

Enterprise Information Management System

Group name: CMPT276_YYDS

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Group members:

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Project introduction and market analysis

- Only basic functions
- Focus on management convenience
- Relatively little consideration of the **individual needs** of employees and **corporate care**.
 - our project innovates
 - an example –benefits management
 - view and customize their desired benefits, like health insurance and retirement plans.



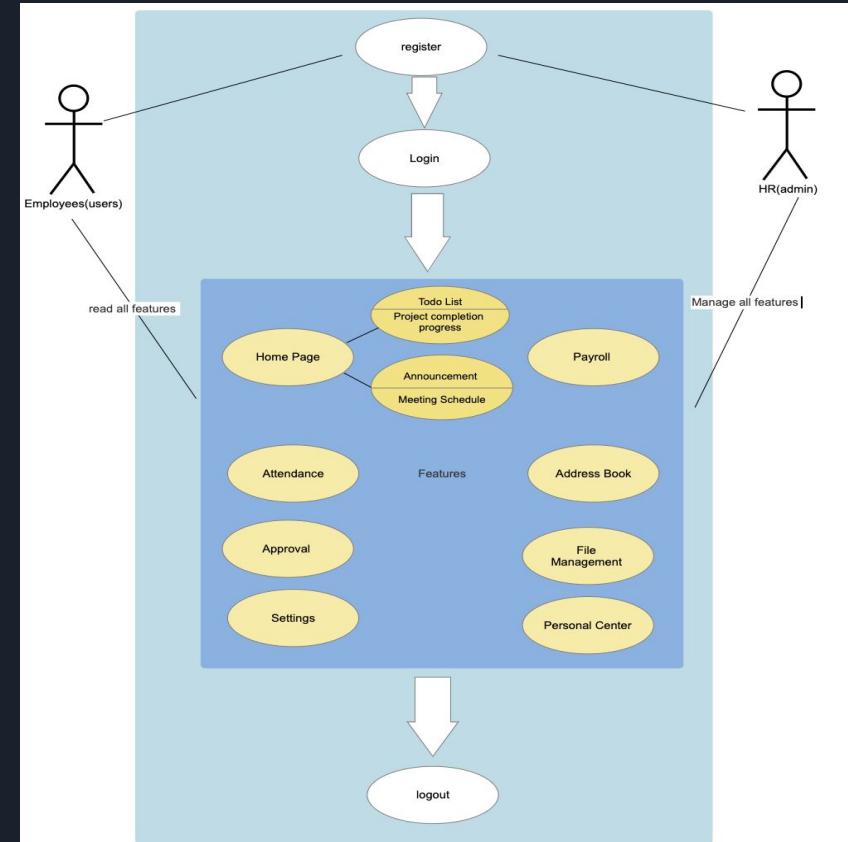
System functions and technical architecture

- User Privileges:
 - Employees(User):

Access to main functions such as personal center, task list, document management, etc.

- Human Resources (Admin):

Full access to all functions, including personnel management, payroll management, etc.



System functions and technical architecture

Enterprise Information Management System

Home Page

Attendance

Performance

Payroll

Address book

File Management

Personal Center

Settings

logout



Hello Stitch!

Design Department

Announcements

Financial report forecast for the second quarter of 2023
Ministry of Administration's financial forecast for 2023
Reports on internal employees of the company (notices about expiring contracts, etc.)
A review of the payroll and benefits of all involved employees in the first half of 2023



Meeting Schedule

09:00 Discuss project timeline

12:00 Review current progress, set next goals

localhost:8080/users/dashboard

Another example of personalization

Todo List

Pending In Progress
Complete



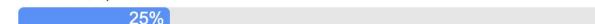
Task List

- t1 (Pending)
- t2 (In Progress)
- t3 (In Progress)
- t4 (Complete)
- t5 (Complete)
- t6 (Complete)

New task...
Pending Add

Project completion progress

CRM Development



Sales Platform Integration



Enter new project name Progress % Add Project

System functions and technical architecture



Frontend tools
-ensure an intuitive and user-friendly interface



Java™



spring boots
framework



SWE Takeaways



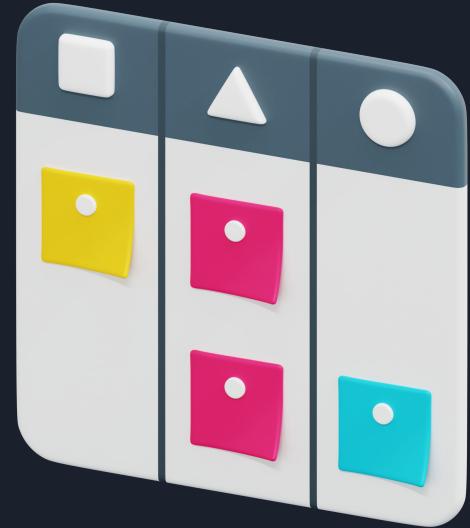


SWE Takeaways

- 01 How do we stay connected?
- 02 How do we ensure efficient and transparent communication?
- 03 What are our team management methods?
- 04 What is our code management process?

