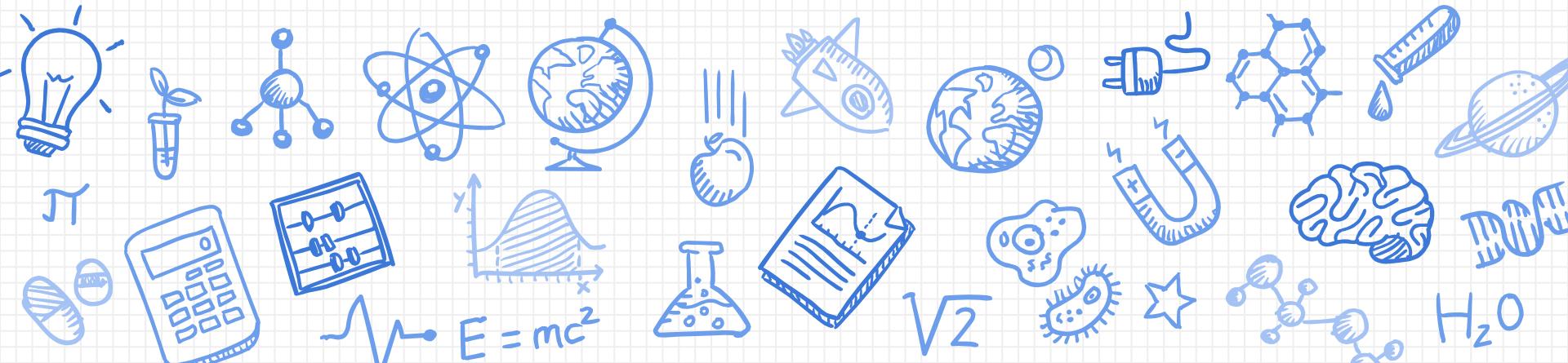


Cars Find You



HELLO!

We are team three

Cheng-Yu Wang, arieswwang

Qianwen Zhang, qwzhang

Siluo Feng, siluofeng

Xue Wu, sherry719

Yao Xiao, xiaoyao5

Yeqing Huang, yeqing2020

Yibo Zhao, yibozhao1003

Content:

1. Website Feature

2. Course Concept

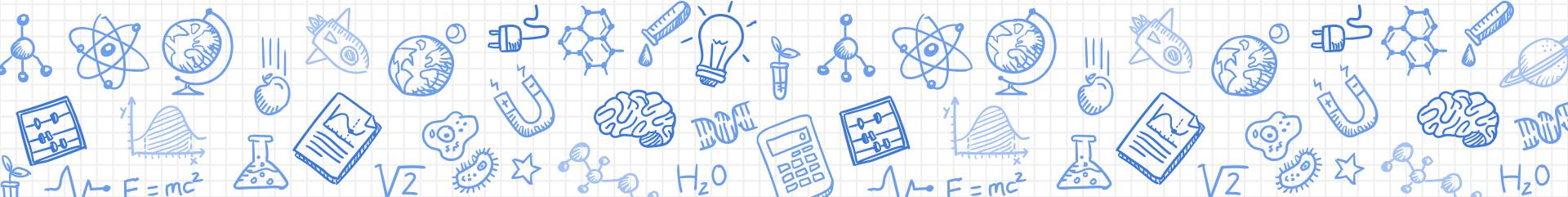
3. Self-Evaluation

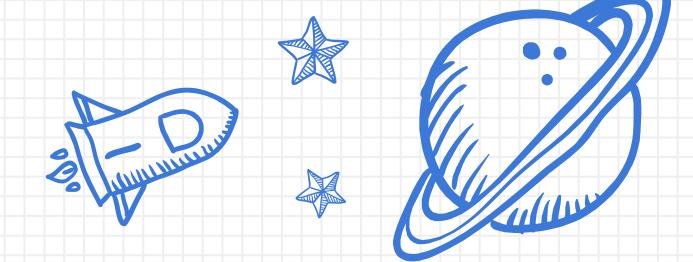
4. Question Time



Website Features

Let's start with the first set of slides





Objective

Buying a car is both time and energy-consuming. People spend plenty of time on searching, comparing cars, and negotiate with dealers. In order to make this process more efficient, we decided to build a brand new online vehicle trading website. Unlike other conventional websites that buyers search for dealers, buyers on our website can post their demands and wait for dealers to match their post if dealers have corresponding vehicles and agree with the trade.

Two kinds of users

Guests

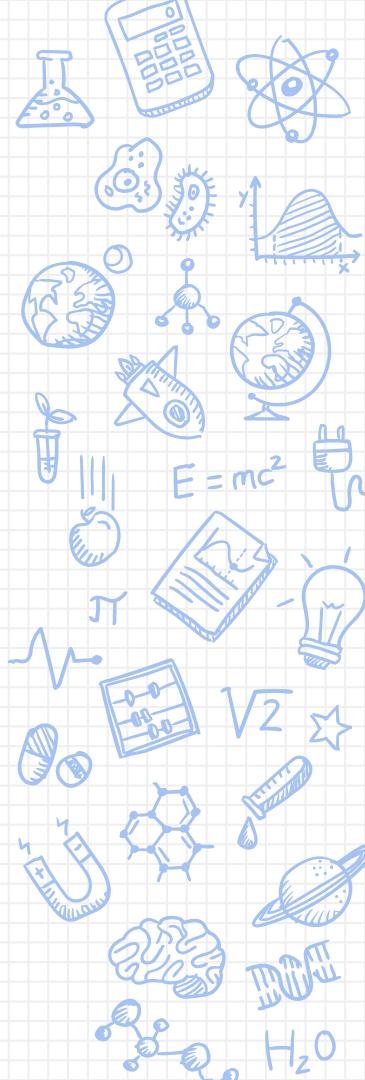
Guests only can browse the homepage. If they need other services, they are supposed to register as dealer or buyer according to their needs.

Buyer

Buyers can post their demands including but not limited to make, model, year, mileage, affordable price range on the website and wait for dealers to contact them.

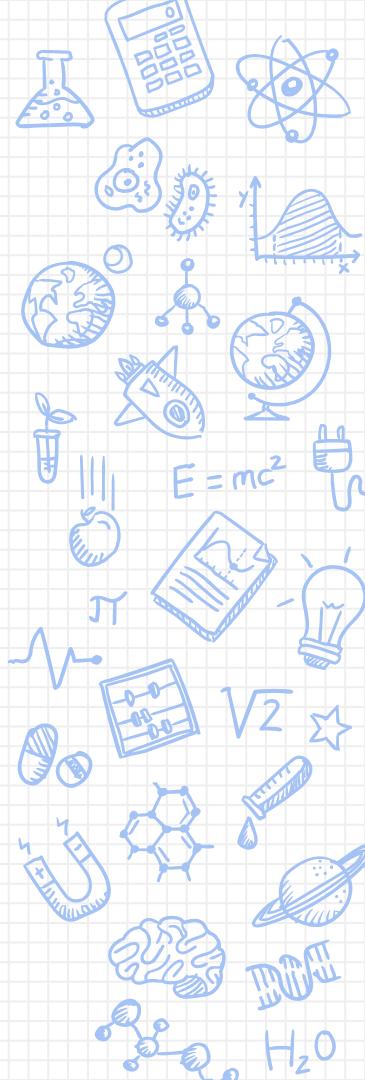
Dealer

Dealers can browse buyer's posts, or they can search posts via filter. If dealers are interested in a post, dealers can create an offer to buyer, and contact them.



