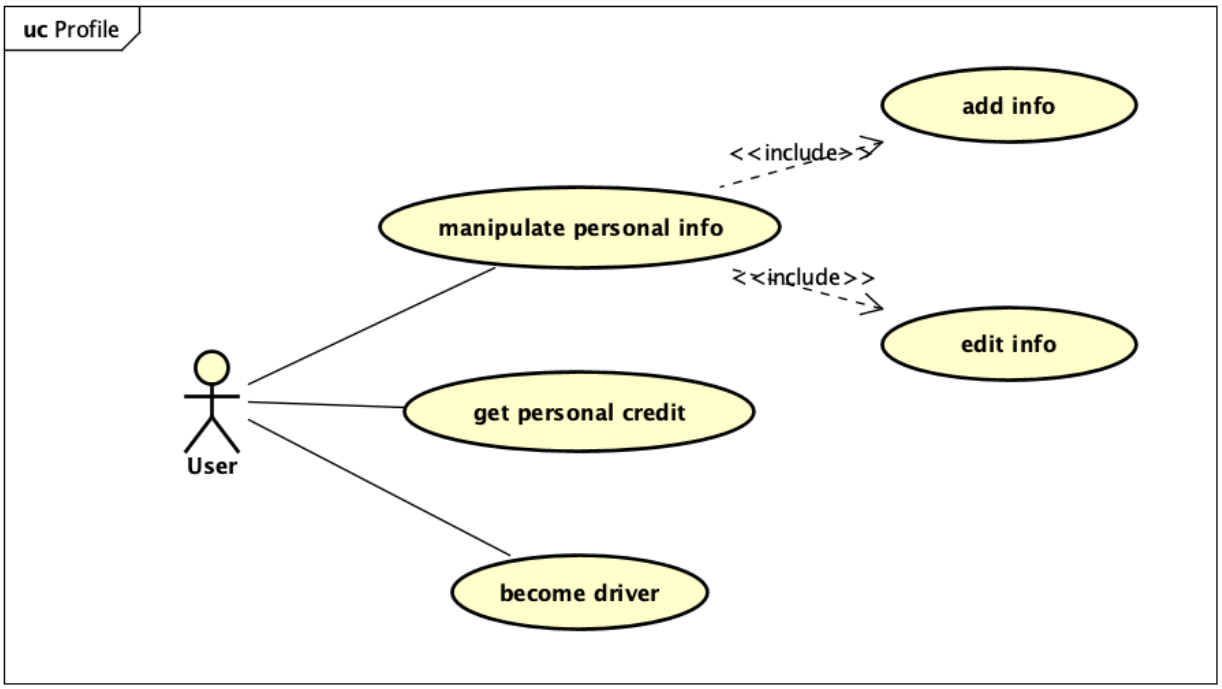
Package Diagram


uc SSO
verify identification
<<include>>
register
User
login
logout

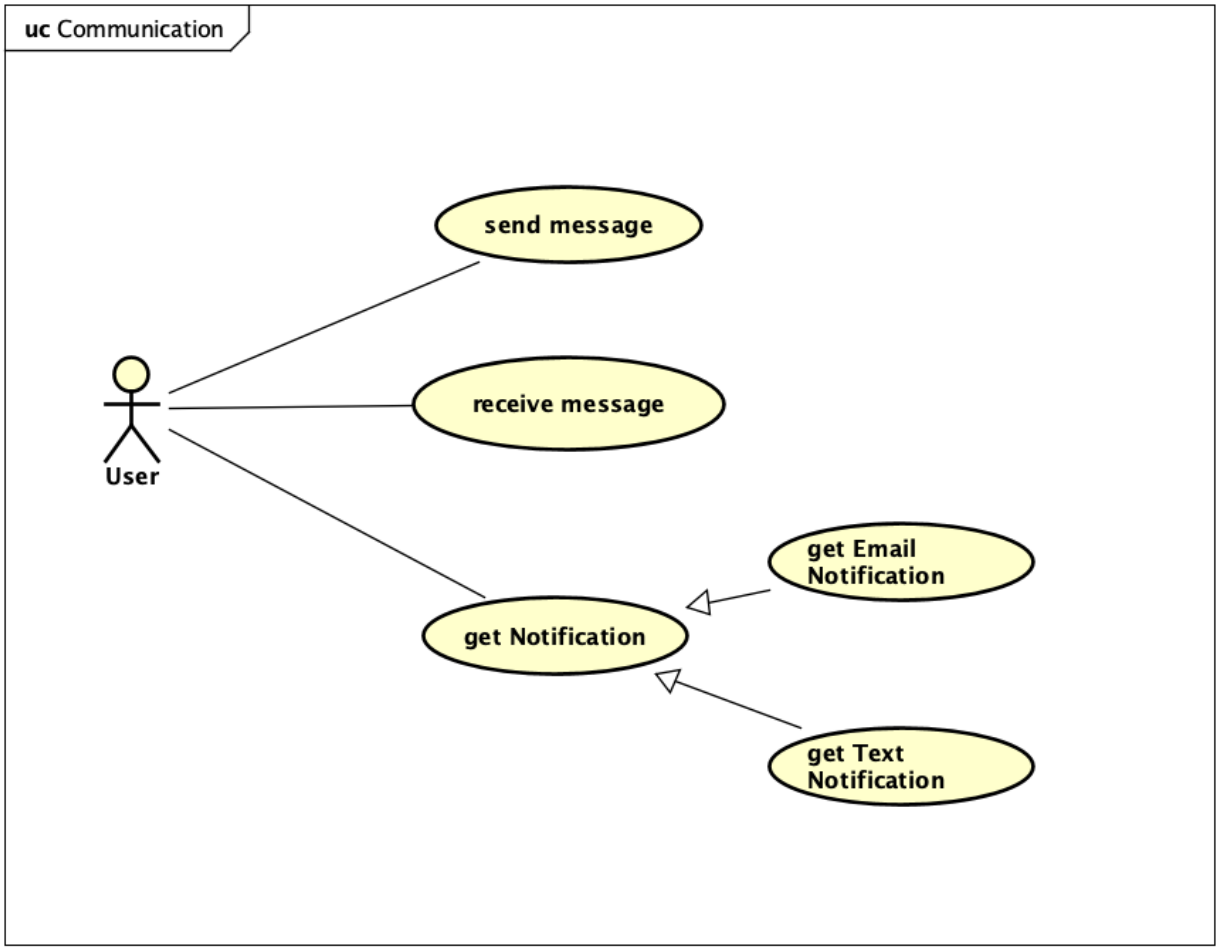
SSO System


uc Post
choose waypoint
<<extend>>
<<include>>
Post Drive
Driver
get location
<<include>>
choose destination
<<include>>
Post Requirements
<<include>>
offer price
User
GPS system
<<include>>
choose pickup time
get Available Drivers

