



DARKSTAR

HRadvocate Self Service Mobile App

Software Design

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February 15, 2018

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1. Revision History

Number	Date	Summary
1	02/15/2018	Initial Document is created
2	02/20/2018	Added a couple UML Design Diagrams
3	02/21/2018	Added UML Class Diagrams and Statement of Work, Assumption and Use Case Diagram
4	02/27/18	Added more UML Sequence Diagrams
5	02/27/18	Added Multi-tier UML Class Diagram
6	02/27/18	Added UML Activity Diagrams
7	02/27/18	Final Revision

2. Statement of Work

- Introduction/Background
 - Neudesic has proposed on building a prototype HRadvocate self service mobile application in order to improve employee convenience. By creating a native mobile application, employees will be have access to common HR actions, such as checking in and requesting paid time off (PTO), at the palm of their hands. It is imperative that the application works on mobile as well if not better than the current alternative of working on desktop or in person requests. Neudesic hopes that this new mobile application will improve employees' interactions with HR.
- Scope of Work
 - The scope of the work for the HRadvocate project will include all the planning, execution, and implementation for the project. This will include the team members needing to learn the necessary tools to create this project. What is not included in the scope of this project's work is the training to use this prototype for Neudesic employees, and also the integration of Neudesic's employee information for the application.
- Period of Performance
 - The period of performance for the HRadvocate project is January 22nd, the first meeting between team Darkstar and Neudesic, and March 15th, the final presentation day of the project. Any additional time or changes may be made through the professor, team Darkstar, or Neudesic review.
- Place of Performance
 - The team will work the majority of the project at University of California, Irvine or at Neudesic if the company or team prefers to work there. The teams from Darkstar and Neudesic will meet every Monday for a weekly status meeting. If the project ends up reaching the state where it will work with data from Neudesic, the place of performance may change to the on-site facility of Neudesic.
- Work Requirements
 - As part of the work requirements, team Darkstar will be performing these various tasks of the project that will result in its completion.
 - Design phase
 - Work with Neudesic to get requirements
 - Create application based on the requirements
 - Develop application design and proposal and for Neudesic review and approval
 - Present updates during weekly status meetings
 - Build phase
 - Team Darkstar will complete all coding for the prototype application