Full stack project (Main function)

- ✓ Register And Login
- ✓ User Profile Management
- ✓ Buyer Post Management
- ✓ Dealers Browse Posts
- ✓ Dealers Offer Management



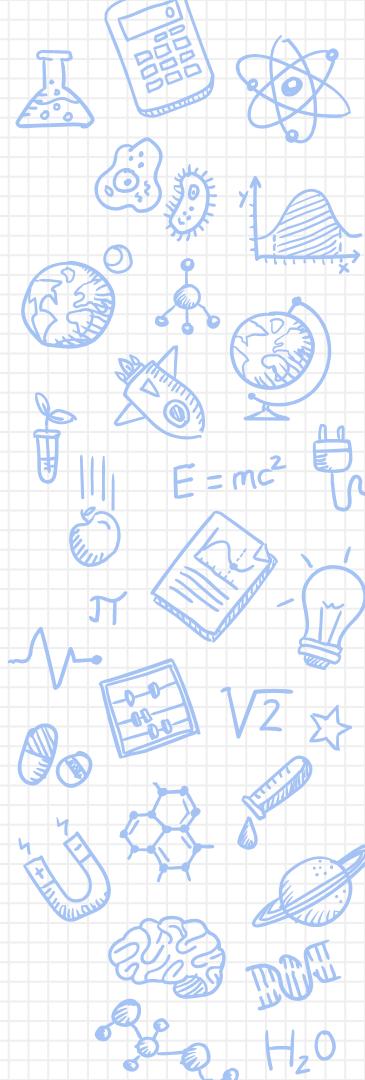
Full stack project(Tech Stack)

Database : MongoDB + Mongoose

Backend: Express + Typescript + Auth0

Frontend: React + Redux + Auth0 + Material UI

Code testing: Jest



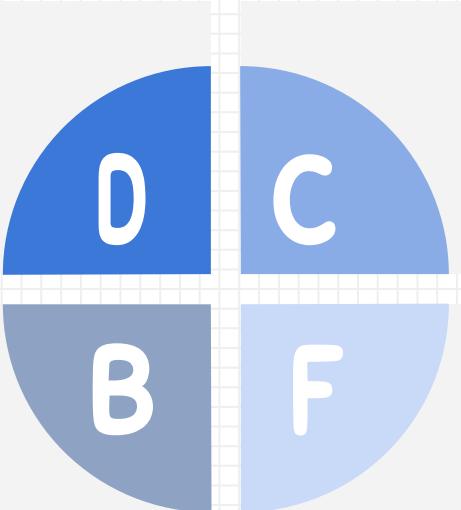
Project Structure (Github)

Docs

Github page of project

Codebase of backend

Backend



Docs/communication-plan s.pdf

Communication plans

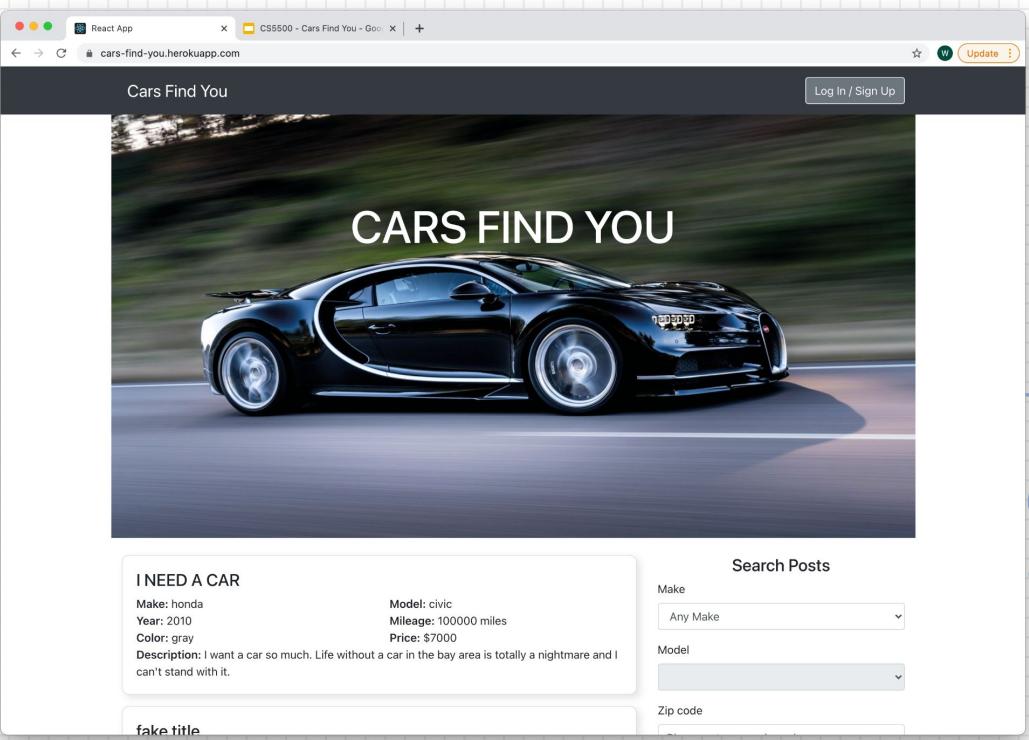
Codebase of frontend

Frontend

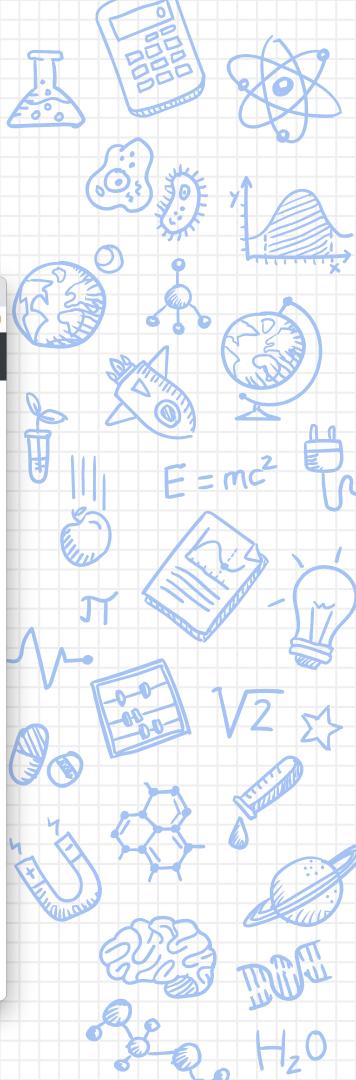


Homepage

Homepage content



A screenshot of a web browser displaying the homepage of a car search application. The title bar shows "React App" and "cars-find-you.herokuapp.com". The main header reads "Cars Find You" and features a "Log In / Sign Up" button. Below the header is a large image of a black Bugatti Chiron driving on a road with motion blur. Overlaid on the image is the text "CARS FIND YOU". At the bottom left, there's a form titled "I NEED A CAR" with fields for Make (honda), Year (2010), Color (gray), Model (civic), Mileage (100000 miles), and Price (\$7000). A description box states: "Description: I want a car so much. Life without a car in the bay area is totally a nightmare and I can't stand with it." To the right of the form is a "Search Posts" section with dropdown menus for "Make" (Any Make), "Model" (dropdown menu), and "Zip code" (dropdown menu). A small note at the bottom says "fake title".