Agile development methods

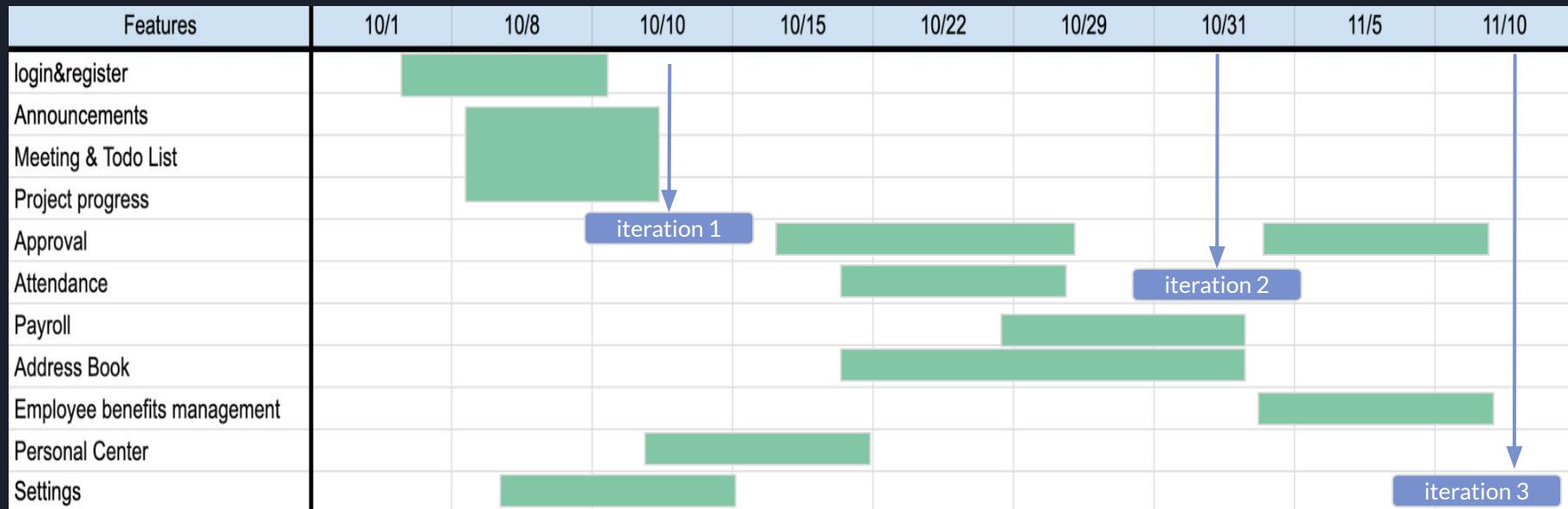
- Viable for “student/bursty” development
- Allows for fixed releases but wiggle room for features
- Supports continuous flow and development
- No estimates needed
- accommodates any-size stories across iterations
- Not much overhead



