Progress Report 1

COSC 4P02 Software Engineering II

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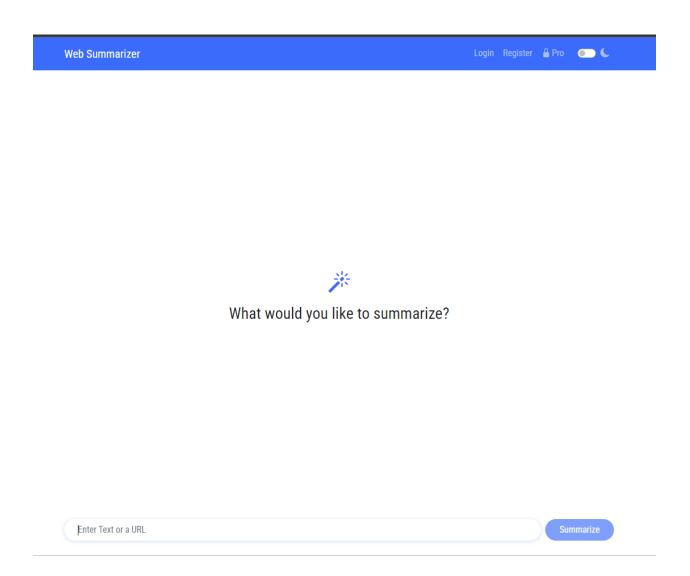
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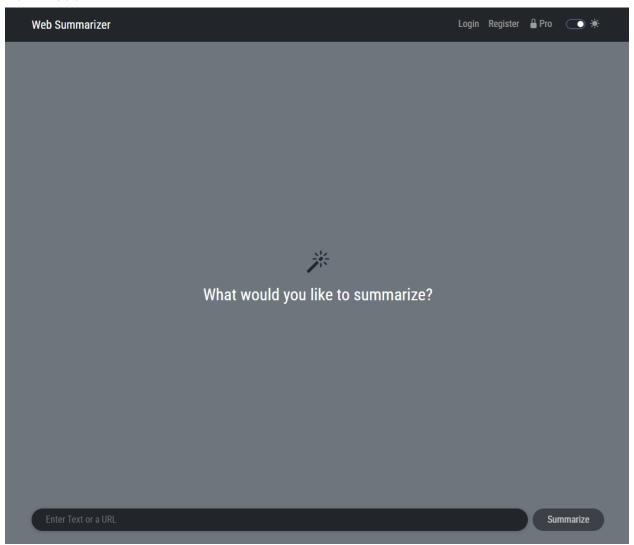
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Screenshots of our working product:

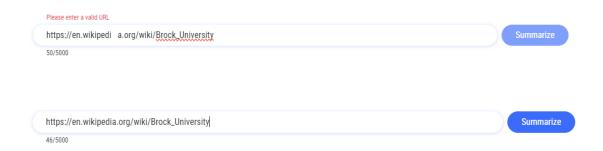
Home page of application, once the user visits the domain, they will see the following home page (in light mode):



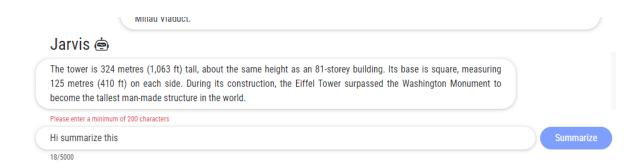
Dark mode



A valid input URL and invalid input are checkout in the frontend to ensure user does not waste time by sending incorrect URL inputs, and the button is blocked until a valid input is provided

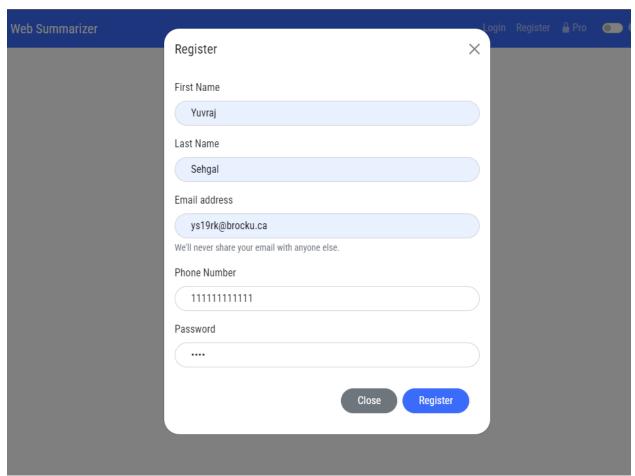


The input has a minimum 200 characters limit to avoid short inputs. Either input should be a valid URL or a paragraph above 200 characters.