Both Buyer and Dealer

Profile content

React App CS5500 - Cars Find You - Good Morning! Cars Find You Demo video - YouTube

cars-find-you.herokuapp.com/profile/auth0%7C607a10f2abeee0068d5da87

Cars Find You

AR

Good Morning!

Edit Your Profile

Email
arieswwwang@gmail.com

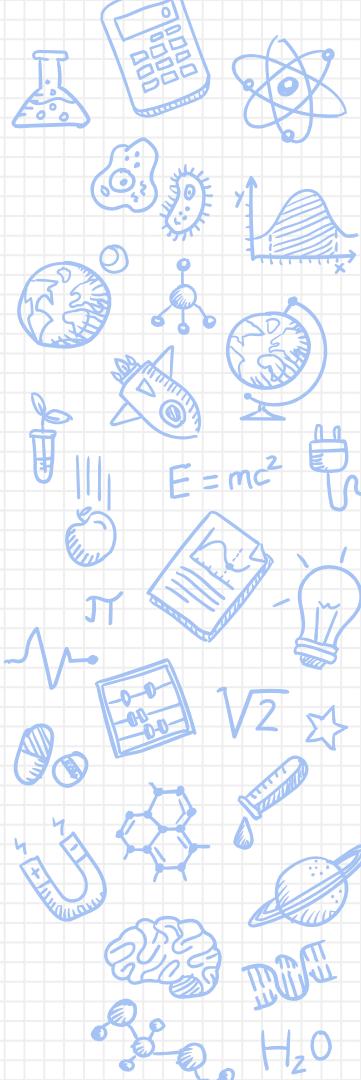
Username
Arieswang

Phone number
5109539506

Role
BUYER

You need to register another account if you want to switch roles

UPDATE



Buyer page

Homepage content

The screenshot shows a web browser window for a React application at the URL cars-find-you.herokuapp.com. The title bar says "React App". The main content area features a large image of a Bugatti Chiron driving on a road with motion blur, overlaid with the text "CARS FIND YOU". In the top right corner, there is a user profile menu with the email "arieswwwang@gmail.com" and options for "Profile", "Post Management", and "Log out". On the far left, there is a green circular icon with the letters "AR". At the bottom left, there is a form titled "I NEED A CAR" with fields for Make (honda), Year (2010), Color (gray), and a Description (want a car so much). To the right of this form is a blue button labeled "I want a car!". At the bottom right, there is a "Search Posts" section with dropdown menus for "Make" (set to "Any Make") and "Model".

Buyer page

Post Management content

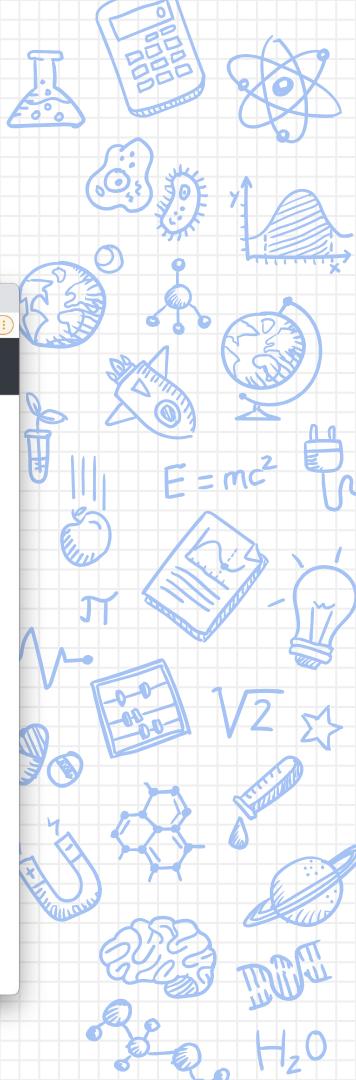
The screenshot shows a web application interface titled "Cars Find You". On the left, under "Your Posts", there is a list of user-generated content:

- Fast and Furious - Dodge Charger
- Hello There - Ford Mustang
- I want a fast car - Ford Mustang
- A real fast car - Ford Mustang
- I want a fast car! - ford mustang
- I want a fast car - bmw 330i
- I want a fast car - Ford Mustang

On the right, under "Post Details", there is a card for a "2020 Dodge Charger - \$10000". The card includes the following information:

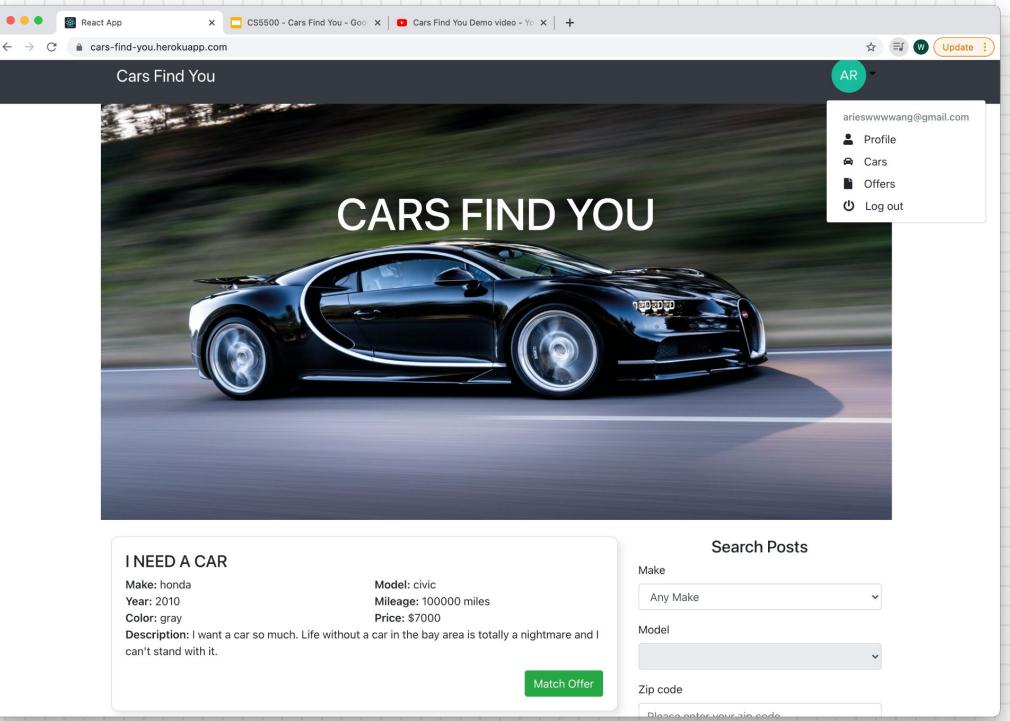
- Image of a dark-colored Dodge Charger
- 2020 Dodge Charger - \$10000**
- Condition: 123456
- Mileage: 1000 miles
- Color: Black
- Description: (empty)
- Dealer: Aries
- Contact: 5109539508
- Message: Hi

At the bottom of the card, a message says "Great! You've accepted this offer".