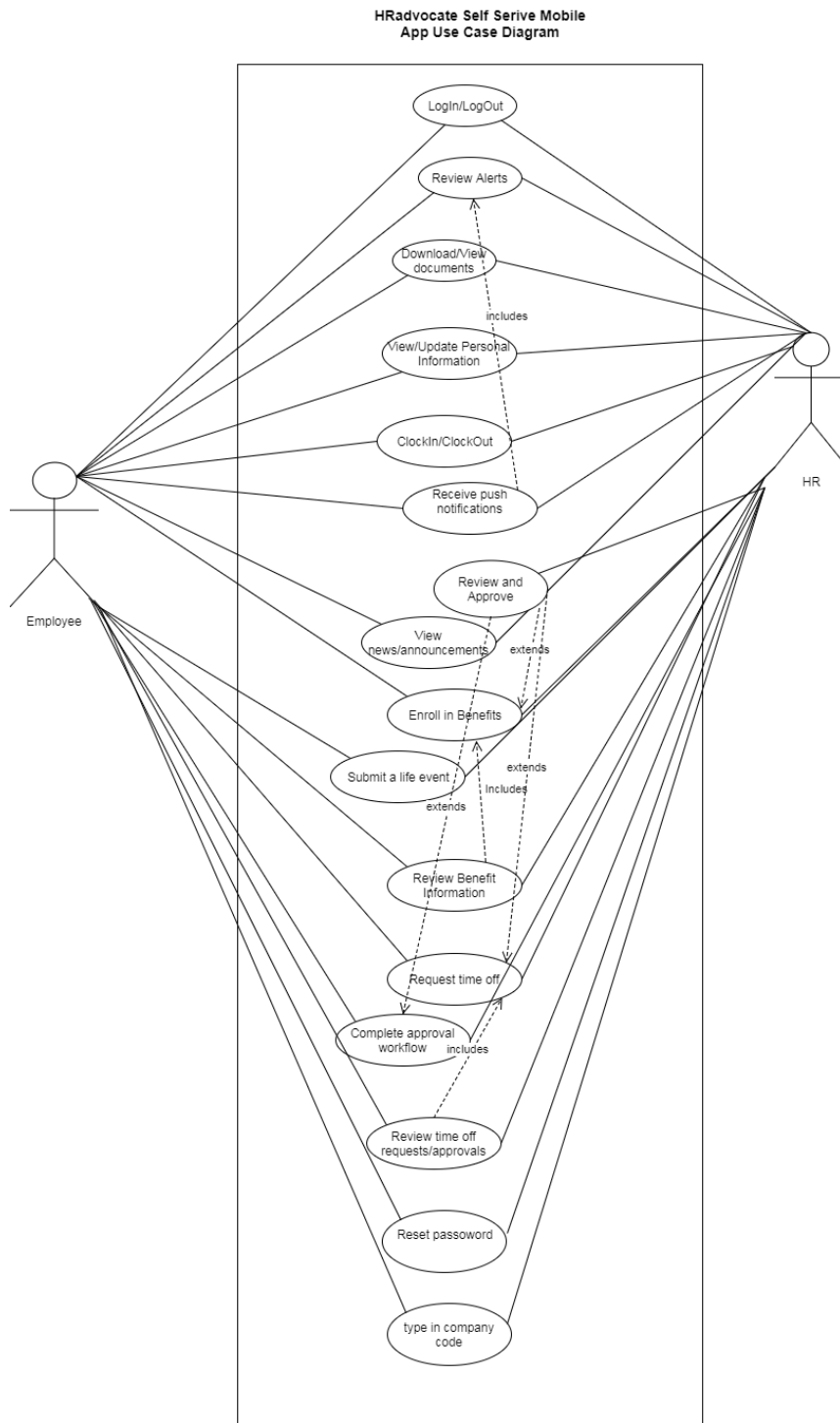
- Team Darkstar will provide Neudesic with a detailed testing plan
 - Team Darkstar will provide all content necessary for the application
 - Team Darkstar will conduct all testing on the prototype application
 - Team Darkstar will resolve any coding issues.
 - Present updates during weekly status meetings
- Implementation phase
 - Team Darkstar will implement the application among themselves and test on different devices
 - If possible, Team Darkstar will implement the necessary information to get the prototype application synced up with real company information
 - Present updates during weekly status meetings
- Handoff phase
 - Team Darkstar will check that all requirements will have been met
 - Team Darkstar will provide a project closure report for approval
 - Team Darkstar will provide all documentation in accordance with the application
 - Present updates during weekly status meetings

3. Assumptions

- Scott, from Neudesic, will continue providing guidance for the project throughout the quarter
- Neudesic will provide us with a React Native bootcamp in order to better understand the development framework
- Neudesic's logo is blue, which therefore should be its preferred colors to design mockup and keep its consistency.
- Team members will commit to the team from the beginning to the end.
- Team members have access to devices/tools to develop the prototype.
- Team members collaborate effectively and successfully complete the product.
- Some of our team members have a technical background so we assume that we are able to accomplish all the coding part of the prototype.
- We will meet at least once in Neudesic's office to further know the enterprise culture.
- Every team member owns a device to do his/her job, either responsible for the coding or design
- Team Darkstar has the required hardwares needed to run and test the programming.