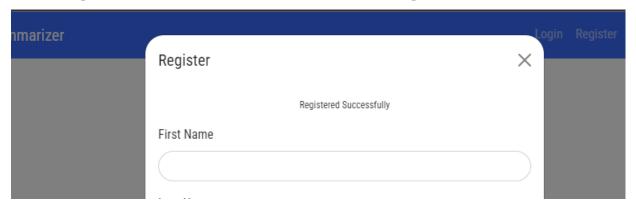


User registration:

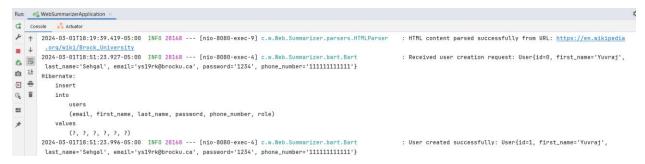
The user can register as a new user using the registration form as follows:



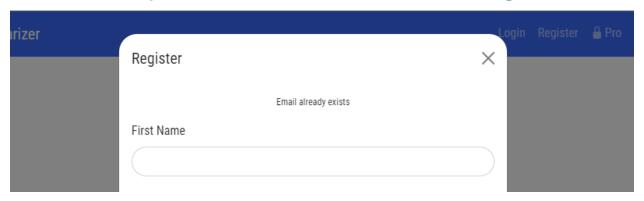
Once registered user will see a success message:



The corresponding log for it also created in the BE:



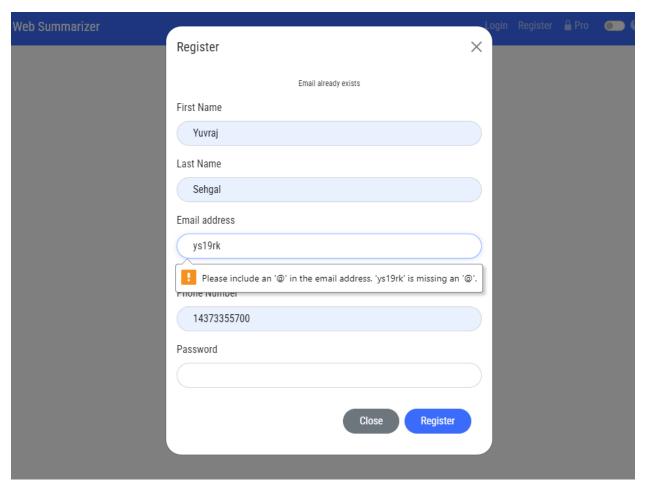
If user already exists in the database, user will get notified:

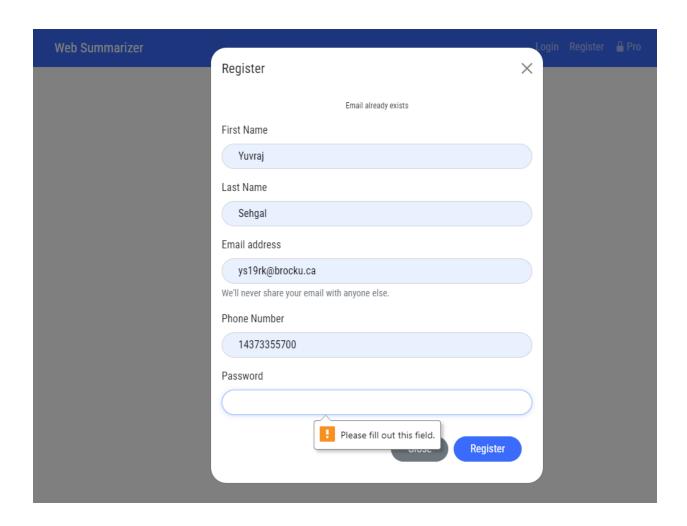


These errors are handled at the backend to avoid any crashes:



Front end also takes care of the invalid email and void entries





Examples of summarizations:

Using text input

2024/03/01 6:22:06 p.m.