Dealer page

Homepage content



Dealer page

Inventory content

Screenshot of a web browser showing a car inventory page titled "Cars Find You". The page displays a list of owned vehicles and a detailed view for one car.

Your Cars

- 2010 honda civic - 123456789
- 2020 honda civic - 12345678
- 2020 Dodge Charger - 123456
- 2020 honda civic - 12345

AR

2010 honda civic - 123456789

VIN
123456789

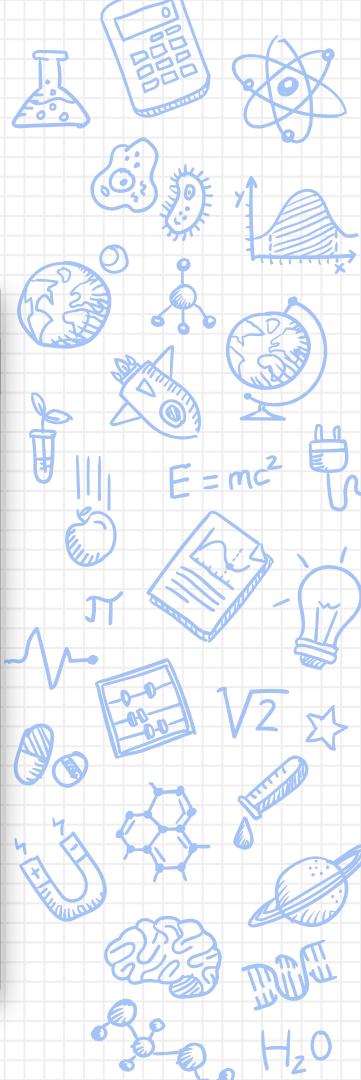
Make	Model	Trim
honda	civic	

Year	Mileage	Price
2010	100000	7000

Color
Black

Description

Edit



Dealer page

Offer management content

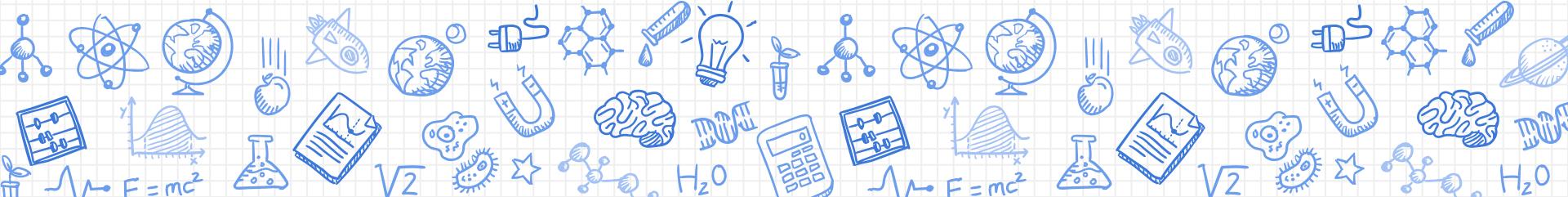
The screenshot shows a web application titled "Cars Find You" with a header "Your Offers". It lists three car offers:

- 2020 Dodge Charger - \$10000**
123456 miles
1000 miles
Black
Dealer: Aries
Contact: 5109539508
Message: Hi
The offer has been accepted by buyer
- 2020 honda civic - \$1000**
12345 miles
10000 miles
white
Dealer: Aries
Contact: 5109539508
Message:
Delete
- 2020 honda civic - \$5000**
12345678 miles
100000 miles
Black
Description: [REDACTED]



Course Concept

Let's move to the second set of slides



Agile Methodology

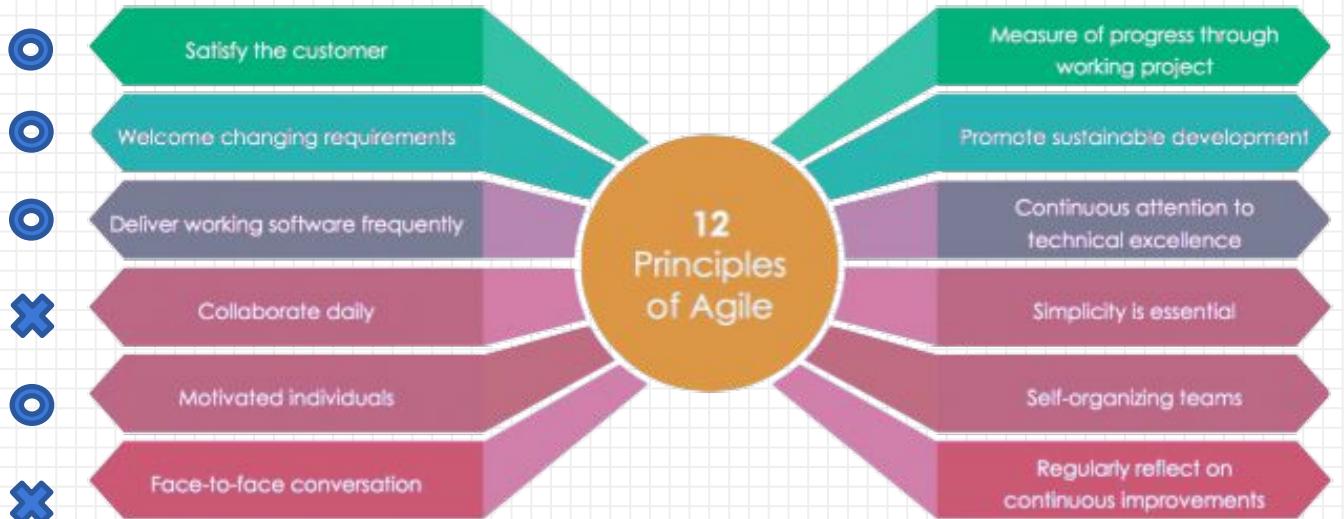
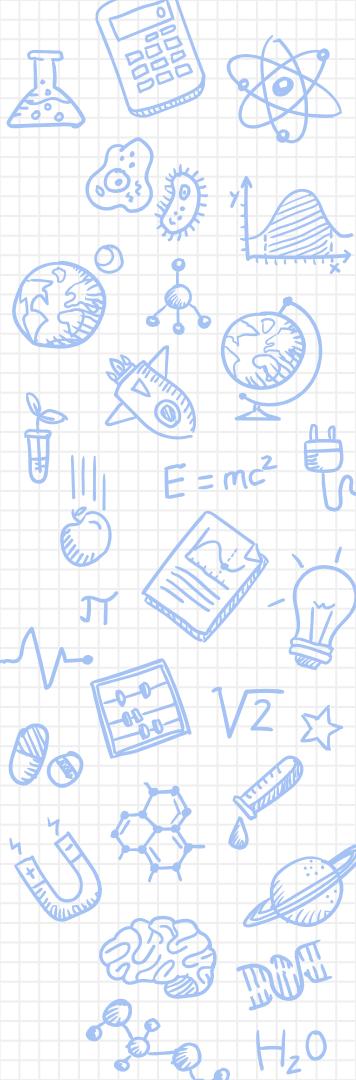