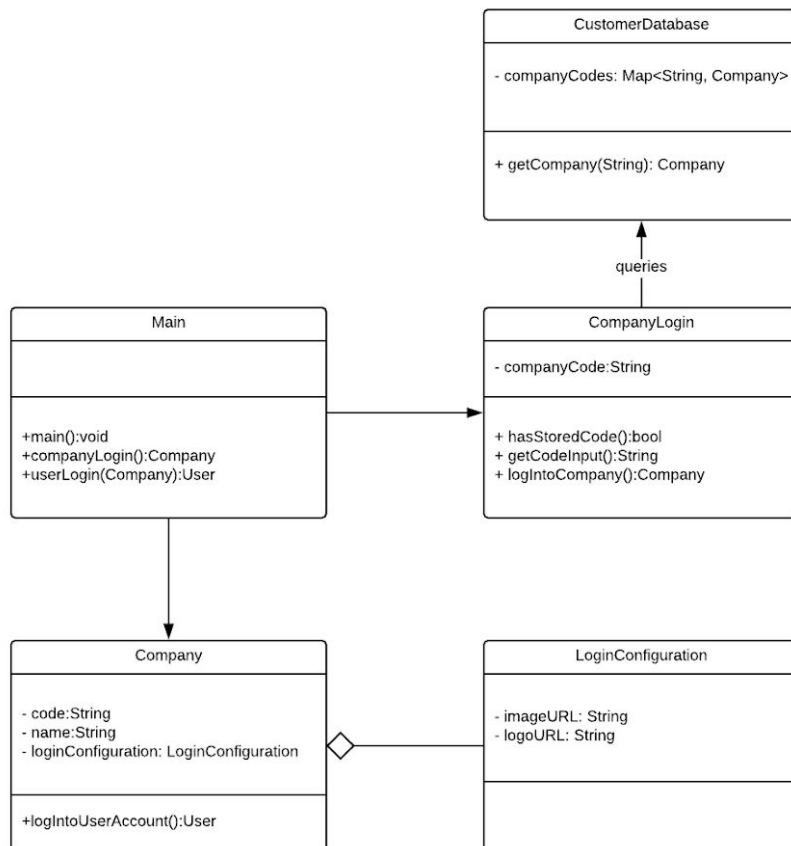
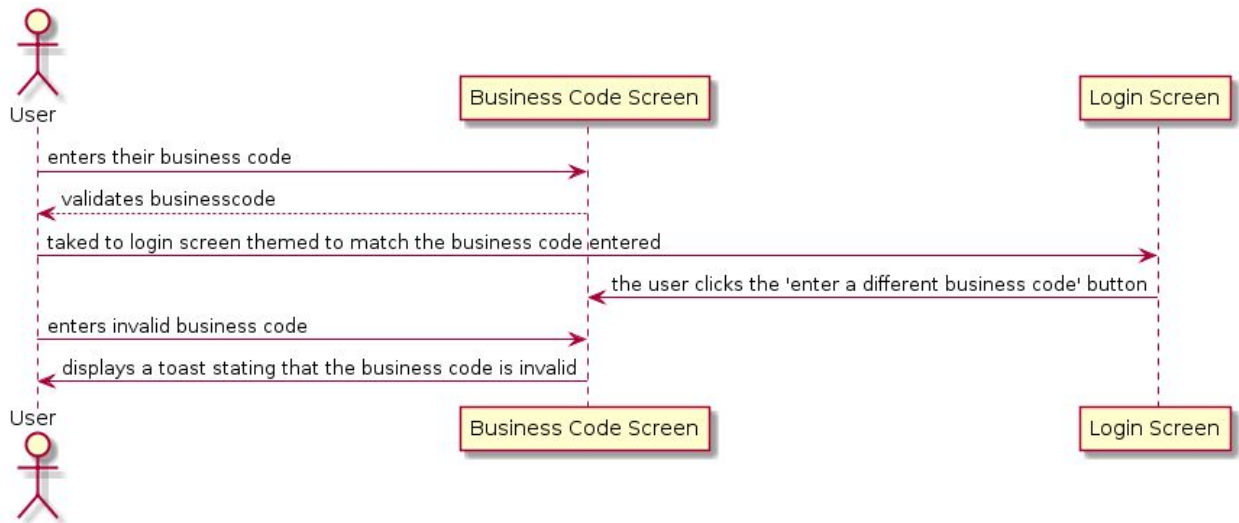
4. Use Case Diagram

The use case diagram illustrates all the use cases which will be implemented in this project. The two main actors who interact with the system will be the employees and HR.