The tower is 324 metres (1,063 ft) tall, about the same height as an 81-storey building, and the tallest structure in Paris. Its base is square, measuring 125 metres (410 ft) on each side. During its construction, the Eiffel Tower surpassed the Washington Monument to become the tallest man-made structure in the world, a title it held for 41 years until the Chrysler Building in New York City was finished in 1930. It was the first structure to reach a height of 300 metres. Due to the addition of a broadcasting aerial at the top of the tower in 1957, it is now taller than the Chrysler Building by 5.2 metres (17 ft). Excluding transmitters, the Eiffel Tower is the second tallest free-standing structure in France after the Millau Viaduct.

Jarvis 🖷

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Enter Text or a URL

Summarize

Once user input the valid URL input, the parser system will extract all the text on that page and reflect it to the user. Then generate the summary of the input text.

https://en.wikipedia.org/wiki/Brock_University
46/5000

Summarize

Output



Brock University is a public research university in St. Catharines, Ontario, Canada. It is the only university in Canada in a UNESCO Biosphere Reserve,[7] at the centre of Canada's Niagara Peninsula on the Niagara Escarpment. The university bears the name of Maj.-General Sir Isaac Brock, who was responsible for defending Upper Canada against the United States during the War of 1812. Brock offers a wide range of programs at the undergraduate and graduate levels, including professional degrees. Brock was ranked third among Canadian universities in the undergraduate category for research publication output and impact indicators in 2008 (the most recent ranking completed).[8] Brock University is the only school in Canada and internationally to offer the MICA (Mathematics Integrated with Computing and Applications) program. Brock University's Department of Health Sciences offers the only undergraduate degree in Public Health in Canada.[9] At the graduate level, Brock offers 49 programs, including nine PhD programs. Brock's co-op program is Canada's fifth-largest, and the third largest in Ontario as of 2011.[7] Graduates enjoy one of the highest employment rates of all Ontario universities at 97.2 percent.[10] Brock has 12 Canada Research Chairs and nine faculty members who have received the 3M Teaching Fellowship Award, the only national award that recognizes teaching excellence and educational leadership.[7] In 1963 the Brock University Founders' Committee, chaired by Arthur Schmon and co-chaired by William B Gunning, offered Dr. James A. Gibson the invitation to become the founding president.[11] Brock University was established by the passage of the Brock University Act by the Legislative Assembly of Ontario in 1964 [12] When the university first opened in September 1964, classes were held at the St. Paul Street United Church in downtown St. Catharines for 13 weeks until the Glenridge Campus was completely renovated.[13] Brock's Glenridge campus was officially opened on October 19, 1964 with Gibson as the university's founding president. In 1996 Brock University honoured Gibson by naming the university library in his honour.[11] Richard L. Hearn was appointed the university's inaugural chancellor in 1967. Canadian Cree actress Shirley Cheechoo was Chancellor from 2015 to 2020. [14] Brock University is named after Major-General Sir Isaac Brock, who commanded the British and Canadian forces during the War of 1812. Although the British and Canadian forces went on to win, Brock lost his life during the Battle of Queenston Heights in 1812, fought 20 km (12 mi) from the present-day site of the campus. His last words are said to have been Surgite! (Latin for "push on") - now used as the university's motto. For his contribution to Canada, Brock was voted the 28th Greatest Canadian in a 2004 poll, conducted by the Canadian Broadcasting Corporation.[15] Using a blend of new construction and major upgrades of existing space, the project will grow Goodman School of Business from its current 50,526 sq. ft. to 76,758 sq. ft. A feature will be the two-storey glass "engagement atrium" at the west end of the complex. Taro Hall's nine current classrooms will be extensively renovated with new floors, ceilings, furniture,