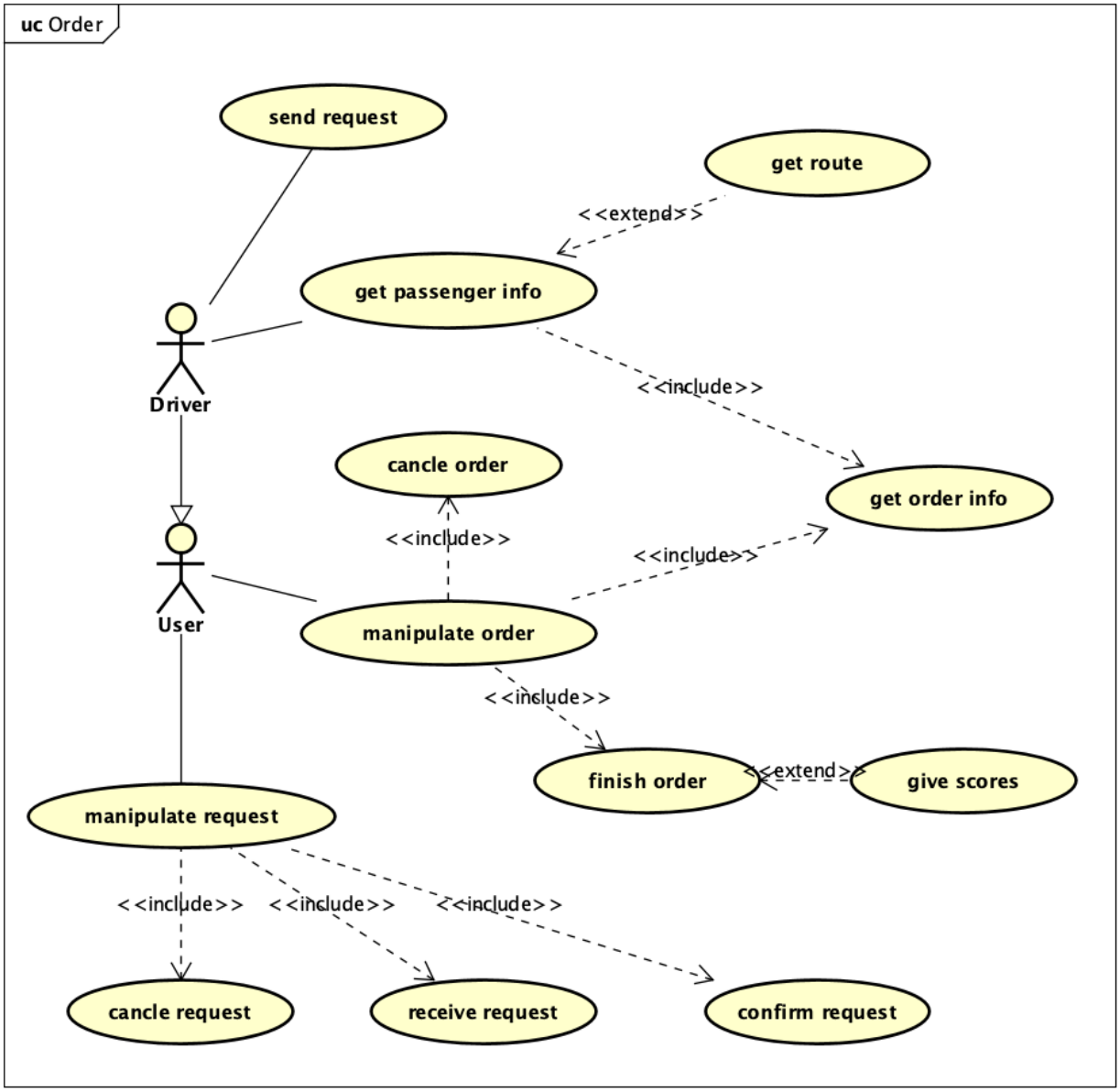
Post



Profile



Communication



order

2. User Personas:

ROMAN'S PERSONA TEMPLATE

romanpichler

PICTURE & NAME	DETAILS	GOAL
What does the persona look like? What is its name? Choose a realistic and believable picture and name. **Driver : Tom** **Passenger : Jerry**	What are the persona's relevant characteristics and behaviours? For instance, demographics, such as age, gender, occupation, and income; psychographics, including lifestyle, social class, and personality; and behavioural attributes like usage patterns, attitudes, and brand loyalty. Only list relevant details. Tom Work as professor at Virginia Tech for more than 10 year. Is 45 years old, holds a PhD of Computer Science degree. Lives in Blacksburg, VA alone. Daily drive to campus from Christiansburg VA. Very kind, open to help others. keen on sharing opinions with other Jerry Student at Virginia Tech Blacksburg campus. Is 22 years old, pursuing the Masters of Computer Engineering degree. Living in Christiansburg VA. Daily commute to campus for 2 hours. Holding a driving license permit, but do not have a car. Would like to meet new friends. do not have a social anxiety disorder	What problem does the persona want to solve or which benefit does the character seek? Why would the persona want to use or buy the product? Tom Willing to get some extra income. Willing to get in touch with others more Jerry Hope to save time from daily commute. Wish to receive new idea from users.

www.romanpichler.com
Template version 04/17

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3. User Stories

SSO System:

As a new user, I want to create an account so that I can use the application.
As a user who cares much about safety, I want to take the ride with Virginia Tech people so that I can avoid potential risks.
As a user, I want to log in and log out so that I can access the application.