kanban

kanban Chart

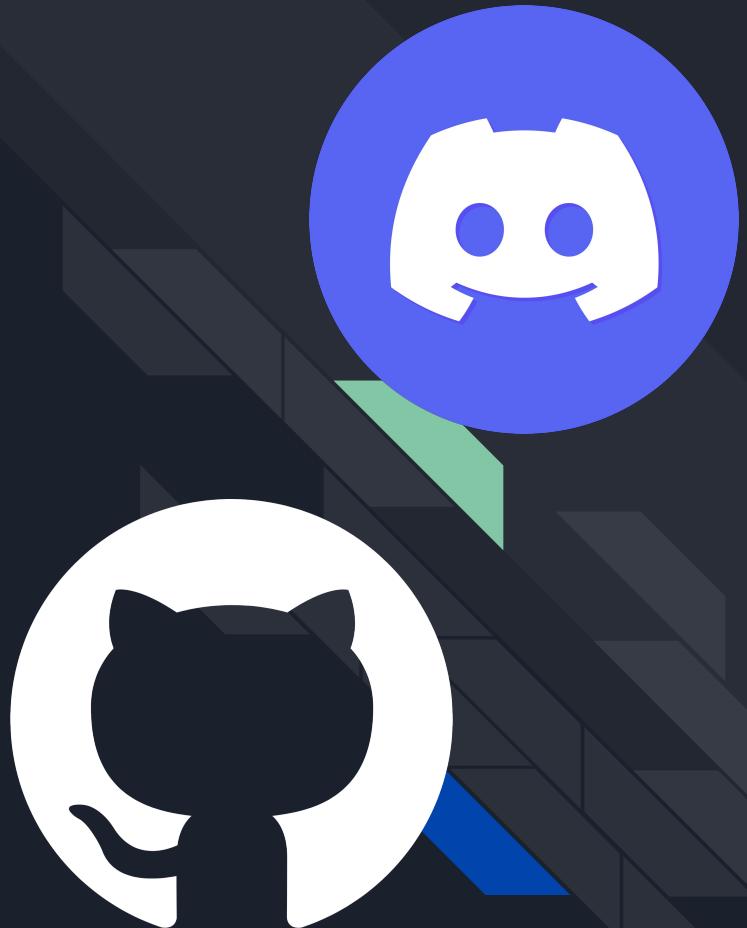
–how we work effectively as a team





Team communication and collaboration tools

–Discord & GitHub





Discord

- Team Communication
- File and information sharing
- Voice Calls

CMPT 276 Project ▾

▼ TEXT CHANNELS

- # general
- # assignment-1
- # javascript
- # class-notes

▼ VOICE CHANNELS

- 🔊 Voice Chat





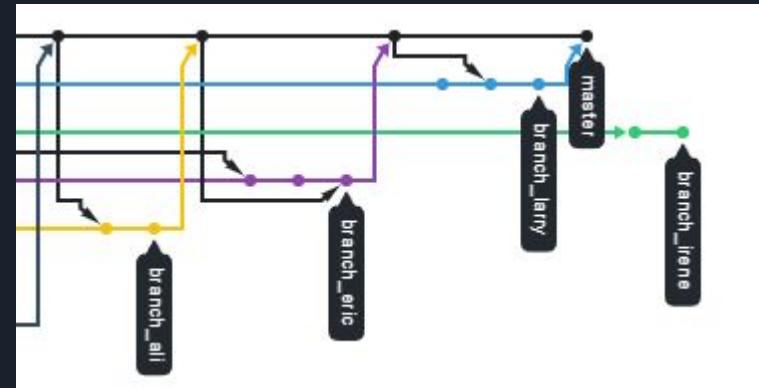
Discord



- Weekly meetings 2-3 times per week
- Ensure up-to-date project progress
- Take advantage with remote collaboration

GitHub

- Version control and debugging
- Track team progress
- Iterative development
- Divide and conquer



Testing

- Unit testing for each sub-function
- Integration testing for the whole project functionality





Reflection and What could have done better

- Group project development experience
 - Group coordination and management
 - SWE methodologies (Agile)
 - Develop using Java Springboot
 - Using Github
-
- More frequent checks on progress throughout the project



What hasn't been implemented

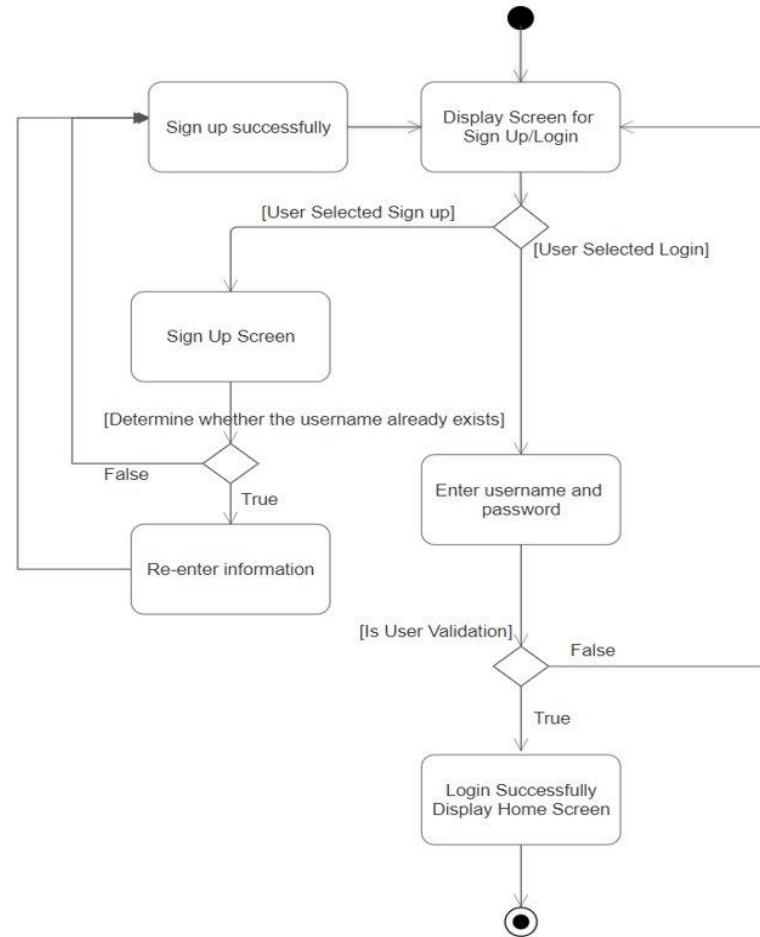
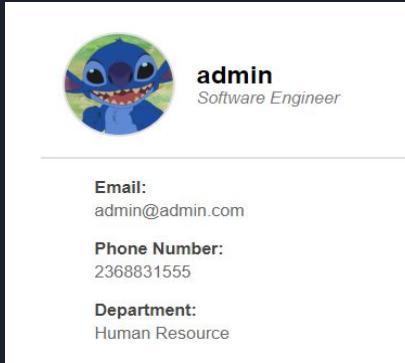
- Check-in function (requires integrating GPS)
- Request management difference between normal user and administrator
- Communication and Feedback Functions (Messaging)
- Analysis and Reporting

User Sign up, Login and Profile

Sign up and Login:

- Sign up: At least username and password required(username is unique).
- Login: Match the user in database can login successfully.
- Personal Center: Show the personal information of user.