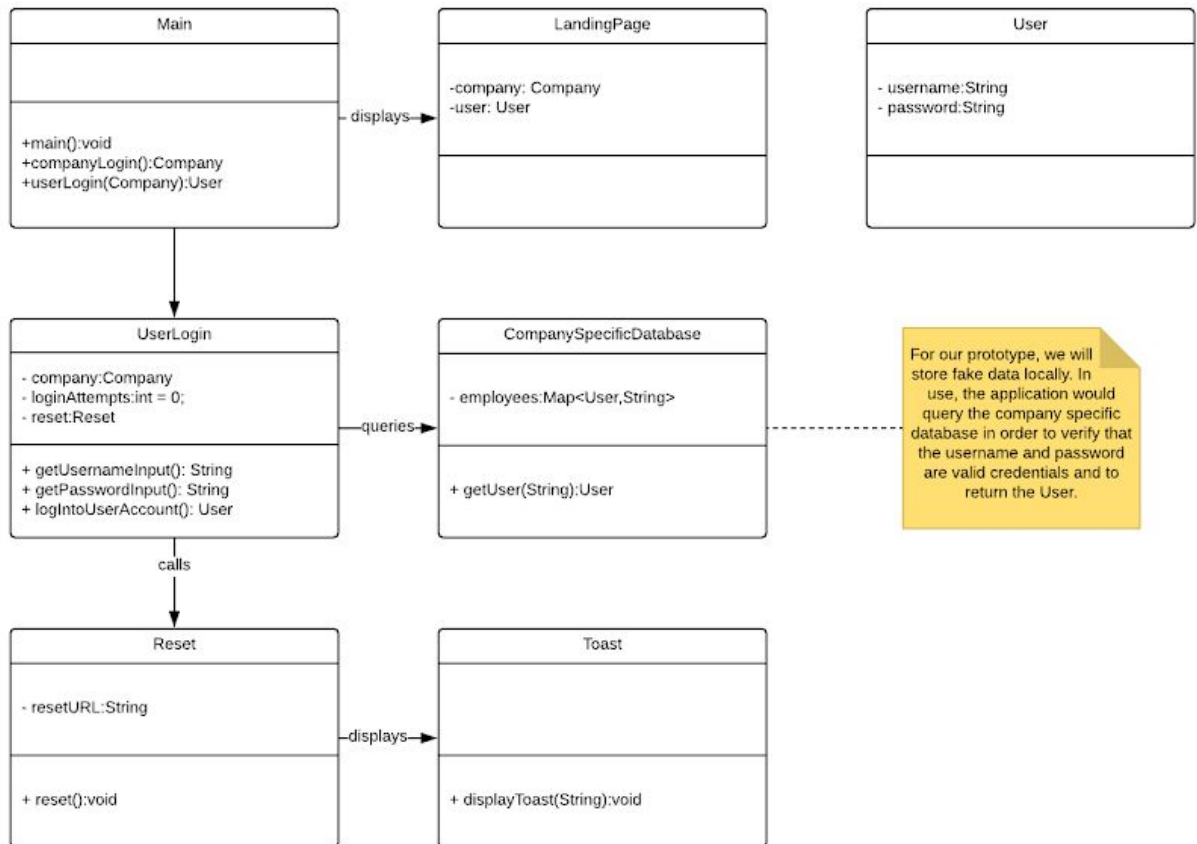