Post System:

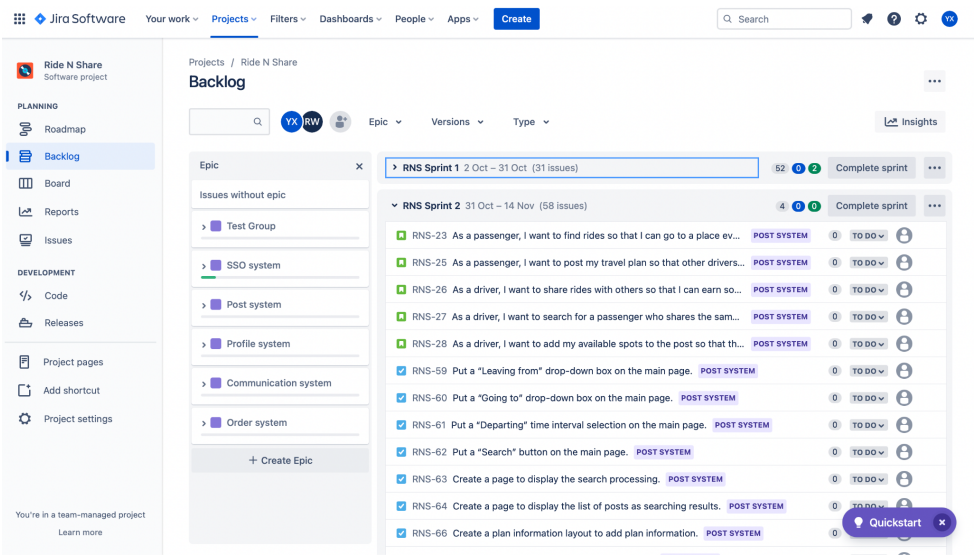
As a passenger, I want to find rides so that I can go to a place even if I don't have a car.
As a passenger, I want to post my travel plan so that other drivers who have the same schedule can pick me up.
As a driver, I want to share rides with others so that I can earn some money and provide convenience to the passengers.
As a driver, I want to search for a passenger who shares the same schedule so that I don't have to write a post.
As a driver, I want to add my available spots to the post so that the number of passengers will not exceed my car capacity.

Profile System:
As an essential user, I want to add my contact information so that others can reach out to me.
As a driver, I want to add my car information so that others know I can provide rides.
As a user, I want to have my credit shown on my page so that the other user knows I am accountable.
As a user, I want to work with those with high credit points.
As a user, I want to edit my profile so that the information is updated.

Communication System:
As a user, I want to have a chat box to communicate with others so that we can talk about details for this ride.
As a user, I want to get email notifications so that I won't miss any messages on the platform.

Order System:
As a driver, I want to send a request to the passengers so that they can confirm it to make a deal, and I will have their contact details.
As a passenger, I want to confirm the request from the drivers so that I can finalize it and have their contact details.
As a user, I want to rate the others who share the ride with me so that I can help maintain a good environment for the users.
As a user, I want to cancel the order so that I don't have to take the ride when I change my schedule.

4. Product Backlog - User Stories & Task & Test & Hours



Details as follows:

SSO System:

User Stories	Taks	Test
As a new user, I want to create an account so that I can use the application.	● Put a “Sign Up” button on the login page. (1h) ● Create a new db to store users. (4h) ● Create a page to display user signup. (6h) ● Add a login link to the login page. (1h)	RideNShare can provide users with a university email register and login.
As a user who cares much about safety, I want to take the ride with Virginia Tech people so that I can avoid potential risks.	● Put a “Sign up with Google” button on the signup page. (1h) ● Create a page to display authentication info with Virginia Tech login portal. (4h)	RideNShare can provide users with a university email register and login.
As a user, I want to log in and log out so that I can access the application.	● Put a “Log In” button on the login page. (1h) ● Create a page to display user login. (6h) ● Add a signup link to the signup page. (1h) ● Put a “Sign Out” button on the main page. (1h)	RideNShare can provide users with a university email register and login.

Post System:

User Stories	Taks	Test
As a passenger, I want to find rides so that I can go to a place even if I don’t have a car.	● Put a “Leaving from” drop-down box on the main page. (2h)	Users can search for an available ride with given situations.