Enter Text or a URL

Summarize

You

Web Summarizer Login Register ♣ Pro • €

by the Mentorship Plus Co-ordinator.[48] The Career Zone is an online resource for posting jobs and recruiting students and connect students with employers. Job fairs, career events and workshops are also listed on Career Zone. Individual Faculties and Departments also offer their own services in Coop, placement, internship and work experience opportunities.[49] Non-academic community engagement is highly encouraged at Brock with 65,000+ volunteer hours on average per year clocked by Brock students.[50] Any Brock student can start a club of their own.[51] The university's clubs are identified by three major categories: (A) Cultural, Religious & International Clubs; (B) Social, Recreation & Activist Clubs; and (C) Faculty & Departmental Clubs.[52] There are other events such as parades and cancer runs.[53] Brock Intramurals are active all year, with sports such as Volleyball, Flag Football, Slow-pitch, Water Polo, Ball Hockey, Soccer, Soccer Baseball and Tennis; and include Tournaments in Coed Quidditch, Coed Wallyball, Coed Ultimate, Coed Football and Basketball.[54] Facilities such as The Zone Fitness Center, track, gymnasia, studios, pool and whirlpool, shower rooms, sauna, squash and outdoor tennis courts are free for current students.[55] Some Brock undergraduate students take up roles of bloggers to write about their activities at school,[56] some of which are accessible through Brock's website.[57] Brock University's Skybar Lounge, run by the Brock University Students' Union in the Student-Alumni Centre, hosts parties and social events for nearly every occasion on campus.[58] Some notable year round events include Frosh Week, Homecoming, O-Week and President's Ball.[59] The university is represented in U Sports by the Brock Badgers. Brock has the following varsity sports: Brock has the following club teams: To date, the Badgers have won 47 national championships and 94 provincial championships, with exceptional success in wrestling.[62] The Government of Canada sponsors an Aboriginal Bursaries Search Tool that lists over 680 scholarships, bursaries, and other incentives offered by governments, universities, and industry to support Aboriginal post-secondary participation. [63] Over 150 Brock University Donor Awards are available, with a combined total of over \$500,000.[64] The university also offers current students with funding opportunities to study internationally on a variety of research, language and student exchange programs.[65] With 96,000 alumni around the world, graduates are represented by the Brock University Alumni Association. The Alumni Association is an autonomous organization run by a volunteer Board of Directors. [66] $43°07'08"N\ 79°14'56"W\ /\ 43.119°N\ 79.249°W\ /\ 43.119;\ -79.249$

Jarvis 🖨

Brock University is a public research university in St. Catharines, Ontario, Canada. It is the only university in Canada in a UNESCO Biosphere Reserve. The university bears the name of Maj.-General Sir Isaac Brock, who was responsible for defending Upper Canada during the War of 1812. Brock offers a wide range of programs at the undergraduate and graduate levels.

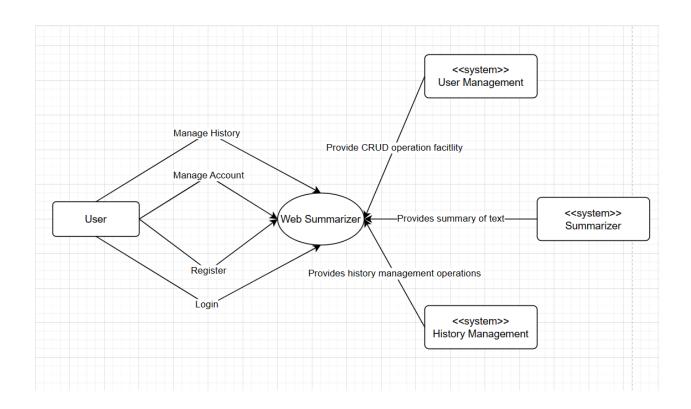
Enter Text or a URL

Summarize

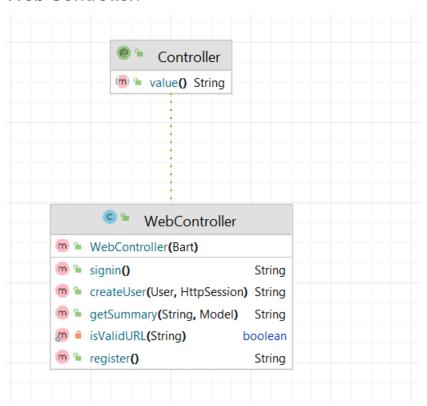
System design and implementation

Our application is built upon the MVC architectural pattern of software development. We decided to use this pattern as it is very efficient for applications like a web summarizer where different entities like user, history and other objects can be treated as models as they are being used to store the information that is being processed by the system, whereas objects like our API calls are handled by the controllers of the application. Various controllers have been implemented in the application such as User Controller to handle the user management such as login, signup, update information, delete account etc. and once the changes are implemented all the corresponding view are updated with the help of controller. Moreover, we incorporated thyme leaf for our user interface development. This technology relies on MVC pattern which is mostly why we decided to use this with Spring boot as both fit well with each other.

