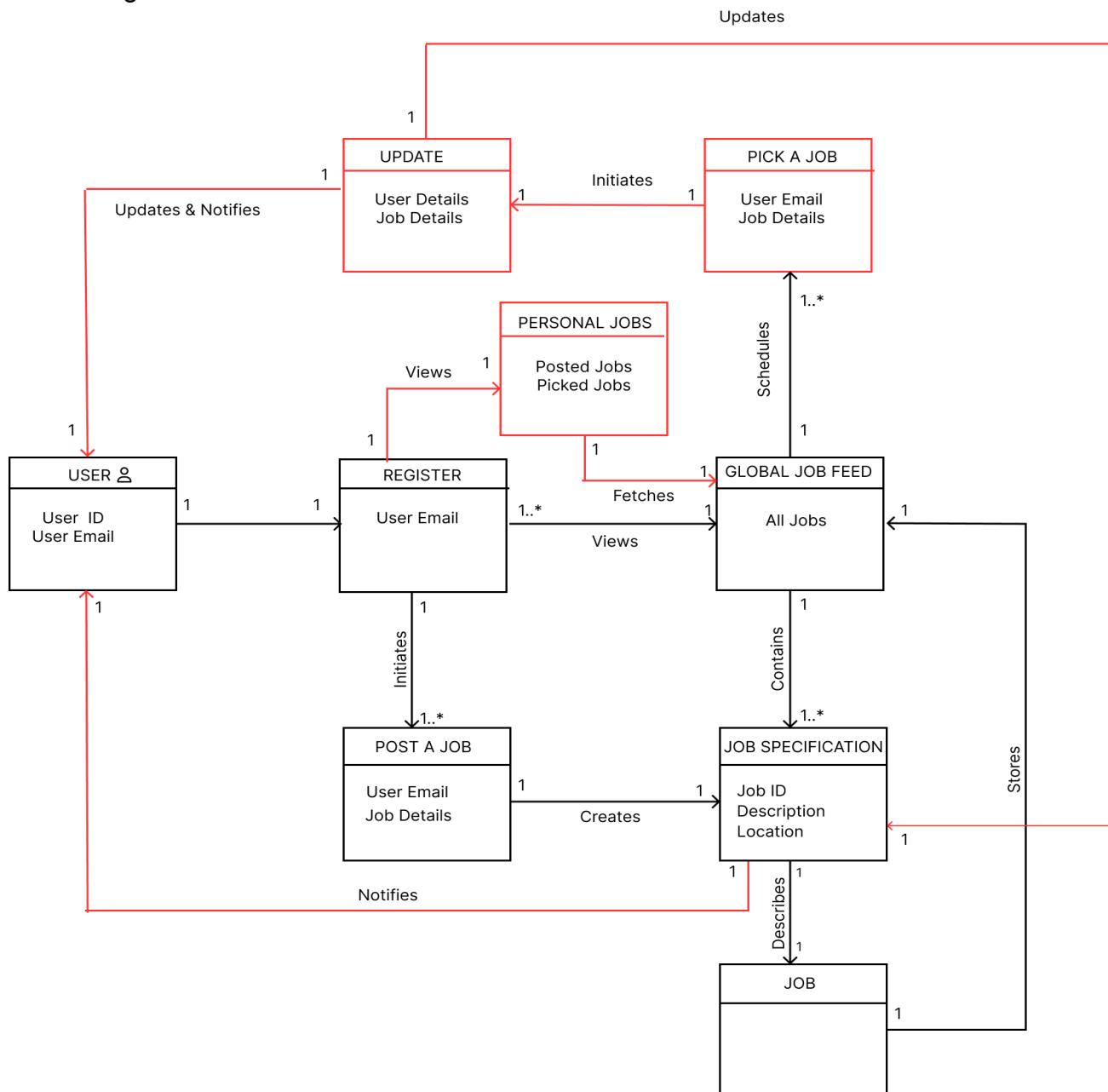


Deliverable Sprint 3

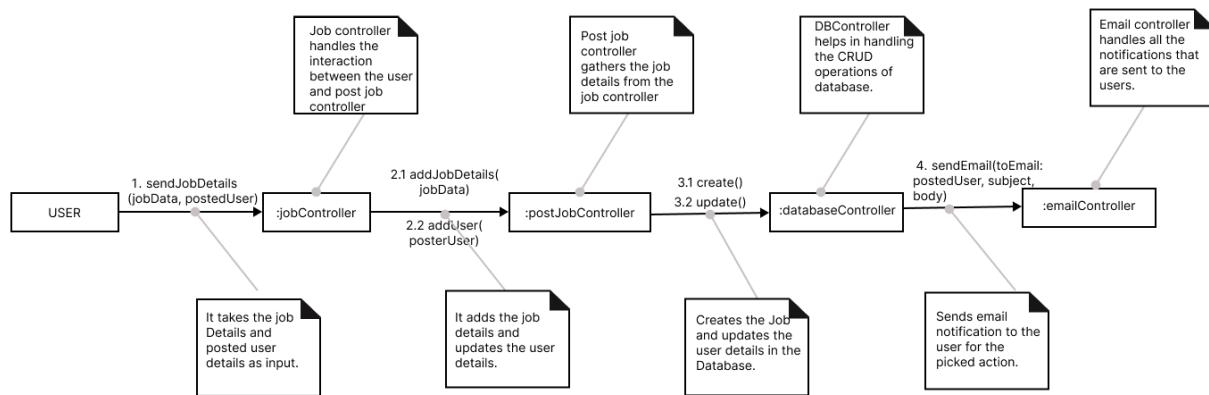
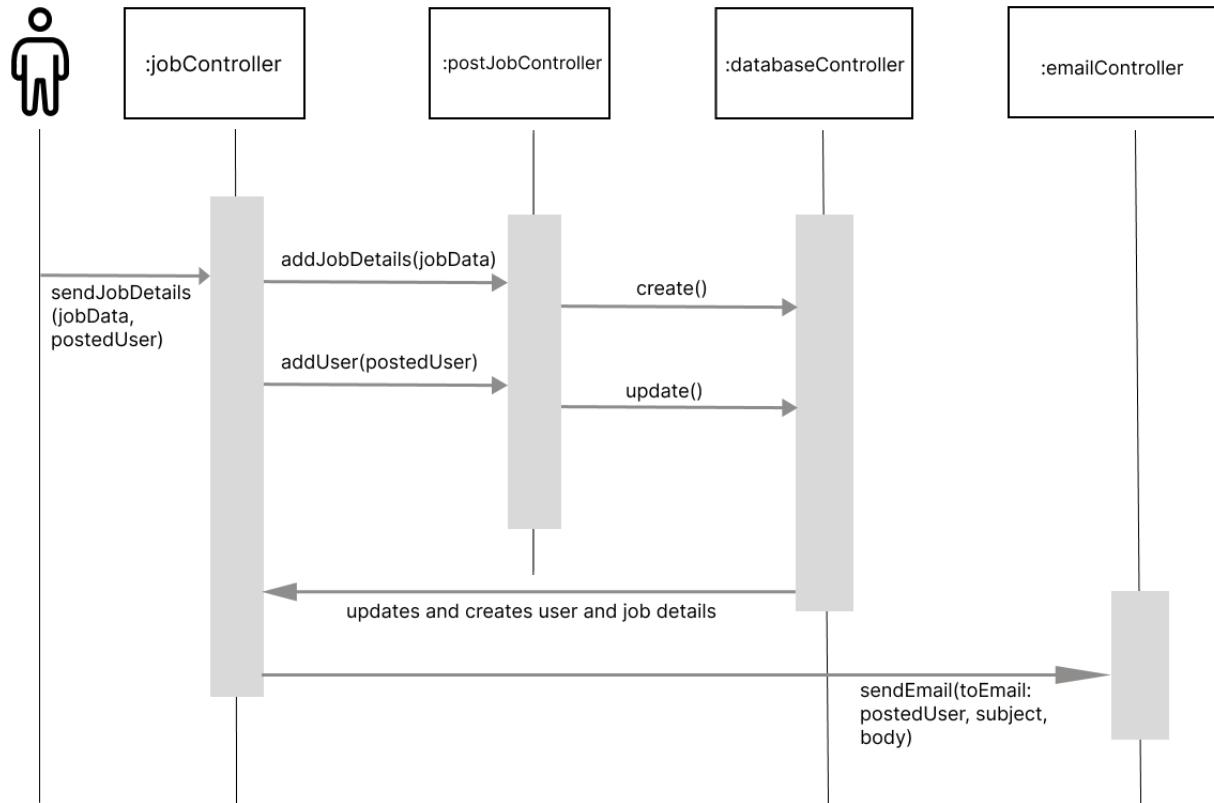
Design Diagrams

Domain Model:

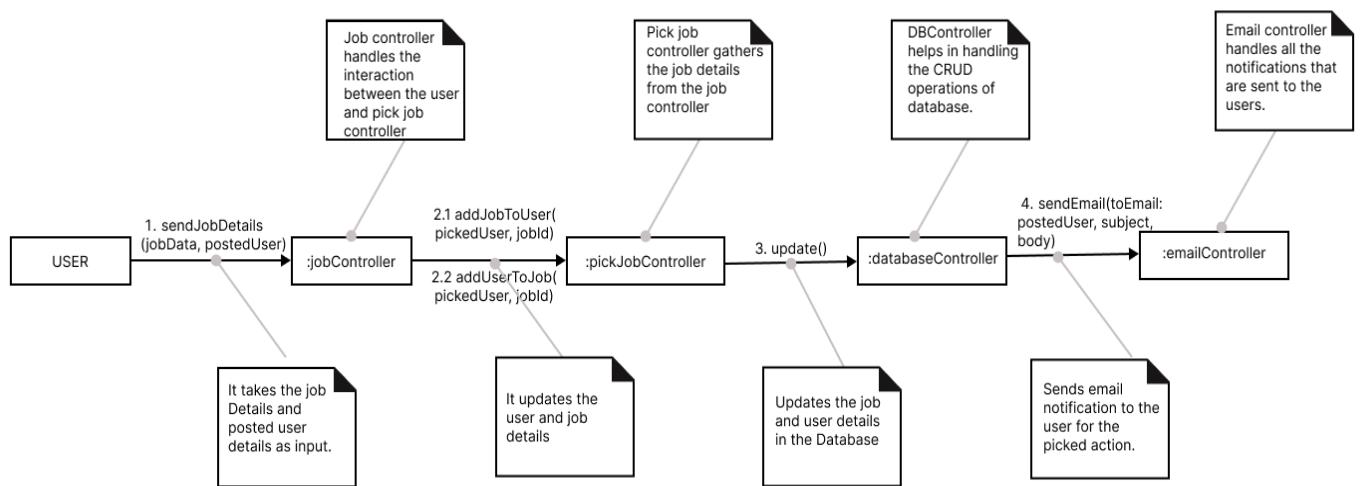
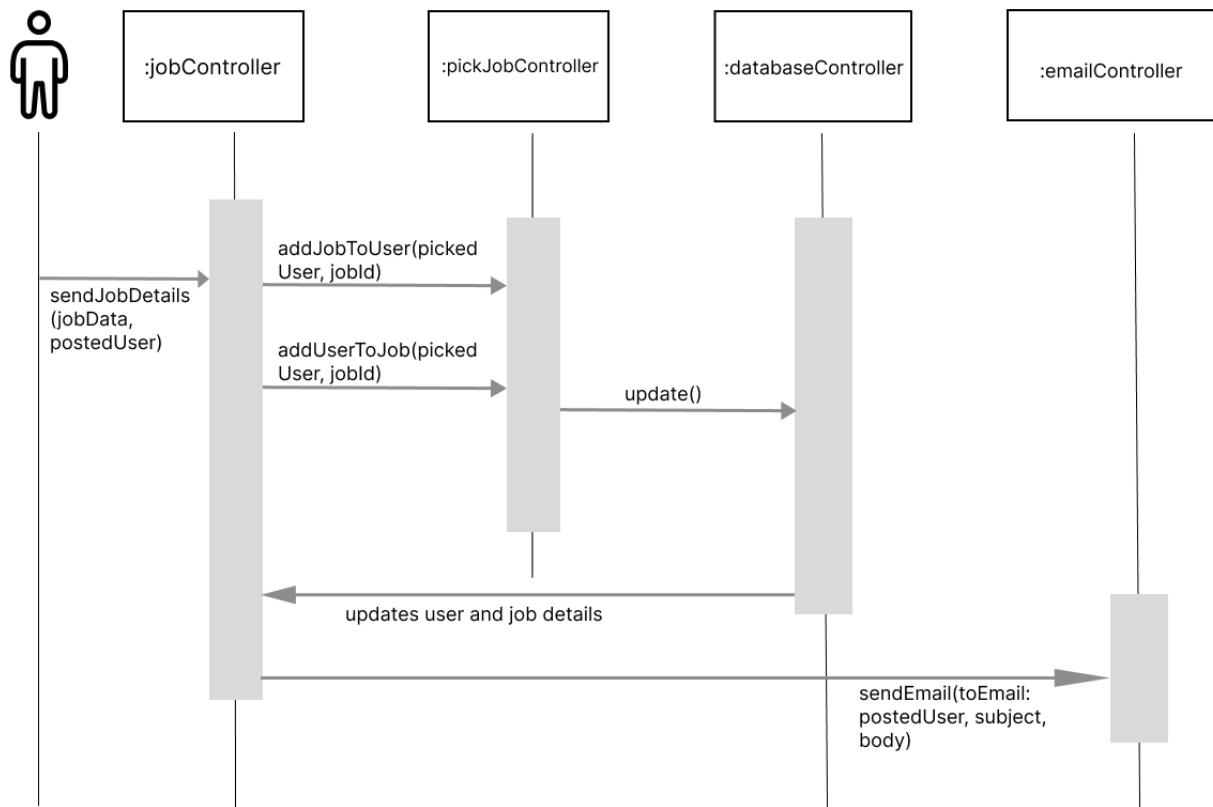
The ones that are highlighted in red are delivered for Sprint 3 and added to the Domain Model diagram.