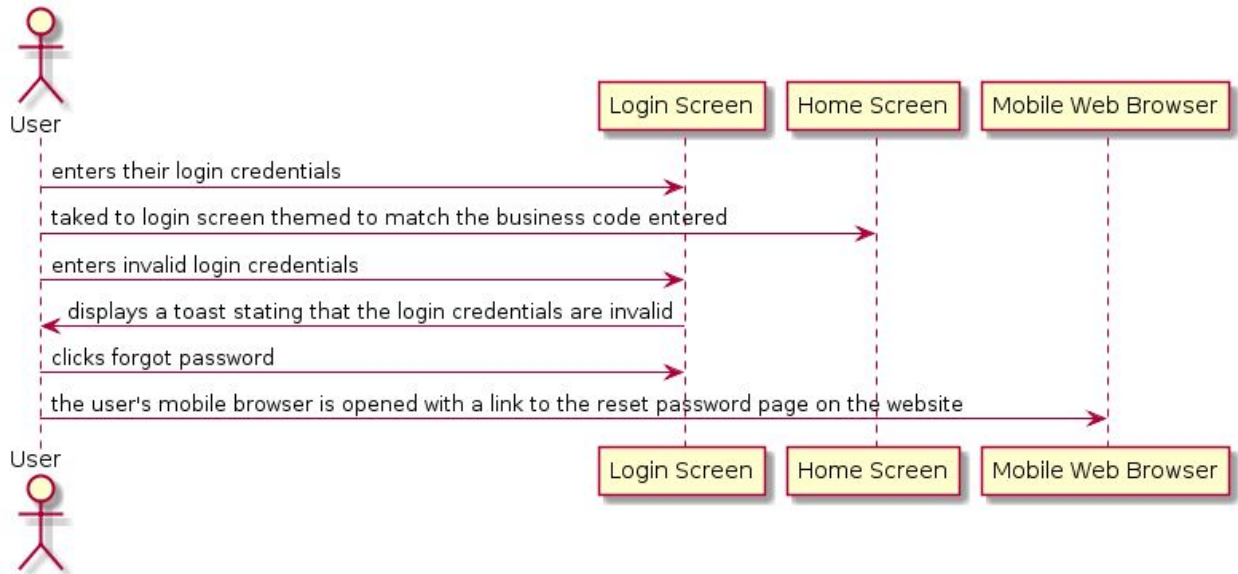
5. UML Diagrams