Our system designs are as follows:



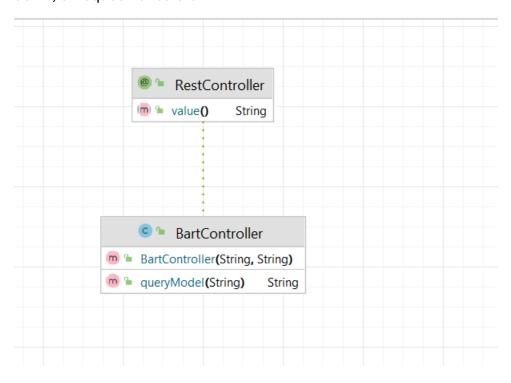
Web Controller:



This class is responsible for handling all the endpoint requests by the client. It maps the post and get requests such as /login, /register, /get-Summary etc. to the appropriate method and returns the results.

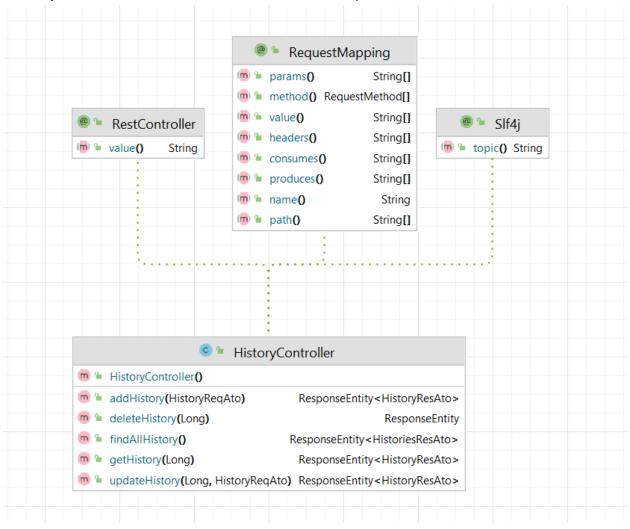
Bart API controller

This controller takes care of all the requests related to summarization. Once the user inputs the text to be summarized or the URL of the webpage first it is filtered to extract all the input information using HTML parse if the given input is a valid URL, and then this controller is used to extract the summarized information from the Bart API. It is also responsible to tell the user if there was an error while summarization such as if the API is down, or request failed etc.



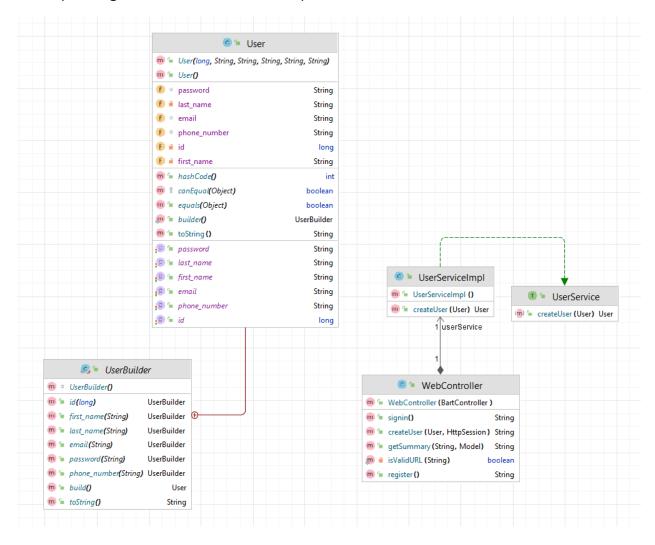
History Controller

The history controller controls the history of the user, it stores the past 20 summarizations done by the user so that user can extract them if required.



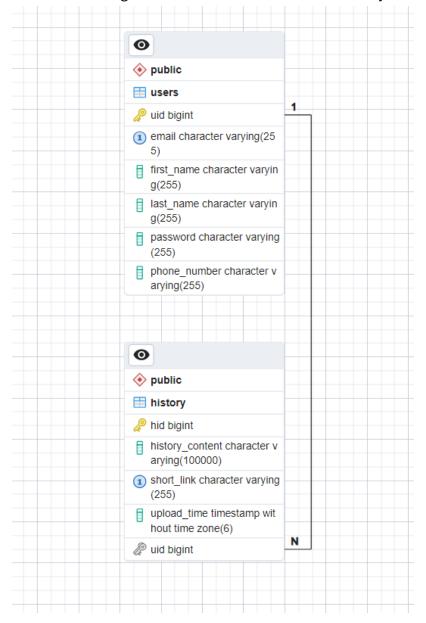
User controller

This controller handles all the CRUD operations related to the user. It updates the corresponding value into the DBMS and updates the user view.