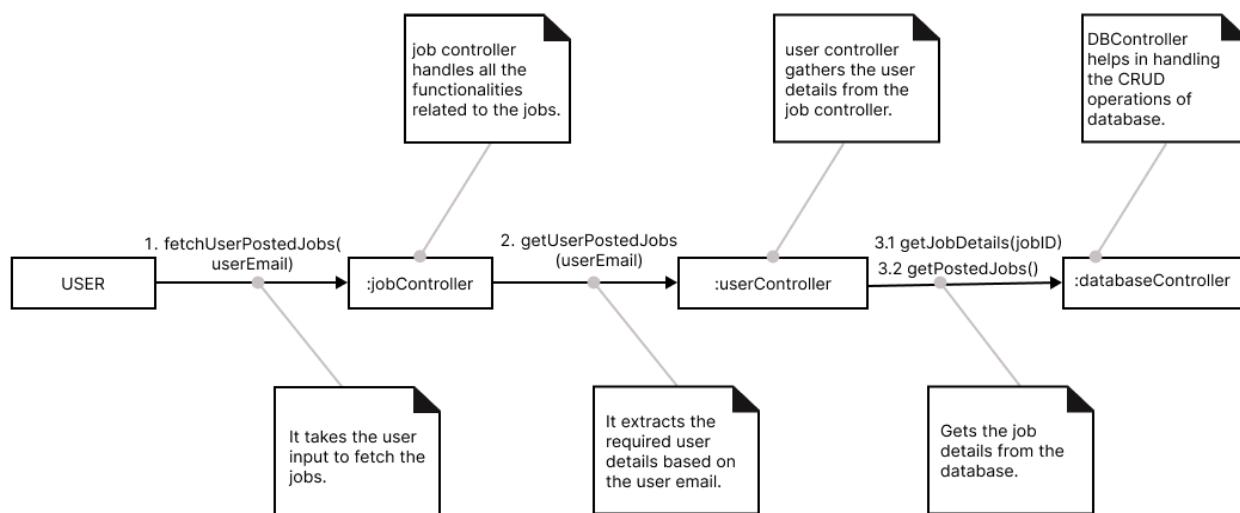
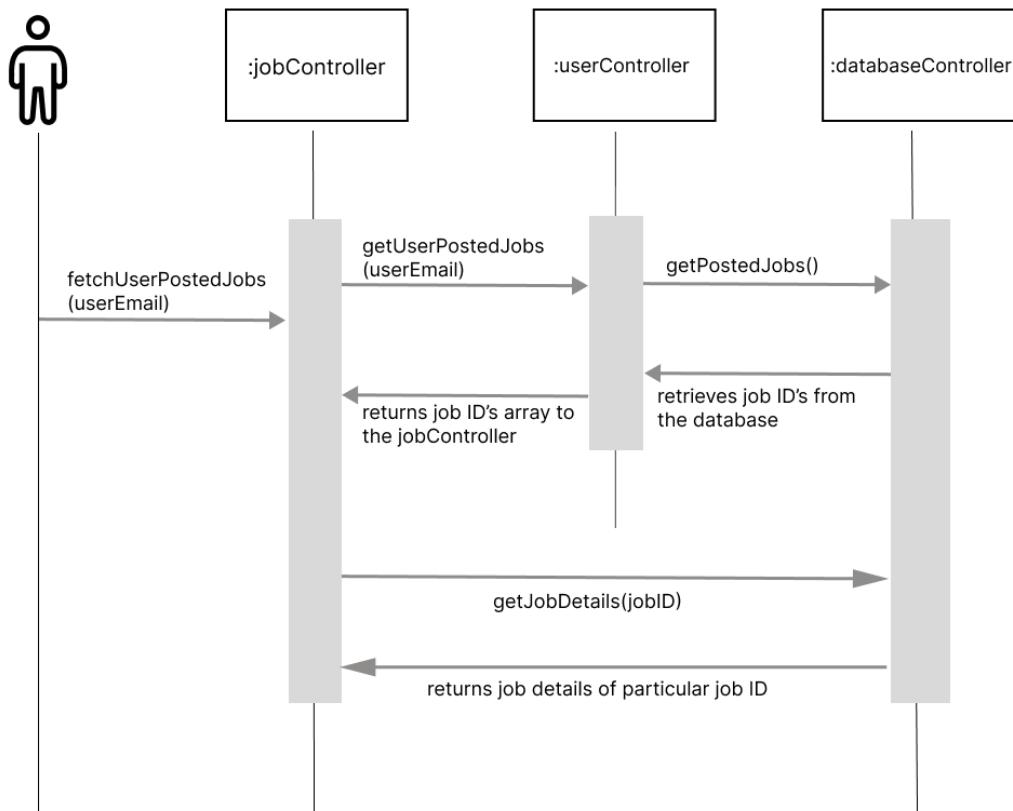
Interaction Diagrams: Use Case-1 : Notify the user when a job is posted.