image: Restya.



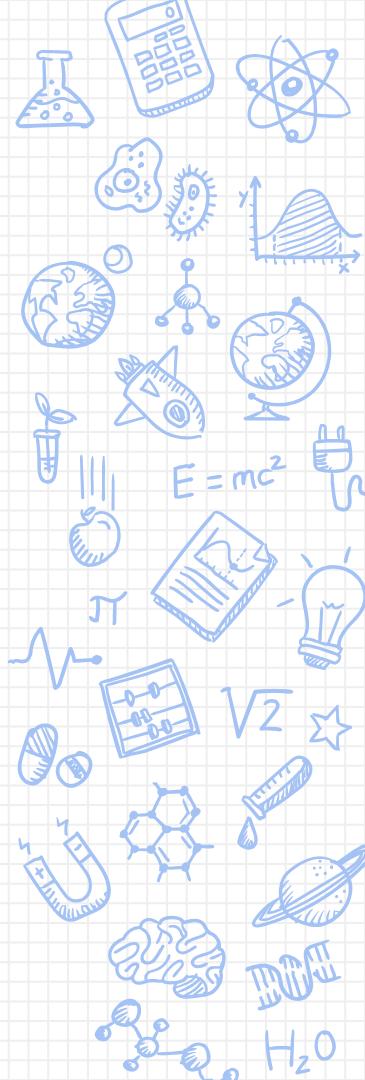
Scrum framework

SCRUM ARTIFACTS



Roles in the project

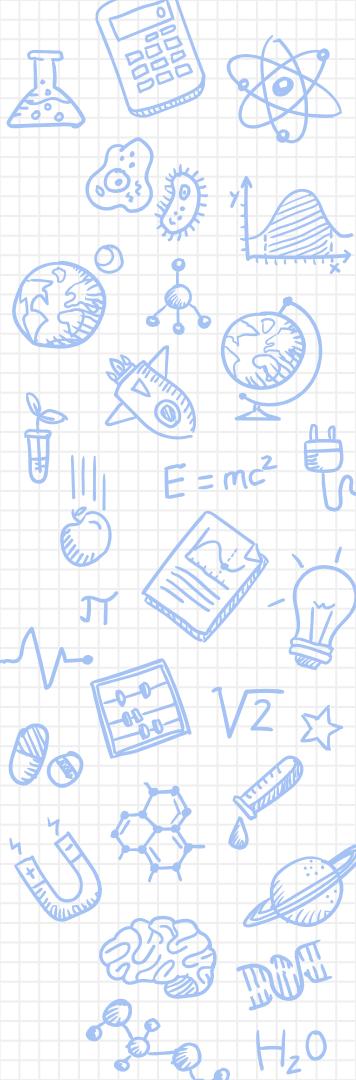
- Product owner
- Development team
- Scrum master



Pros and Cons of Agile Methodology

Pros: Communications with customers and stakeholders every week enable us to deliver the product more efficiently, and really lower the cost of a change.

Cons: Lack of necessary documentation



Roadmap

15/03/2021-21/03/2021
Virtual team building activities

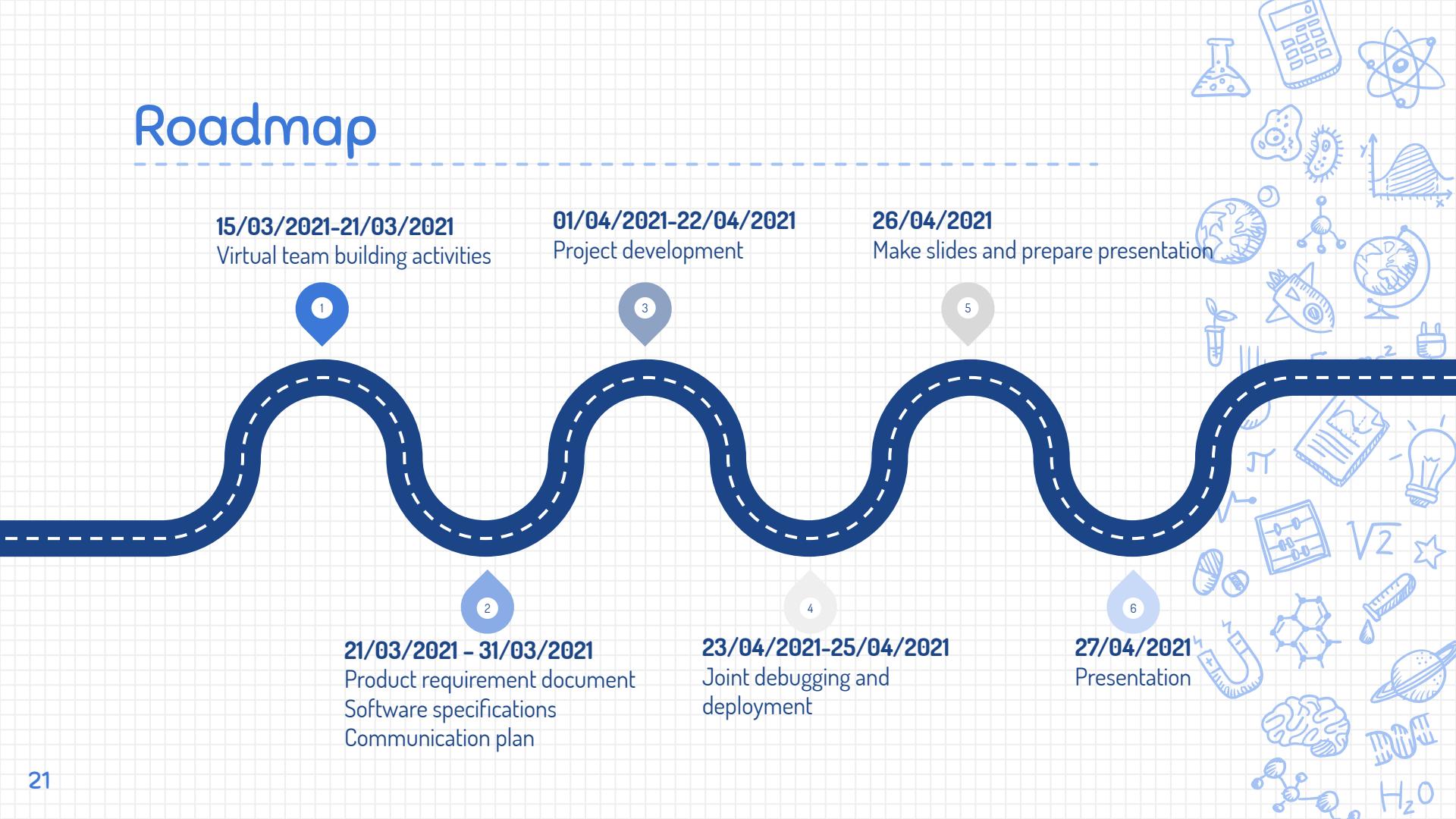
01/04/2021-22/04/2021
Project development