Database Design:

Currently our database is storing the user information and their history of summarizations.



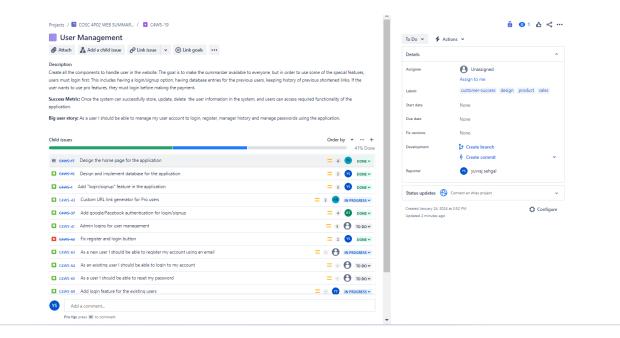
There are some changes to the database design that are not currently merged with the main branch.

Software development process

Throughout our development process we have followed Scrum agile software development process. This process helped us to create the MVP within the first month of development.

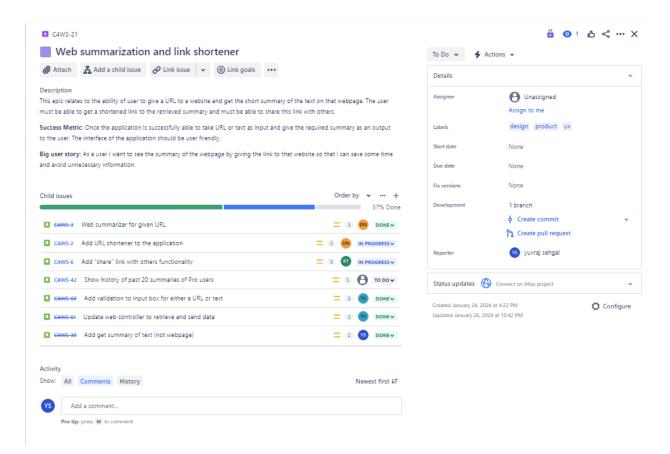
In our first sprint we designed our base application by setting up the home page design, basic user management functionalities such as registration and added some front-end design enhancement features like dark mode.

Currently we have 3 Epics in our projects, with numerous user stories in the backlog. Almost 50% of the stories have been completed in the user management epic and by the end of next sprint it will be above 75%.



Our second epic comprises of stories related to web summarization features, the progress in this epic is around 60% completion.

By the end of our first sprint, we our application had the backend API for the summarization.

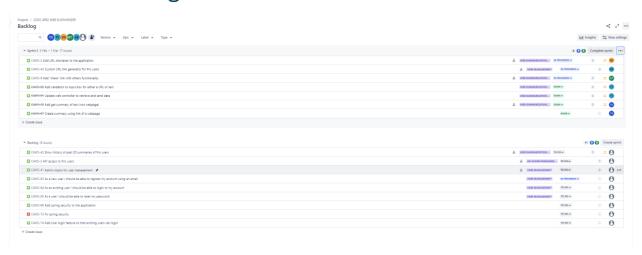


In our second sprint we focused on the advanced user management system, by implementing Spring security for login, and to enhance the user experience by not exposing the unnecessary data. During the second sprint we also faced two hot fixes, while testing the application some of the backend log was getting printed to the client-side of application due to poor exception handling, so we created a hot fix branch that fixed this issue and merged the code immediately with the master branch.

Moreover, while performing integrated system testing of the application, we found that the API calls are consuming a lot of time, so we decided to improvise our Bart API controller. On review of the code, we came across the fact that this controller was making 2 API calls per request, so we redesigned the controller to avoid this overhead. Once the changes were incorporated the efficiency the increased to a great extend

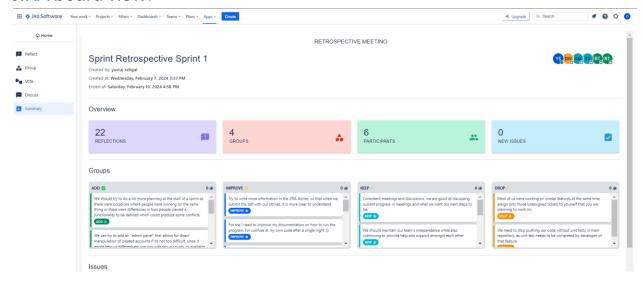
Some adjustments were made due to midterms around the reading week, due to which are second sprint stretched a little bit.