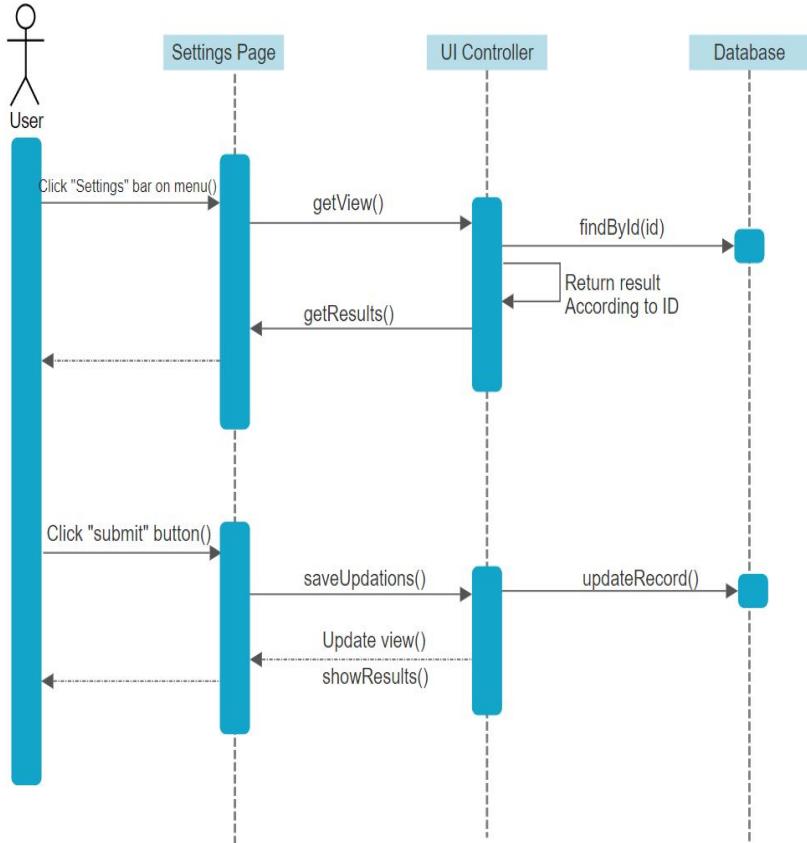
User
- username: String - password: String - isAdmin: boolean - email: String - phoneNumber: String - department: String - userSchedule: List<UserSchedule> - hourlySalary: BigDecimal



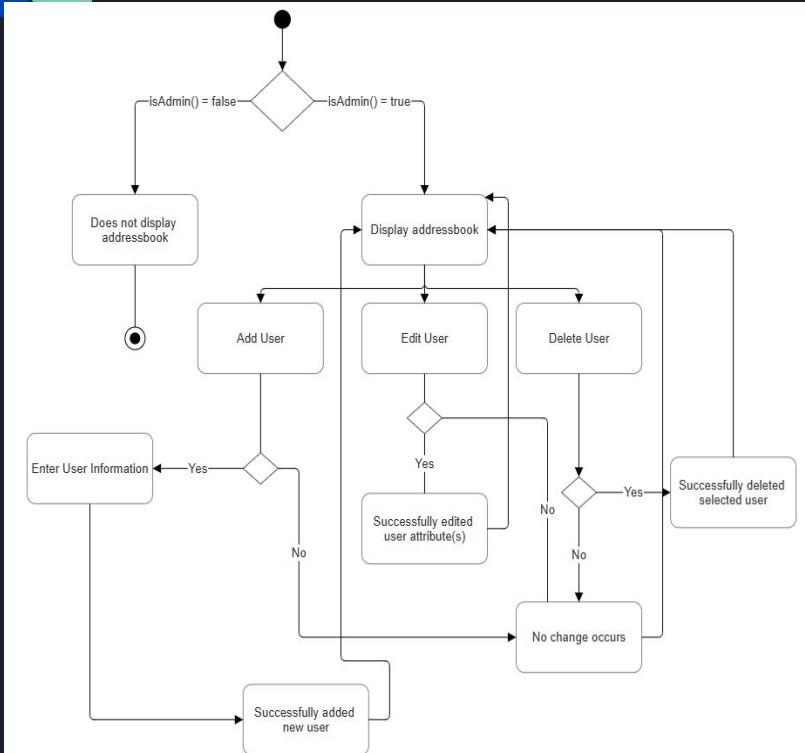
User Information Settings

User can directly modify their own username, password and information in setting area.