	• Put a “Going to” drop-down box on the main page. (2h) • Put a “Departing” time interval selection on the main page. (2h) • Put a “Search” button on the main page. (4h) • Create a page to display the search processing. (6h) • Create a page to display the list of posts as searching results. (6h)	
As a passenger, I want to post my travel plan so that other drivers who have the same schedule can pick me up.	• Create a plan information layout to add plan information. • Put a TimePicker box to choose date and time. • Put a Text Field to input the start point. • Put a Text Field to input destination. • Put a submit button to submit plan information. • Create a plan db to store passenger’s plan information.	The ride user posted has same information with users’ input.
As a driver, I want to share rides with others so that I can earn some money and provide convenience to the passengers.	• Create a ride information layout to add ride information. • Put a TimePicker box to choose date and time. • Put a Text Field to input the start point. • Put a Text Field to input destination.	The ride user posted has same information with users’ input.

	• Put a stop drop-down box to choose your preferred stops. • Put a submit button to submit ride information. • Create a ride db to store driver's plan information.	
As a driver, I want to search for a passenger who shares the same schedule so that I don't have to write a post。	• Put a "Leaving from" drop-down box on the main page. • Put a "Going to" drop-down box on the main page. • Put a "Departing" time interval selection on the main page. • Put a "Search" button on the main page. • Create a page to display the search processing. • Create a page to display the list of posts as searching results.	Users can search for the available ride with give conditions.
As a driver, I want to add my available spots to the post so that the number of passengers will not exceed my car capacity.	Put a capacity Text Field to input your passenger limit on the ride information page.	Test if maximum confirmed requests equals to the limit of capacity.

Profile System:

User Stories	**Task**	**Test**
As an essential user, I want to add my contact information so that others can reach out to me	Put a input form and a submit button on the profile page 2.5	Test profile input form submit

As a driver, I want to add my car information so that others know I can provide rides	Put a input form and a submit button on the profile page 2.5h	Test profile input form submit
As a user, I want to have my credit shown on my page so that the other user knows I am accountable	Put a textbox to on the profile page to show credit 1h	Test textbox shows correct personal credits.
As a user, I want to work with those with high credit points.	Add ranking strategy with the qualified user on the communication page. 12h	Test show users with credit desc order
As a user, I want to edit my profile so that the information is updated	● Put a button to request the update to the profile information in the database. 2.5h ● Make the profile page changeable by users, and this function can be activated by a button. 12h	● Test the button appearance and function work well. ● Test the profile page works if users click the button. ● Test the profile data is changed by users.

Communication System:

User Stories	**Task**	**Test**
As a user, I want to have a chat box to communicate with others so that we can talk about details for this ride.	● Have a chat box in the website, making it has send button and text area. 12h ● Function sending and receiving messages. 12h	● Test the chat box appears appropriately on the website. ● Test the chat box appear massages properly. ● Test the char box send button. ● Test the receiving messages function. ● Test sending messages function.

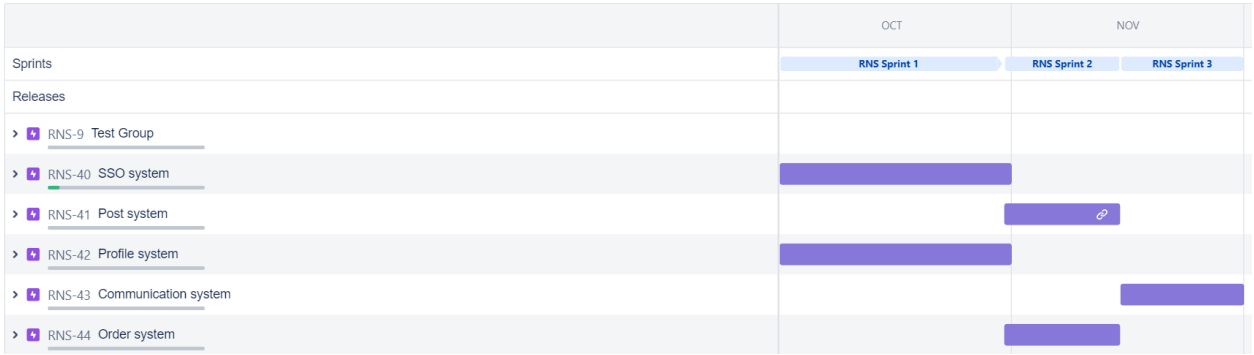
As a user, I want to get email notifications so that I won't miss any messages on the platform.	• Get a signal when there is a new message from the other user. 2h • Send an email to the user when the system gets this signal. 3h	• Test the signal when there is a new message. • Test the function of sending an email.