Current backlog



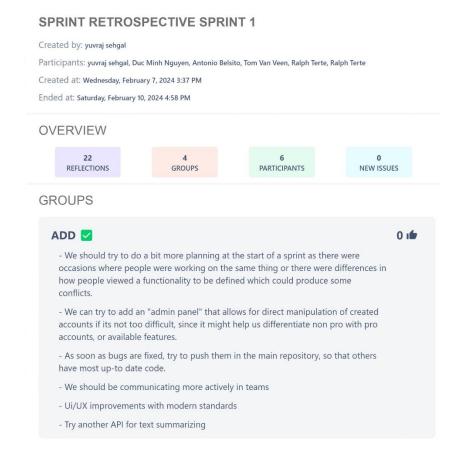
Sprint retrospective meeting

JIRA board view:



1st Sprint Retrospective Result:

RETROSPECTIVE MEETING



IMPROVE 🌟



- Try to write more information in the JIRA stories, so that when we submit the pdf with our stories, it is more clear to understand
- For me I need to improve my documentation on how to run the program. I'm confuse at my own code after a single night :))
- improve the quality of code, unnecessary comments, information should be removed before creating a pull request
- Since our code review is marked, so complete the peer review in the Github seriously, don't just approve.
- Assign tickets to yourself and create branches of the features you are working on
- We need to work more on testing of our application, including unit testing.
- Branch management and pull requests streamlined
- Sometimes our co-ordination can be off.

KEEP 🥮



- Consistent meetings and discussions, we are good at discussing current progress in meetings and what we want our next steps to be.
- We should maintain our team's independence while also continuing to provide help and support amongst each other
- Effective communication and mutual assistance within teams enhances code production efficiency.
- The design of application is going really well, just as planned
- Our pace of work is really good, keep it up.
- Good sprint meeting attendance

DROP 🦫





- Most of us were working on similar features at the same time, assign only those unassigned tickets to yourself that you are planning to work on.
- We need to stop pushing our code without unit tests in main repository, as unit test needs to be completed by developer of that feature.

ISSUES

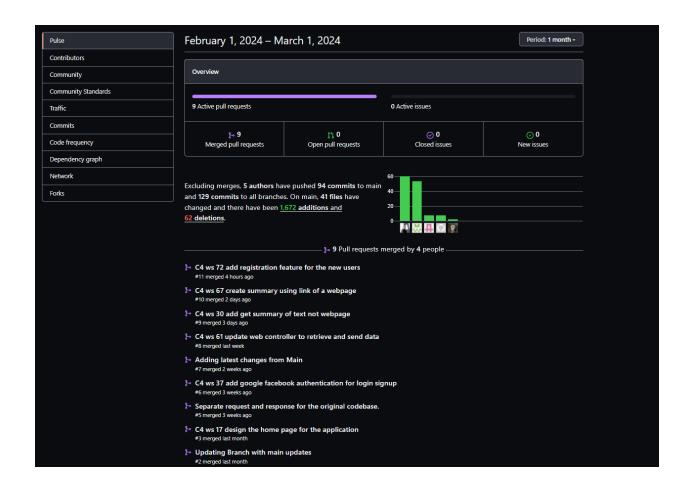
ACTION LIST

GitHub logs:

Reason for uneven contributions:

Our git commits look a little uneven because in our first sprint most of us were not use to commit our small code changes, instead most of us committed our code just before creating a pull request due to which it looks like not many people contributed to the code. Duc, Yuvraj, Antonio and Ralph contributed a lot in the user management system and configuring the spring security of the application, but forgot to commit in the 1st sprint, but recently we all started committing our small contributions in the project. Moreover, there is some code from our current sprint that needs to be tested before merging, and it is in the developer's branch and not merged with the main branch.





Link of commits: Commits · tv15jl/COSC-4P02-PROJECT · GitHub