User Name:	<input type="text" value="admin"/>
Password:	<input type="text" value="admin"/>
Email:	<input type="text" value="admin@admin.com"/>
Phone Number:	<input type="text" value="2368831555"/>
Human Resource	
<input type="button" value="Submit"/>	



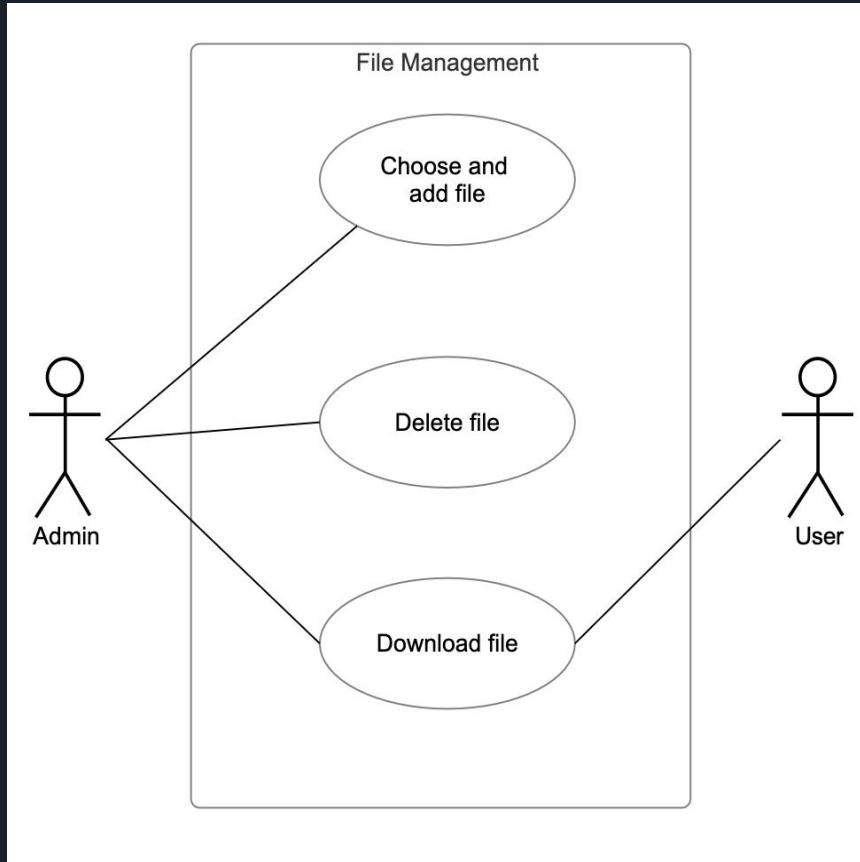
Admin Address Book Management



Enterprise Information Management System							
add user							
ID	Name	Email	Phone	Department	Admin	operate	
58	admin	admin@admin.com	2368831555	Human Resource	true	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
29	test3	123@gmail.com	123456789	Engineering	false	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
27	test1	123@sfu.ca	123456	Engineering	true	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
36	test123			Finance	true	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
28	test2	1234@gmail.com	12345	Finance	true	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
37	test1234			Finance	false	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
39	test0	123@gmail.com	123456	Finance	false	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
60	test4	444@sfu.ca	44444444	Finance	false	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
34	123	123123@gmail.com	123123123	Engineering	false	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
61	test5	555@gmail.com	55555	Human Resource	true	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
46	test1234	123@outlook.com	123	Finance	false	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
45	testacc	123123@yahoo.com	12313	Finance	true	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
35	test	123@hotmail.com	123456	Engineering	false	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
49	new123	123@hotmail.com	123	Human Resource	true	<input type="button" value="delete user"/> <input type="button" value="update user"/>	
63	test6	666@outlook.com	666666	Engineering	false	<input type="button" value="delete user"/> <input type="button" value="update user"/>	

Only Admin can see this page.
What admin can do?

- Add user
- Delete user
- Edit User



File Management

Admin:

- Choose and Add file
- Delete file
- Download file

Employee:

- Download file

User Approval Management

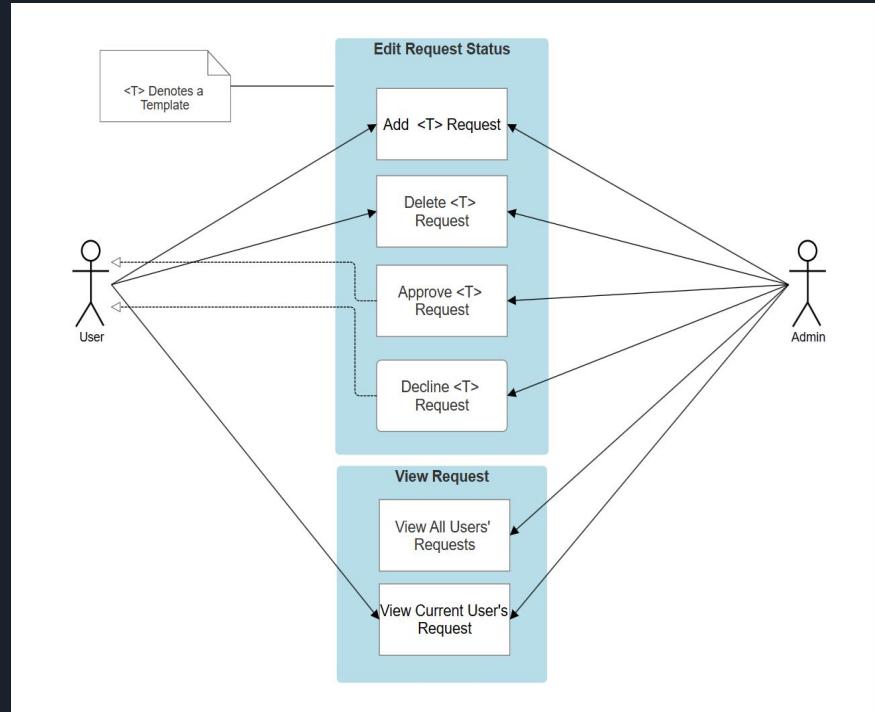
Each Request type is of Many-One relation with a user and admin

Admin:

- Display users' request
- Approve or Decline the request and updates the status back to user

User:

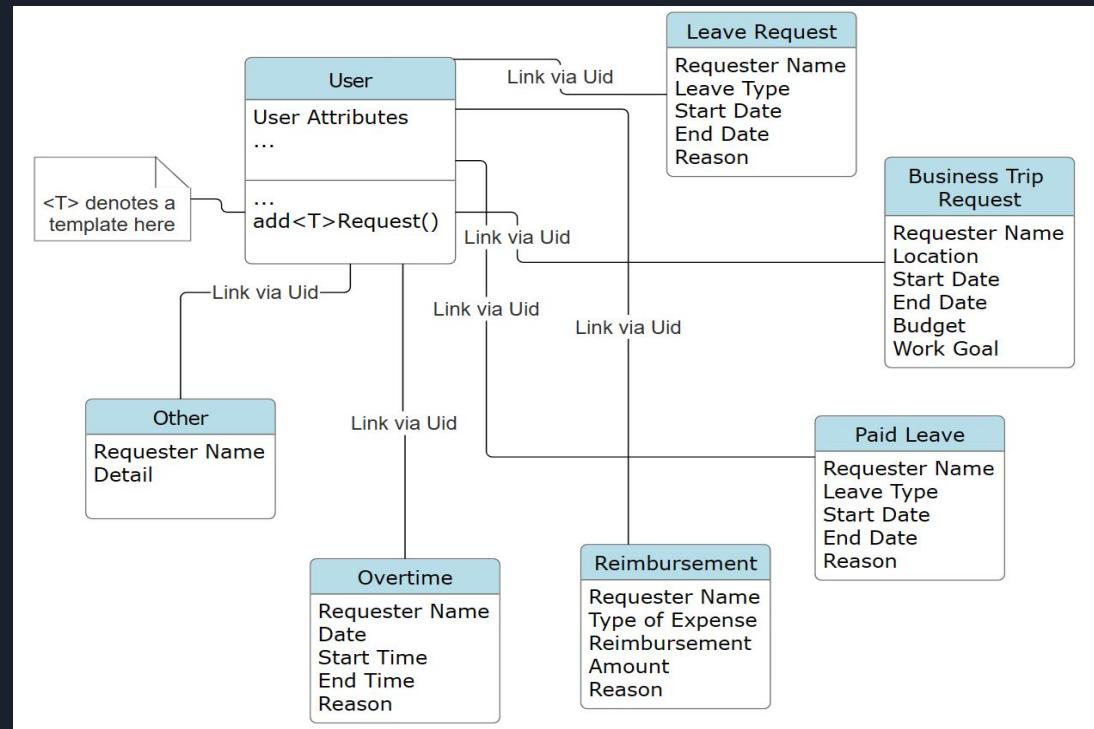
- Display their own request



User Approval Management

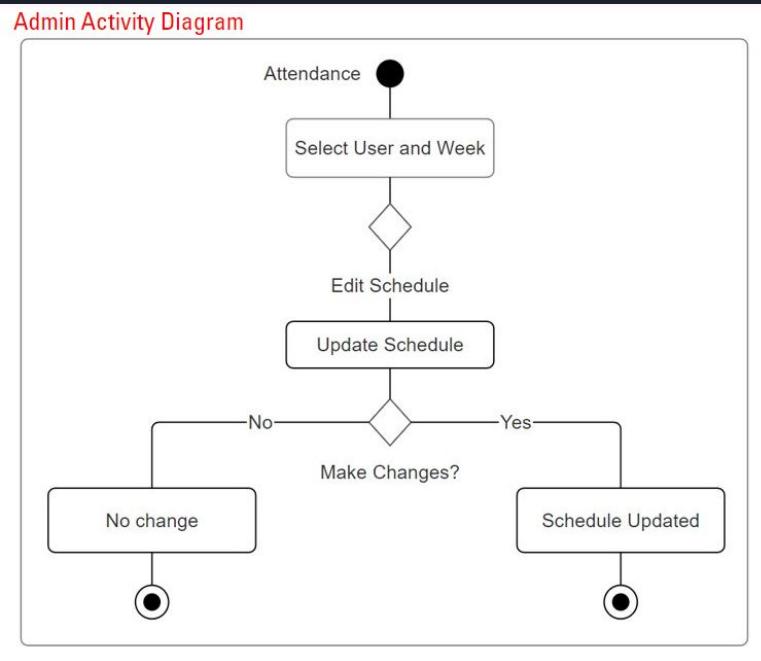
Each request type are linked to user via a foreign key (Uid)

Each have their unique attributes

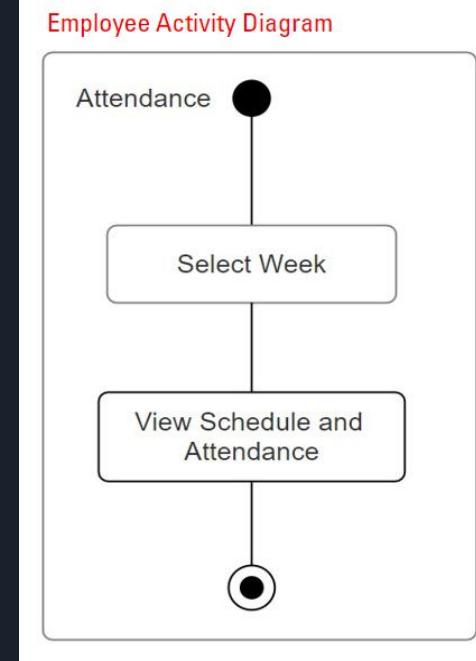


User Schedule and Attendance

Admin Activity Diagram



Employee Activity Diagram



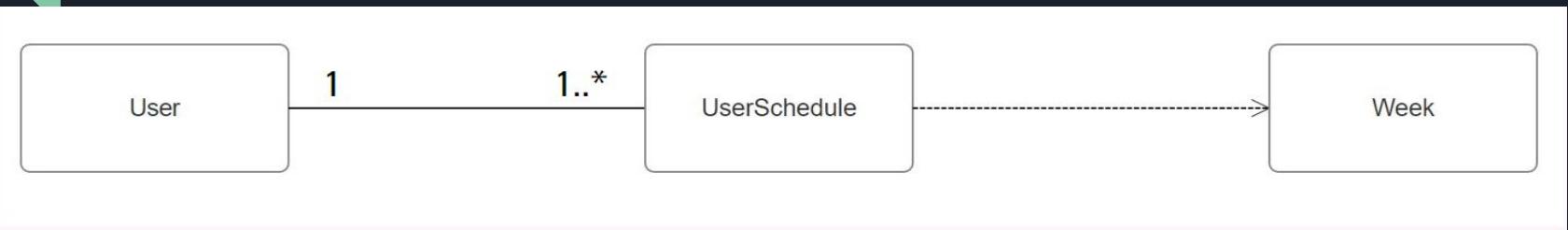
Employee:

- days scheduled
 - late days
 - total number of hours worked

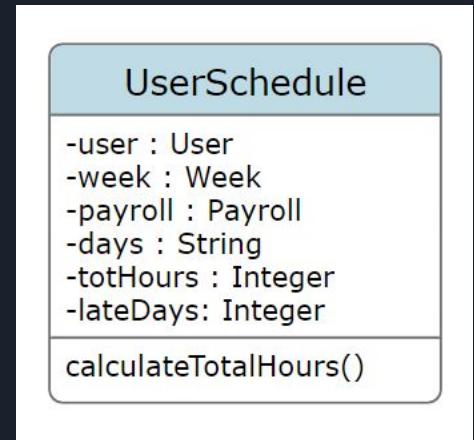
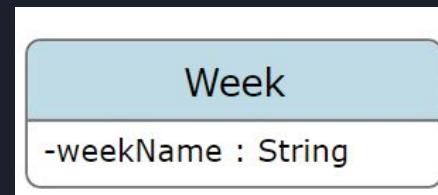
Admin:

- edit any users:
 - days scheduled
 - late days

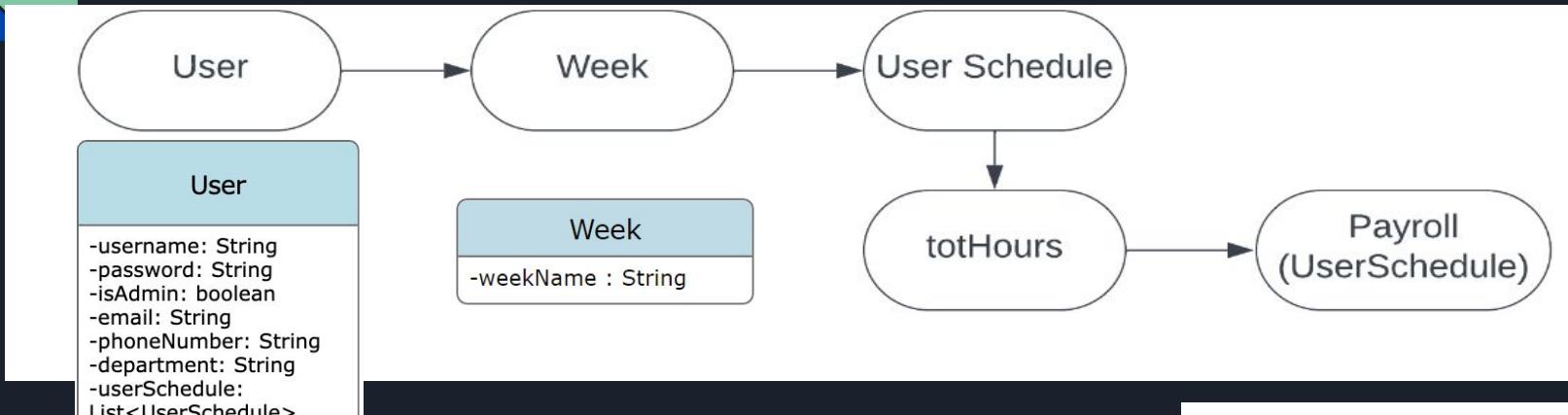
Association Between User, UserSchedule and Week



- Each User is associated with 1 or more Schedules.
- Each UserSchedule Object is associated with only one user.
- UserSchedule uses (depends on) Week.



Payroll Interaction with UserSchedule, Week, and User



Each specific User (who has 1 or more UserSchedule)

Find UserSchedule for User for ALL Weeks

Take totHours from UserSchedule

Calculate Payroll based on User salary and totHours



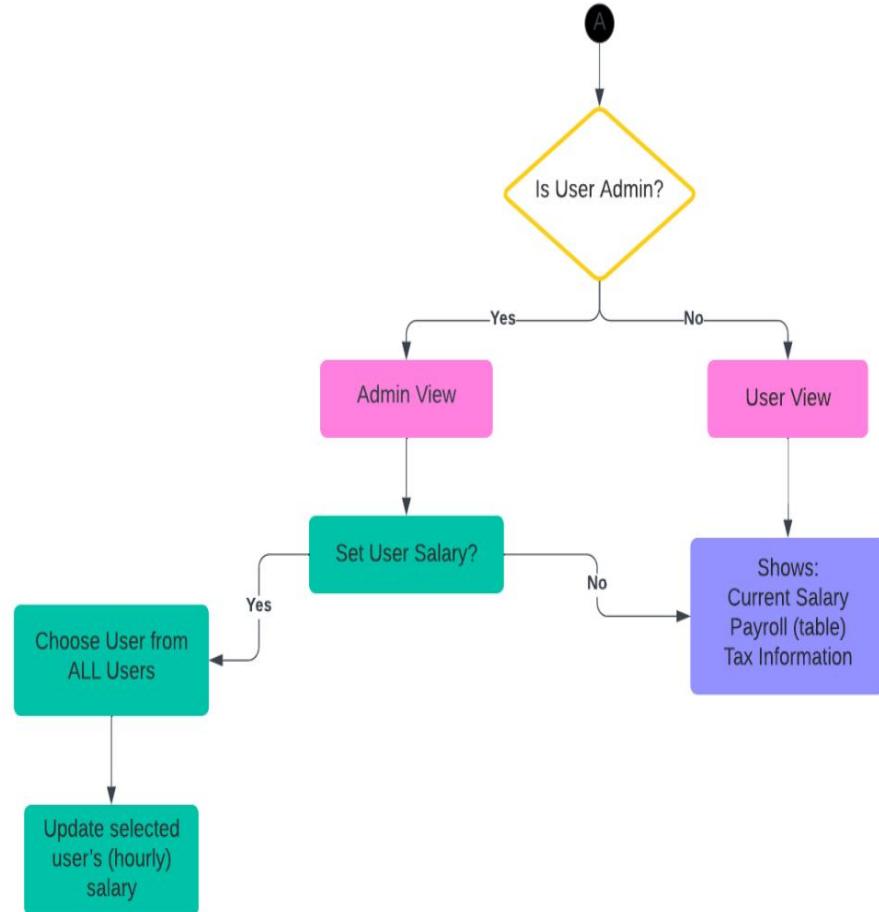
Payroll

User:

- Dynamic payroll table
- CRA (Tax) information
- User's Salary (hourly)

Admin:

- Update ANY user's Salary



Demo !

Try the web app for free at: <https://cmpt276-springboot-render.onrender.com>



Thanks for listening!

Questions?