26/04/2021
Make slides and prepare presentation

21/03/2021 – 31/03/2021
Product requirement document
Software specifications
Communication plan

23/04/2021-25/04/2021
Joint debugging and deployment

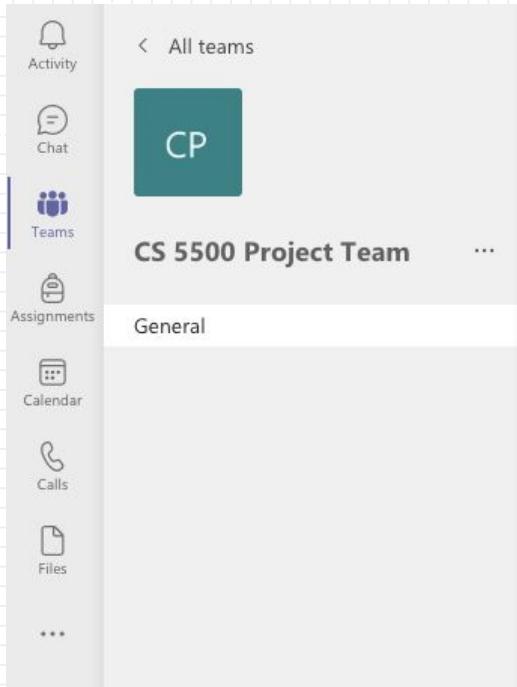
27/04/2021
Presentation



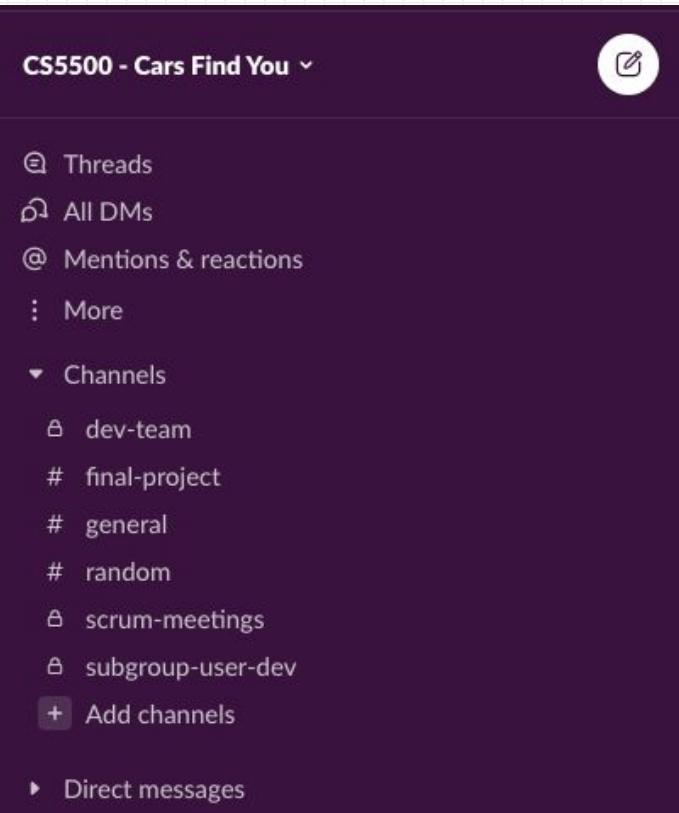
Communication Matrix

Type	Objectives	Tool	Audience	Frequency	Output
StakeHolder Meeting	Report progress Clarify requirements Discuss options and ideas Get feedback	Zoom Slack	Stakeholders and Project Team	Kickoff meeting, 31 st March Weekly meeting, 2pm every Friday	Feedback and general requirement of next Sprint
Customer Meeting	Catch up with customers Collect feedback	Slack Project Homepage	Customers and Project Team	When reaching a milestone	Short video introducing the progress of the project Customer's feedback
Project Design Meeting	Discuss and sketch project design	Teams Google doc	Project Team	Twice a week	Meeting minutes about project design
Miscellaneous Communication	Instant discussion and coordination Review the status of the project and tasks	Slack Teams Google docs	Project Team	Any time	Slack chat history Google Docs
Spring Plan Meeting	Discuss tasks of sprint Estimate workloads Assign tasks Define output	Teams Github	Project Team	11am every Monday	Task cards and issues on Github repo
Scrum Meeting	Share progress Identify and discuss blockers Define tasks in the next scrum	Slack Github	Project Team	Every Monday, Wednesday and Friday before 11am	Task cards and issues on Github repo
Sprint Review Meeting	Review task status Discuss improvements	Teams Github Google docs	Project Team	1pm every Friday	Close issues and task cards on Github repo. Meeting minutes on Google doc

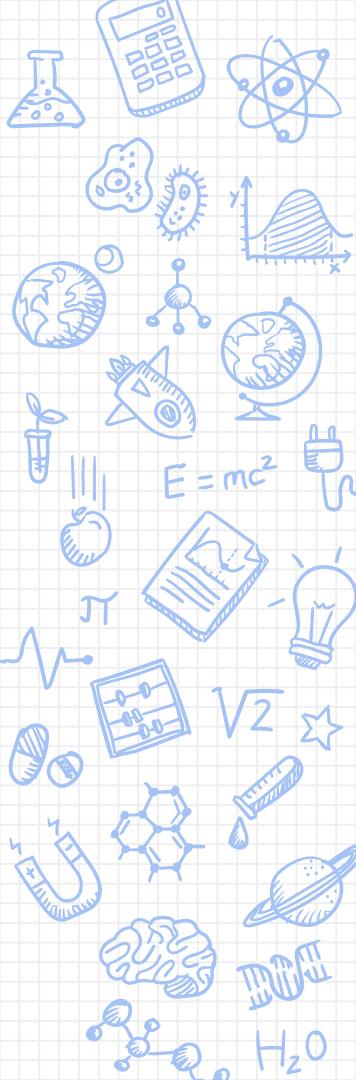
Managing Internal Communication



A screenshot of the Microsoft Teams interface. On the left is a vertical sidebar with icons for Activity, Chat, Teams, Assignments, Calendar, Calls, and Files. The main area shows a team named "CS 5500 Project Team" with a green "CP" icon. Below the team name is a channel named "General".