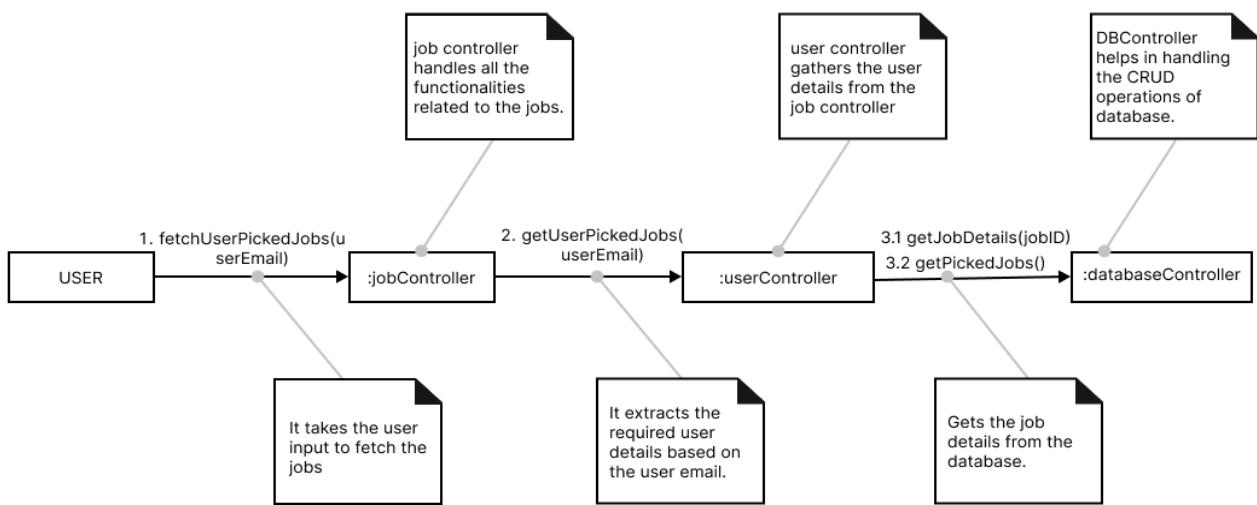
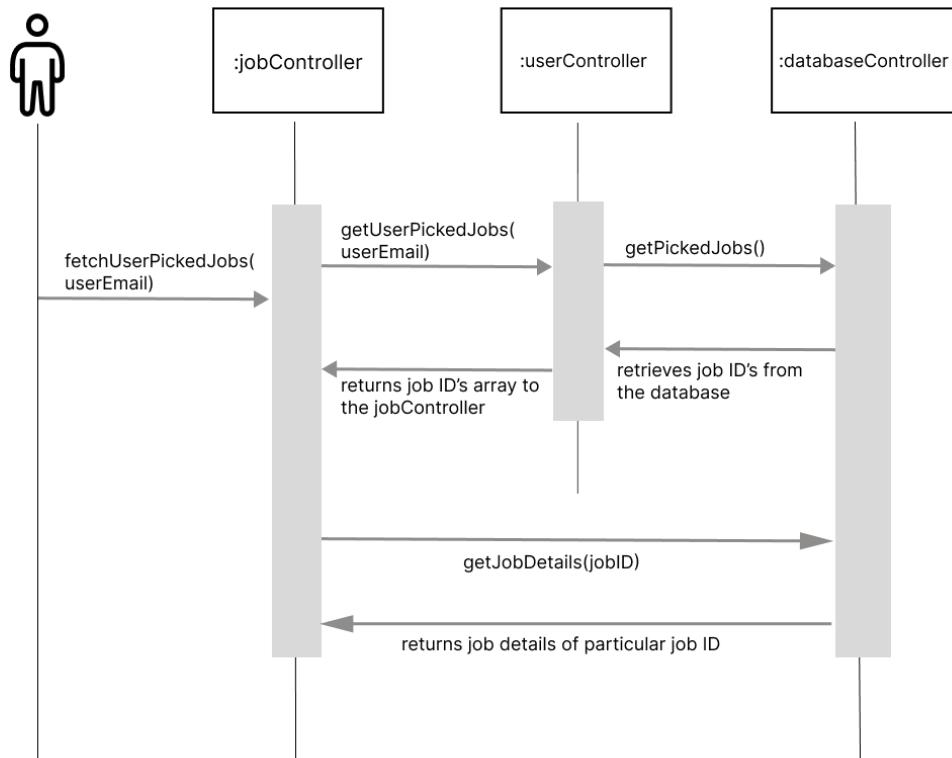
Use Case-2 : Notify the posted user when their job is picked by someone.