Order System:

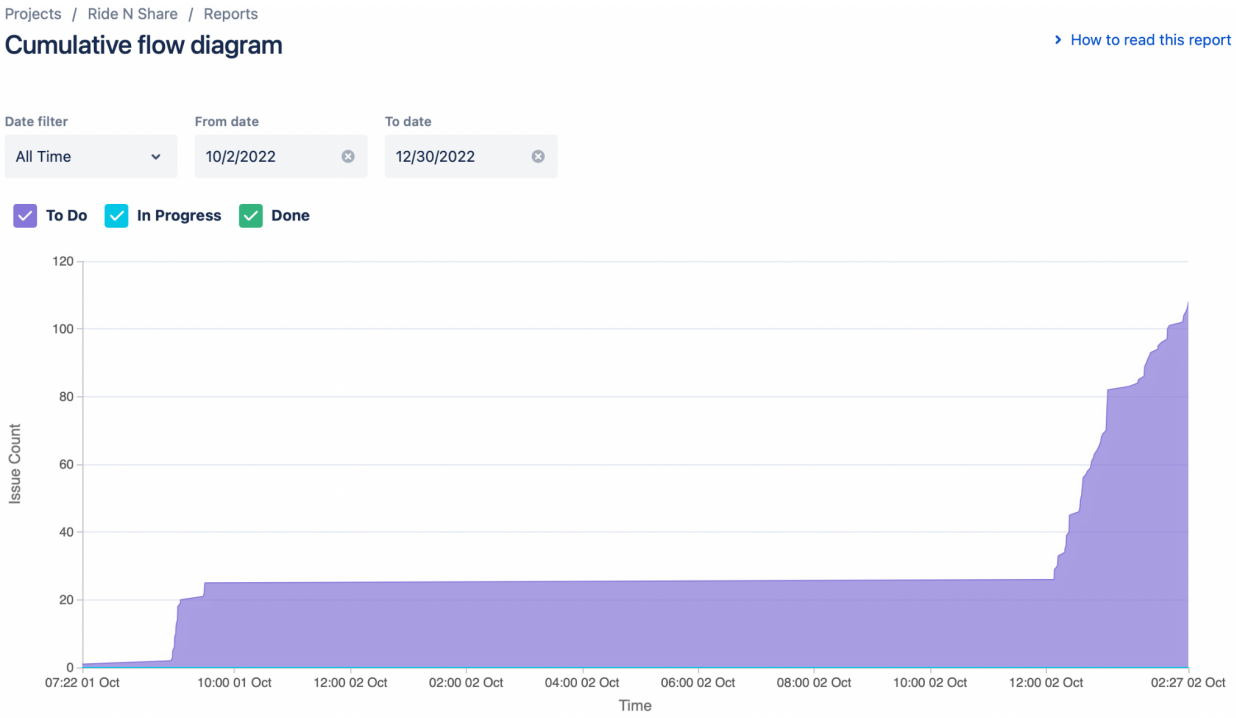
User Stories	**Task**	**Test**
As a driver, I want to send a request to the passengers so that they can confirm it to make a deal, and I will have their contact details.	• Put a button for the driver to send a request to the passenger. 1h • Create an order in the database to record the order. 4h • Send the request to the passenger. 3h	• Put a button for the driver to send a request to the passenger. 1h • Create an order in the database to record the order. 4h • Send the request to the passenger. 3h
As a passenger, I want to confirm the request from the drivers so that I can be confirmed and have the contact details.	• Put a confirm button on the request page. 1h • Create a new order to record this drive. 2h • Put a driver info link at the order page. 1h • Show the driver's contact message on the driver info link page. 2h	• Click the confirm button on the request page, show up the generated order 1h • Click the driver info link on the order page, jump to the driver contact link info page 2h
As a user, I want to rate the others who share the ride with me so that I can help maintain a good environment for the users.	• Put a finish drive button on the order page.1h • Create a rate page after finishing the order. 3h • Create a rate form for users to rate the other.3h	• click on the finish order button on the order page, jump to the rage page 1h • choose rate of this drive, fill in the form, click on the ok button on the rate page 2h