A screenshot of the Slack interface for the channel "CS5500 - Cars Find You". The interface includes a header with a edit icon, a list of items (Threads, All DMs, Mentions & reactions, More), a collapsed "Channels" section, and an expanded "Channels" section listing several channels: dev-team, final-project, general, random, scrum-meetings, subgroup-user-dev, and an "Add channels" button. At the bottom is a "Direct messages" button.



Managing project content(Github is fantastic)

Code Issues 3 Pull requests Projects 1 Wiki Insights Settings

Cars Find You
Updated 4 days ago

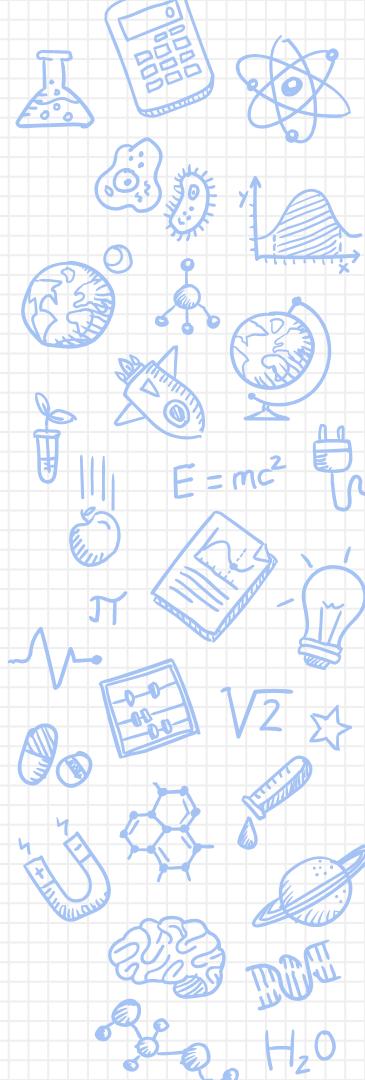
To do + ...

In progress + ...

- Inventory and offer management for dealers #23 opened by yibozhao1003 enhancement ↳ Release 13
- Documentations #25 opened by yibozhao1003 documentation ↳ Release 13
- Quality Assurance #24 opened by yibozhao1003 QA ↳ Release 13
- Create posts and store in databases #40 opened by yibozhao1003 enhancement ↳ Release 13

Done + ...

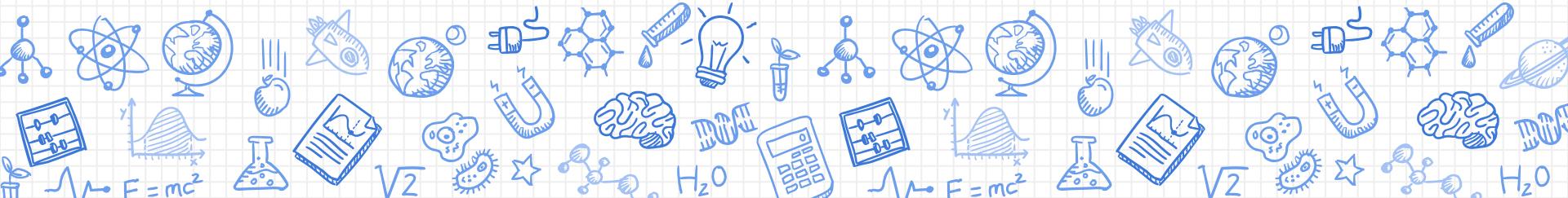
- Build prototype - draft #4 opened by yibozhao1003 documentation ↳ Alpha Version 13
- Post API #21 opened by yibozhao1003 enhancement ↳ Alpha Version 13
- Car API #20 opened by yibozhao1003 enhancement ↳ Alpha Version 13
- Offer API #22 opened by yibozhao1003 enhancement ↳ Alpha Version 13
- Filter car inventory when dealers create offers #26 opened by yibozhao1003 bug ↳ Alpha Version 13