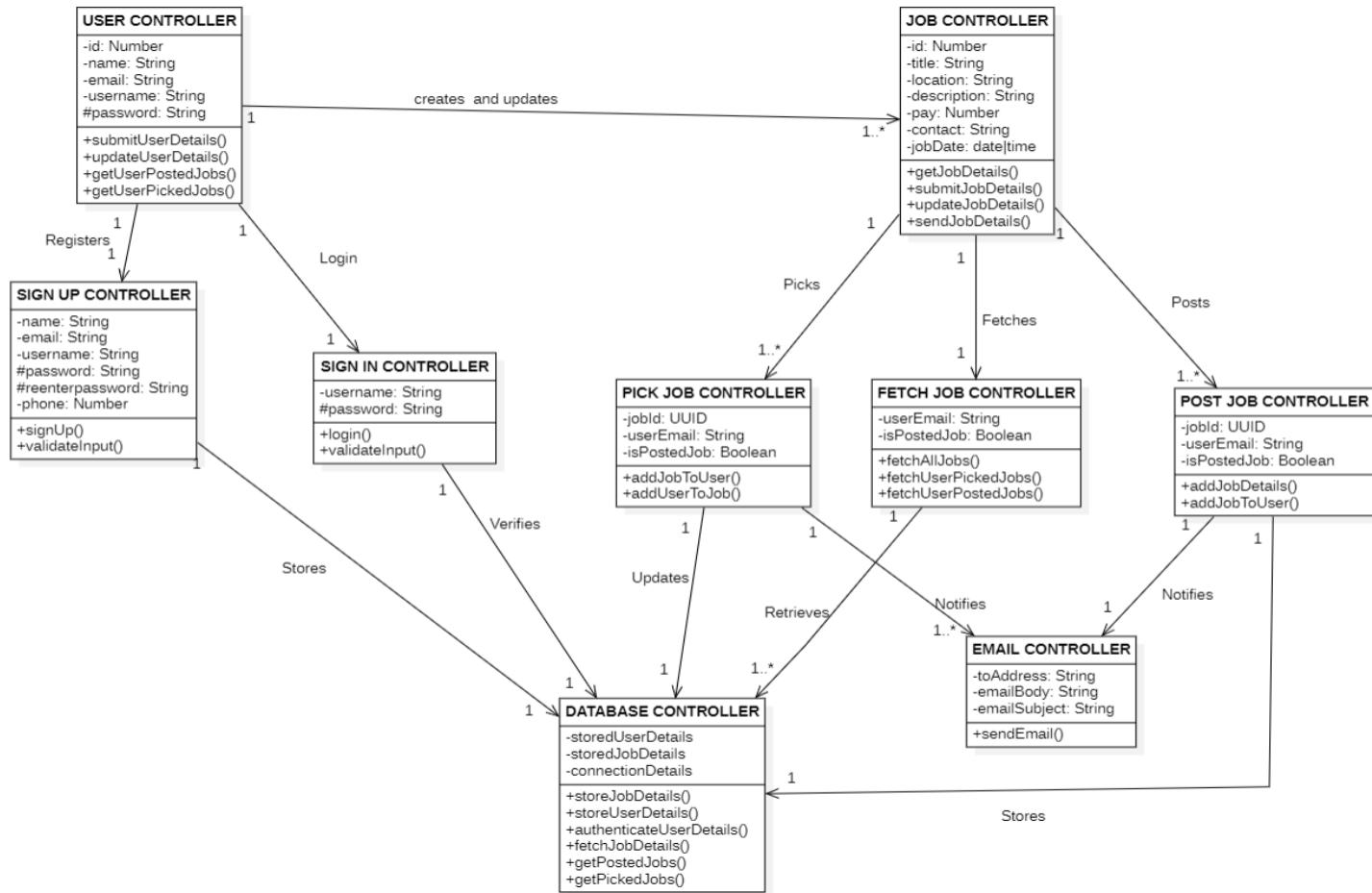
Usecase-3 : Show all the jobs posted by the user