	• Create a confirm button on the rate page.1h • Calculate the final rate of the user and store it in the database.2h	• click on the profile of the user and see the rate of the user is correct 3h
As a user, I want to cancel the order so that I don't have to take the ride when I change my schedule.	• Put a cancel button on the order page.1h • Create a reason page after clicking on the cancel button.3h • Put a confirm button on the reason page.1h • Rate the reason and calculate the credit point for the user, store it in the database.3h • Notify the other user that you canceled the order using email/text.4h	• click on the cancel button on the order page, a message shows the order is canceled is showed, jump to the reason page 3h • fill in the reason form ,and click the confirm button. 3h • choose the person profile, and can see the credit point of the person is correct(influenced by cancel) 2h • Users can search for an available ride. 1h

5. Product Roadmap

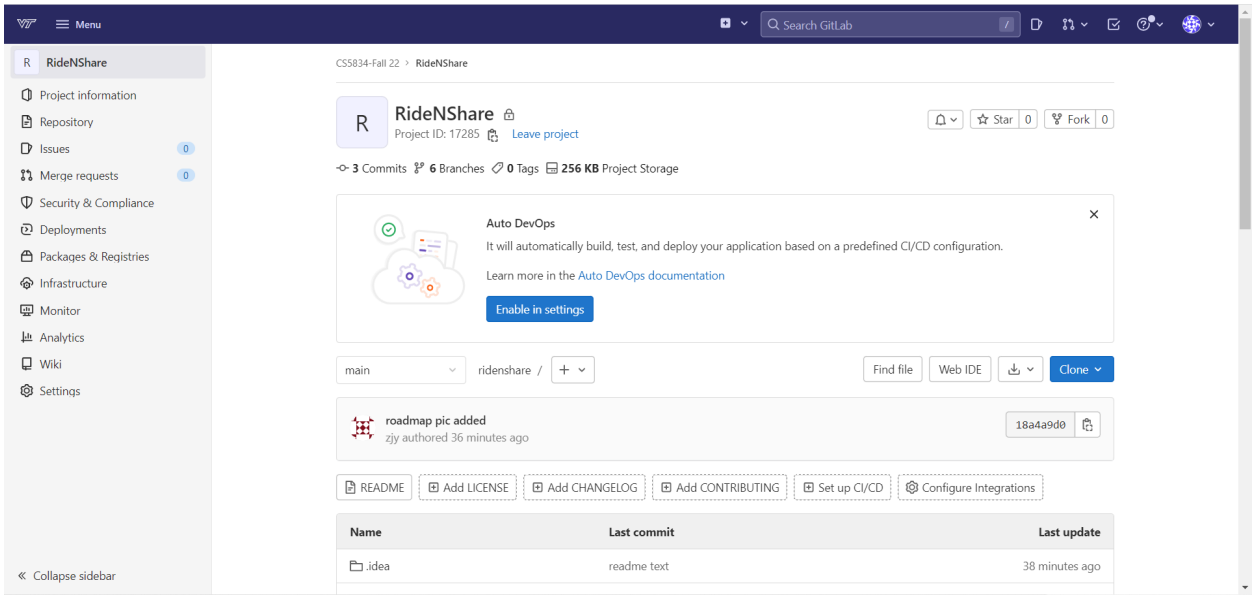


6. Burndown Chart



7. GitLab

https://code.vt.edu/cs5834-fall-22/ridenshare

Readme:https://code.vt.edu/cs5834-fall-22/ridenshare/-/blob/main/README.md\

We have set 5 different branches for each member, for development purposes.