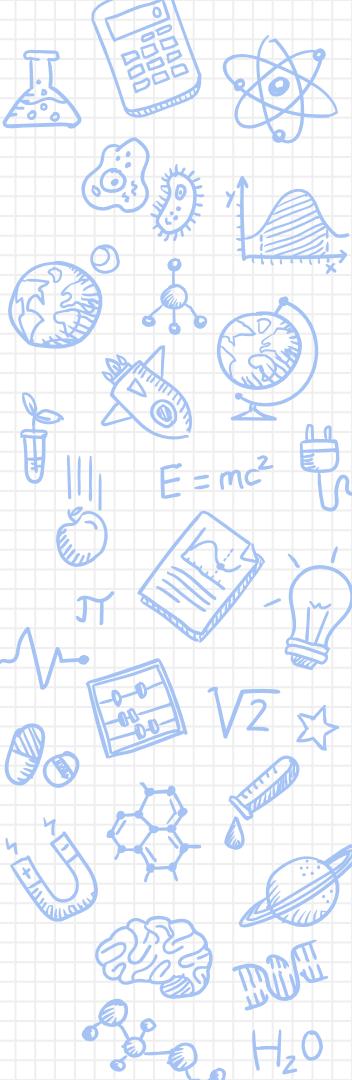




Self-Evaluation

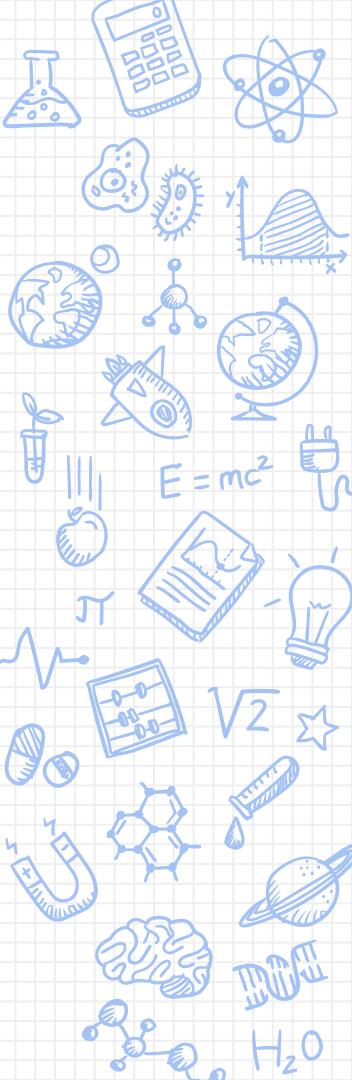
Let's move to the third set of slides





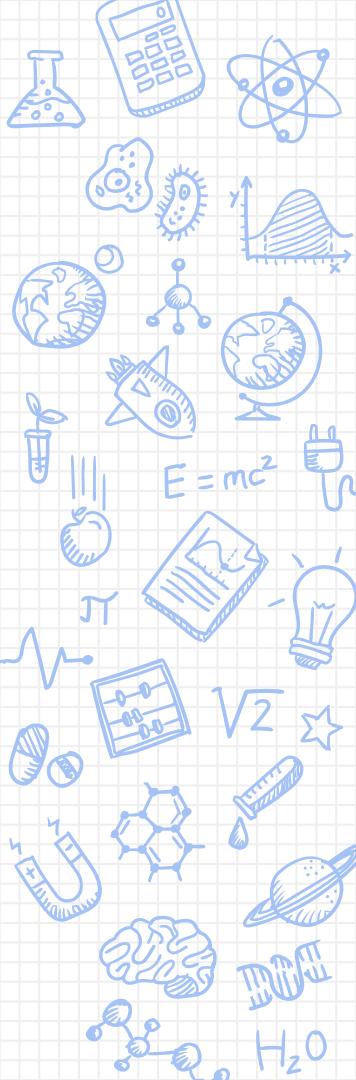
What went well

- ✓ Communication plans, product requirement document and technical design document
- ✓ Setting up github repository
- ✓ Setting up development environment
- ✓ Website deployment



What were the challenges

- ✗ Retrieving dealer and vehicle data from Scrawler
- ✗ Building frontend pages
- ✗ Using backend api at frontend
- ✗ Using Jest to test both frontend and backend

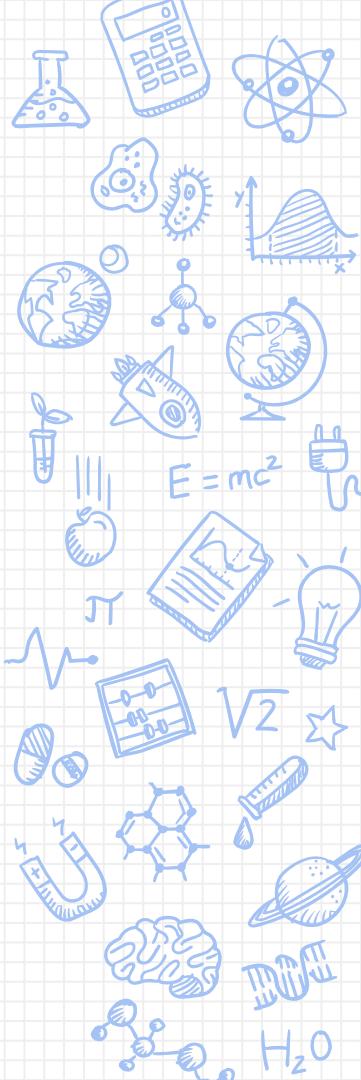


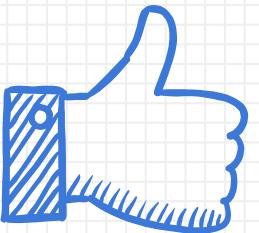
What we plan to do next if we have time

- Enable dealers edit inventory function
 - Adding online chatting function
 - Implement buyers browse inventory
 - Adding “out-the-door” price calculator
 - Improve the UI, UX of the website
 - Testing accessibility and usability and scalability

Teamwork

- Effective communication (less than 30 minutes)
- Strong teamwork spirit, good listener
- Allocating tasks appropriately to team members
- “Open-minded” working environment





THANKS!

Any questions?

Our project is available on:

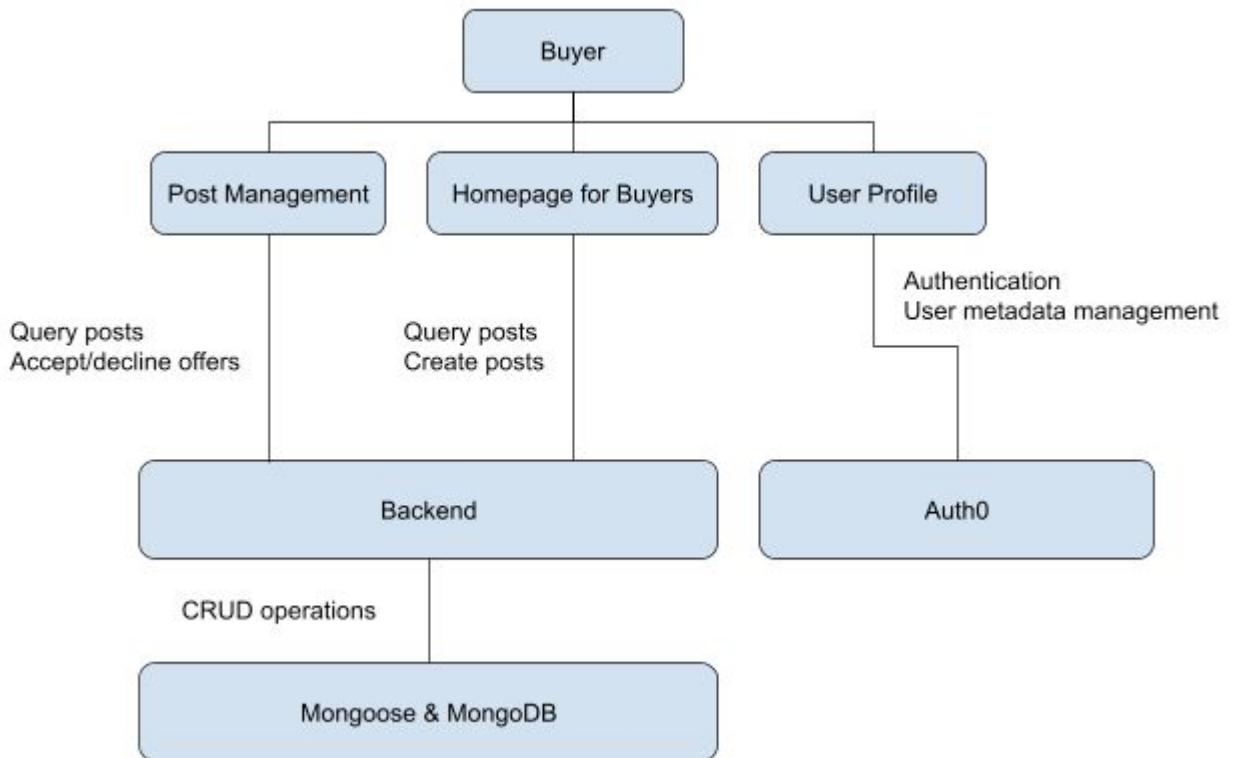
Github Repo: https://github.ccs.neu.edu/2021SPCS5500SB/project-cars_find_you

Github Pages: https://pages.github.ccs.neu.edu/2021SPCS5500SB/project-cars_find_you/

Demo Video: <https://www.youtube.com/watch?v=oJ74fx0Xw5Q>

Project Url: <https://cars-find-you.herokuapp.com/>

System Architecture(Buyer workflow)



System Architecture(Dealer workflow)