Usecase-4 : Show all the jobs picked by the user



Design Class Diagram:



Demo Working Product System

Home Page:

The screenshot shows a web browser window for 'localhost:3000/hokieforu/account/home'. The header features a logo for 'HOKIE FOR U' with a cartoon character, and navigation links for 'Notifications', 'Home', 'My Jobs', 'My Profile', and 'Logout'. Below the header is a large photograph of four people wearing face masks and volunteer badges, working together. A central call-to-action button says 'Open Jobs, People need help from you'. Below the button are three search input fields: 'Search for Job Title', 'Search for Job Description', and 'Search for Job Location'. At the bottom right of the page is a red 'Post a job' button.

Available Jobs

[Post a job](#)

Student Manager

📍 Hokie Grill, Virginia Tech
Pay \$: 15/hour
Ph: 5405581234

Testing

📍 Blacksburg
Pay \$: 10/hour
Ph: 5405587364

Testing1

📍 Blacksburg
Pay \$: 10/hour
Ph: 5405587364

The home page functions as the central hub in a job listing application, providing users with a comprehensive overview of all available job opportunities stored in the database. A significant feature is the "Post a Job" button, empowering users to contribute new job listings to the platform. This interactive feature encourages users to actively participate in the job listing community, expanding the range of available opportunities.

Each job listing is presented in an individualized box format, containing essential information for potential applicants, such as the job title, location, pay, and date of posting. Additionally, a detailed job description is provided to offer users a deeper understanding of the available roles. Including the email and contact details of the user who posted the job facilitates direct communication and streamlines the application process.

To improve the user experience and simplify job searches, the home page incorporates filter criteria. Users can input specific terms like job title, description, or location to customize displayed results according to their preferences. This thoughtful integration of

search filters not only saves time but also ensures users can quickly and efficiently find the most relevant opportunities.

The screenshot shows a web browser window for 'localhost:3000/hokieforu/account/home'. The header features the 'HOKIE FOR U' logo with a cartoon owl icon. On the right, there are links for 'Notifications', 'Home', 'My Jobs', 'My Profile', and 'Logout'. Below the header is a banner image showing people at a volunteer event. A central callout box says 'Open Jobs, People need help from you' with three search input fields: 'Search for Job Title', 'Search for Job Description', and 'Search for Job Location'. At the bottom of the page, there's a section titled 'Available Jobs' with three job listings: 'Community Center Service Work', 'Babysitter / Nanny', and another 'Community Center Service Work'. Each listing includes details like location, pay rate, phone number, posted by, and job details. A 'Post a job' button is in the top right of the 'Available Jobs' section, and a 'Post a job' button is also located on the right side of each individual job listing. Navigation arrows and a page number '3' indicate pagination at the bottom.

Acknowledging the potential information overload that can come with a large volume of job listings, the application adopts a pagination concept. Instead of overwhelming users with an exhaustive list on a single page, each page displays a manageable number of jobs, approximately nine in this case. This pagination approach not only enhances page load times but also contributes to a more organized and user-friendly interface, allowing users to navigate job listings with ease.

In summary, the home page is a crucial component of the job listing application, offering a user-friendly interface that combines essential features like job posting, detailed job information, search filters, and pagination. This holistic design ensures a seamless experience for both job seekers and those posting opportunities, fostering a dynamic and engaging platform for the job-seeking community.

My Jobs Page:

The "My Jobs" page functions as a personalized area within the application, displaying jobs either posted or selected by a specific user. This page is divided into two main parts: "Posted Jobs" and "Picked Jobs."

The screenshot shows a web application interface for 'Hokie FOR U'. At the top, there's a header bar with a logo, navigation links for 'Notifications', 'Home', 'My Jobs', 'My Profile', and a 'Logout' button. Below the header, the main content area is divided into two main sections: 'Posted Jobs' and 'Picked Jobs'.

Posted Jobs

- Community Center Service Work**
 - Location: Blacksburg Community Center, VA, 24060
 - Job Details: Testing
 - Pay: \$10/hour
- Community Center Service Work**
 - Location: Blacksburg Community Center, VA, 24060
 - Job Details: Need help for a weekend game
 - Pay: \$10/hour
- Community Center Service Work**
 - Location: Blacksburg Community Center, VA, 24060
 - Job Details: There's a game this weekend. We need some volunteers to run the game. It would be very helpful
 - Pay: \$10/hour

Picked Jobs

- House Cleaning**
 - Location: Blacksburg
 - Pay: \$20/hour
 - Phone: 5406050025
 - Posted By: sivakumarreddy@vt.edu
 - Job Details: cleaning the floors
- Testing1**
 - Location: Blacksburg
 - Pay: \$10/hour
 - Phone: 5405587364
 - Posted By: samhithap@vt.edu
 - Job Details: Testing1
- Lawn Cutting**
 - Location: blacksburg
 - Pay: \$10/hour
 - Phone: 5405587637
 - Posted By: samhithap@vt.edu
 - Job Details: A 2 hour job to help with lawn mowing
- Game Volunteer**
- Math Tutor**
- Testing**

The "Posted Jobs" section exclusively exhibits the jobs posted by the particular user. In this segment, users can view detailed information about each job, encompassing the job title, location, pay, and a comprehensive job description. This layout enables users to easily manage and monitor the opportunities they have shared on the platform.

Conversely, the "Picked Jobs" section highlights jobs chosen or favorited by the user. Similar to the "Posted Jobs" area, the "Picked Jobs" section provides in-depth details about each selected job, including the job title, location, pay, as well as the email and contact details of the user who posted the job. Additionally, a job description is presented to offer a thorough understanding of the selected opportunities.

With these two subcomponents, the "My Jobs" page creates a user-focused experience, allowing individuals to conveniently access and oversee both the jobs they have posted and those they have chosen to pick or favor. This dual categorization ensures a clear and well-organized presentation of the user's engagement with the job platform, facilitating efficient navigation and interaction with the posted and picked job listings.

Email Notifications:

Once Job is Posted:

The screenshot shows an email inbox interface with a single message highlighted. The message is from 'hokieforu@gmail.com' to the user. It is titled 'Your job is successfully posted' and includes a yellow 'External' button and an 'Inbox' button. The message body contains the following details:

Job Title: Babysitter / Nanny
Job Description: I have meeting on 11/30/2023 but I cannot leave my kid alone. he is a great kid. He is quiet and friendly. I want someone to take care of him for 5 hours.
Job Pay: 9
Job Location: 820 Patrick Henry Drive, Blacksburg
Job Date: 2023-11-30
Contact Information: 5405583501

Regards,
HokieForU

At the bottom of the email view, there are 'Reply' and 'Forward' buttons.

Upon successful submission of a job posting, the system triggers an automated email to be sent to the user who posted the job. The subject of this email is set as "Your job is successfully posted." This email serves as a confirmation and provides the posted user with a detailed summary of the job they have created.

This email notification not only serves as a confirmation for the user but also provides them with a quick reference to the essential details of the posted job. It enhances the user experience by offering clear and concise information about the job they have just added to the platform.

The inclusion of specific job details in the email, such as title, description, pay, location, date, and contact information, ensures that the user has a comprehensive record of the job they have posted. This feature contributes to user satisfaction and engagement by keeping them informed about the details of their recent job posting in a convenient and accessible manner.

Once Job is Picked:

The screenshot shows an email inbox interface with a single message highlighted. The message is from 'hokieforu@gmail.com' to the user. The subject of the email is 'Your job has been picked!!!'. The body of the email contains the text: 'The job you have posted (Babysitter / Nanny) has been picked'. Below the message, there is a section titled 'Picked User Details:' followed by the user's email address, 'User Email: sivasagar@vt.edu'. At the bottom of the email view, there are two buttons: 'Reply' and 'Forward'.

When a user's posted job is successfully picked by another user, an automated email notification is triggered to inform the original job poster. The subject of this email is set as "Your job has been picked!!!"

This email notification serves as an immediate alert to the user whose job has been selected by another user. It provides clear information about the picked job, including the job title, and introduces the user who has picked the job with their email address. The concise format ensures that the original job poster is promptly informed about the development, fostering efficient communication and transparency within the job listing platform.

This functionality contributes to a positive user experience by keeping the user updated on the status of their posted job, enabling quick and informed responses to the selection of their job by another user.

Both of these emails are sent from the email address "hokieforu@gmail.com", providing a consistent and recognizable sender for users receiving these notifications. This not only ensures the legitimacy of the emails but also establishes a clear connection between the platform and the user, fostering trust and reliability in the communication process.

Scrum

Sprint 3 Backlog

User Story-1:

Create a booking system that allows users to schedule service jobs, including date and time preferences - BackEnd

<i>Task</i>	<i>Hours</i>
Create backend functionality for pick a job	4h
Update user and job details for picking and posting jobs	2h
Create APIs to fetch User Jobs	2h
Scheduling System	1h
API Testing through Postman	3h

User Story-2:

Retrieve and display a list of available service jobs - FrontEnd

<i>Task</i>	<i>Hours</i>
Create front end to display User Jobs	2h
Frontend to Backend Connection for displaying User Jobs	3h
Unit Testing	2h
Test - check if jobs are getting displayed	2.5h

User Story-3:

Create a booking system that allows users to schedule service jobs, including date and time preferences - FrontEnd

<i>Task</i>	<i>Hours</i>
Frontend to Backend Connection for Pick a Job Functionality	2h
Unit Testing	1h
Test - Pick a Job functionality	2.5h

User Story-4:

As a user, I want a user dashboard that provides an overview of my most recent and upcoming jobs.

<i>Task</i>	<i>Hours</i>
Frontend to Backend Connection Development	3h
Unit Testing	1h
IAT Testing	3h

User Story-5:

As a user, I want to receive notifications when a service job is booked or scheduled.

<i>Task</i>	<i>Hours</i>
Email Notifications Development	4h
Unit Testing	0.5h
IAT Testing	2h

User Story-6:

Display all the available jobs with filter criteria and provide pagination to show all available jobs.

<i>Task</i>	<i>Hours</i>
Dev for Filter Criteria	3h
Dev for creating Pagination	3h

Unit Testing	1h
Testing for Filter Criteria and Pagination	1.5h

Sprint 3 Burndown chart

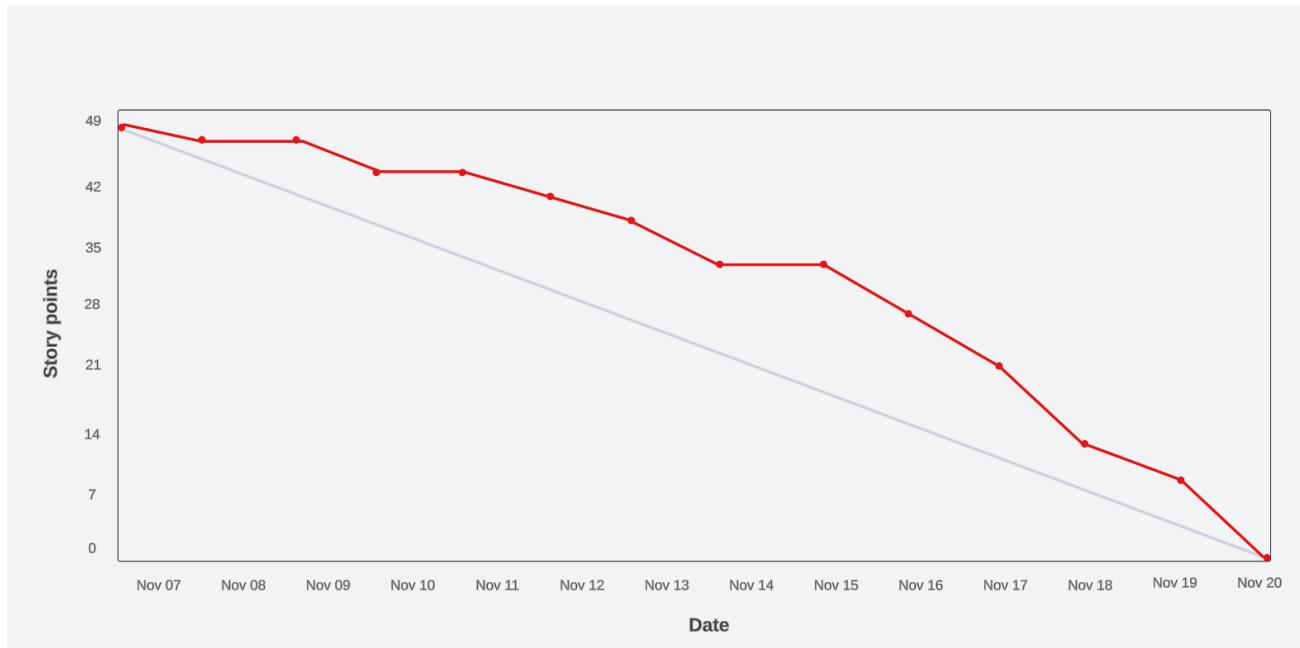


Fig 1: Sprint burndown chart(Story points vs Sprint dates)

Sprint Retrospective

Accomplishments:

- Backend and Frontend development for Booking system for scheduling jobs based on user date and time preference was successfully completed.
- Frontend for Retrieving and displaying list of available service jobs was done.
- Dashboard with overview of most recent and upcoming jobs was designed.
- Notification system for scheduled and booked service jobs was done.
- Displaying all available jobs based on filter criteria along with pagination was achieved.

What Went Well:

- All user stories were completed as planned, showcasing the team's commitment to meeting the sprint goals.

- Development was completed earlier than expected, indicating the team's efficiency in delivering work within the set time frame.
- The early completion of development allowed for more time dedicated to testing, contributing to a higher-quality product.

Areas of Improvement:

- Exploring automation opportunities to streamline testing processes and enhance overall test coverage can be done better.

Product Backlog

- In the final sprint of our project, we are excited to announce that all user stories outlined in both the Sprint Backlog and Product Backlog have been successfully accomplished. This achievement reflects the hard work and collaboration of our team throughout the entire development process.

ID	User Story	Estimation	Priority
1.	As a user, I want to register and login securely using authentication methods.	8	1
2.	As a user, I want to be able to access and use a web application, so I need a login and registration interface to create a new account or log in to an existing one.	3	1
3.	As a website visitor, I want to see an engaging and informative homepage so that I can quickly understand the purpose and offerings of the website.	3	2
4.	As a product manager, I want a database schema for user profiles, including personal information and profile pictures.	3	3
5.	As a user, I want the ability to post service jobs and store their details in the system.	8	4
6.	As a user, I want to have a profile page where I can view and manage my personal information.	5	5
7.	As a product manager, I need a data model for service job postings, covering attributes like title, description, category, and location.	3	6

8.	As a user, I want to browse and view a list of available service jobs.	8	7
9.	As a user, I want to schedule service jobs, specifying date and time preferences.	13	7
10.	As a user, I want to see the jobs which I have posted and picked	5	8
11.	As a user, I want a user dashboard that provides an overview of my most recent and upcoming jobs.	8	9
12.	As a user, I want to receive notifications when a service job is booked or scheduled.	5	10
13.	As a user, I want a dashboard for all the jobs and need a filter criteria option to search through the jobs.	8	10

Issue tracking

We raised the below bug while testing the Sprint 3 user stories:

Recent Jobs - issue

Recent Jobs not getting updated

Pagination - Incorrect

Incorrect Pagination Display on Job Search Results

Issue 1 : [Recent Jobs - issue](#)

Recent Jobs not getting updated

Issue 2 : [Pagination - Incorrect](#)

Incorrect Pagination Display on Job Search Results

<input type="checkbox"/> <input checked="" type="checkbox"/> HOK-79 Recent Jobs not getting updated	DONE 	-		...
<input checked="" type="checkbox"/> HOK-80 Incorrect Pagination Display on Job Search Results	DONE 	-		