Company Login: As a user, my first login experience should prompt me for a company code, so that I can reach my company's dedicated login screen.

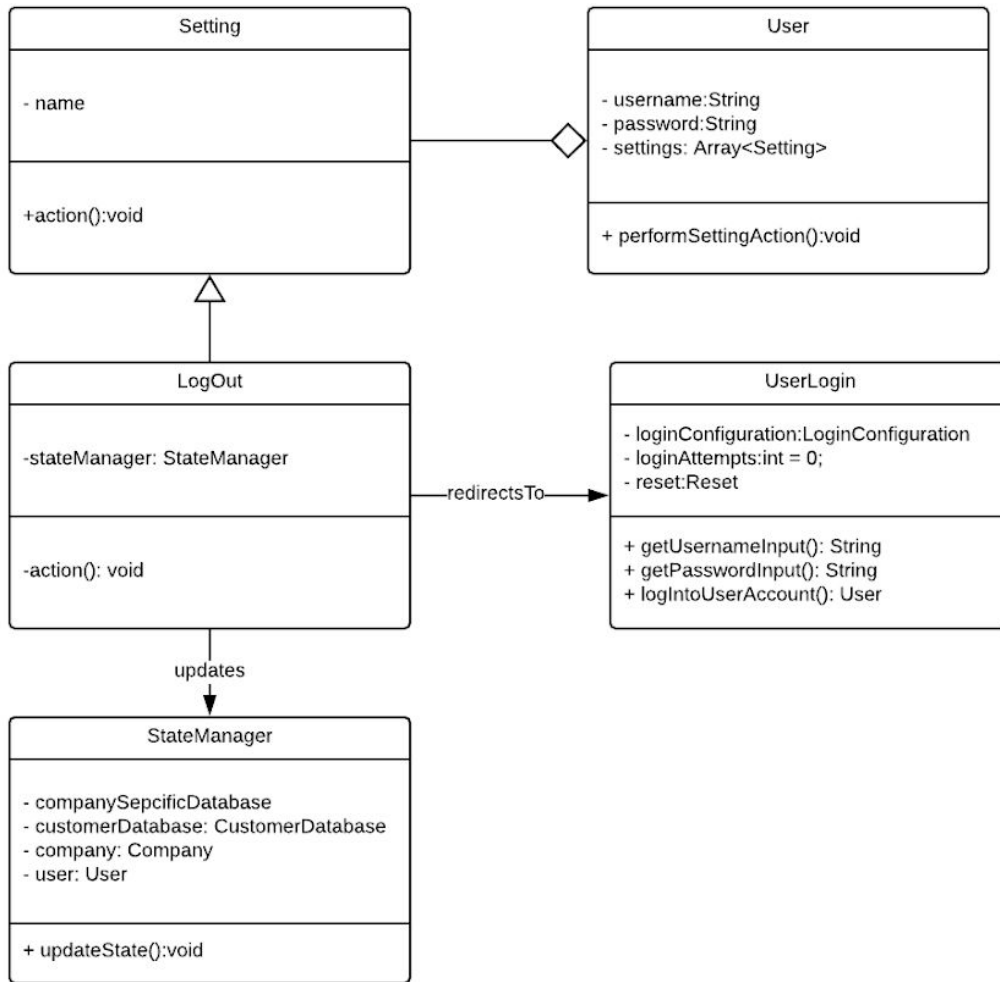
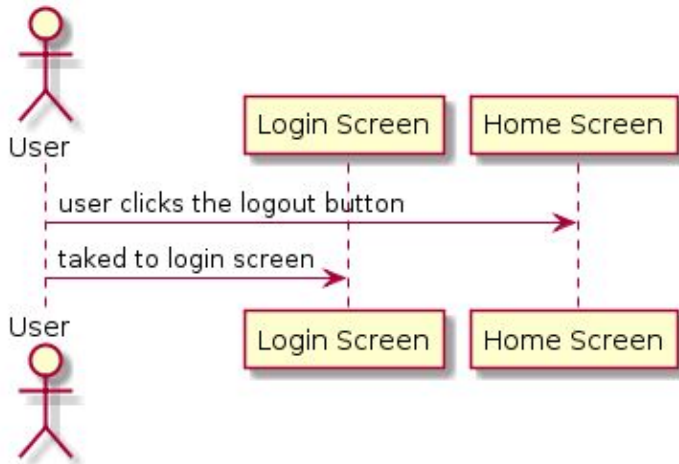


For our prototype, we will store fake data locally. In use, the application would query the customer database in order to obtain the customer (company) associated with the code.

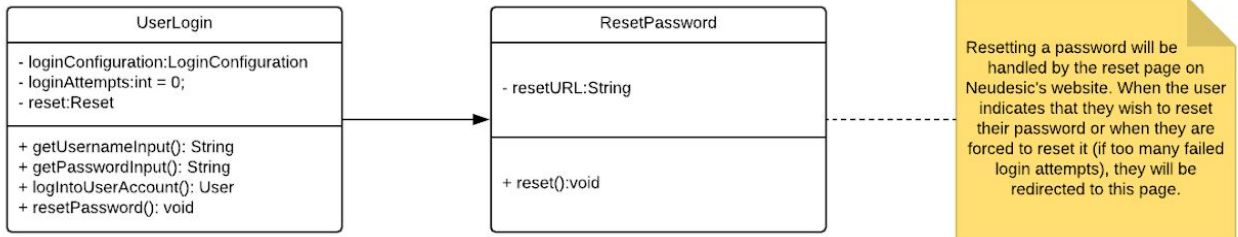
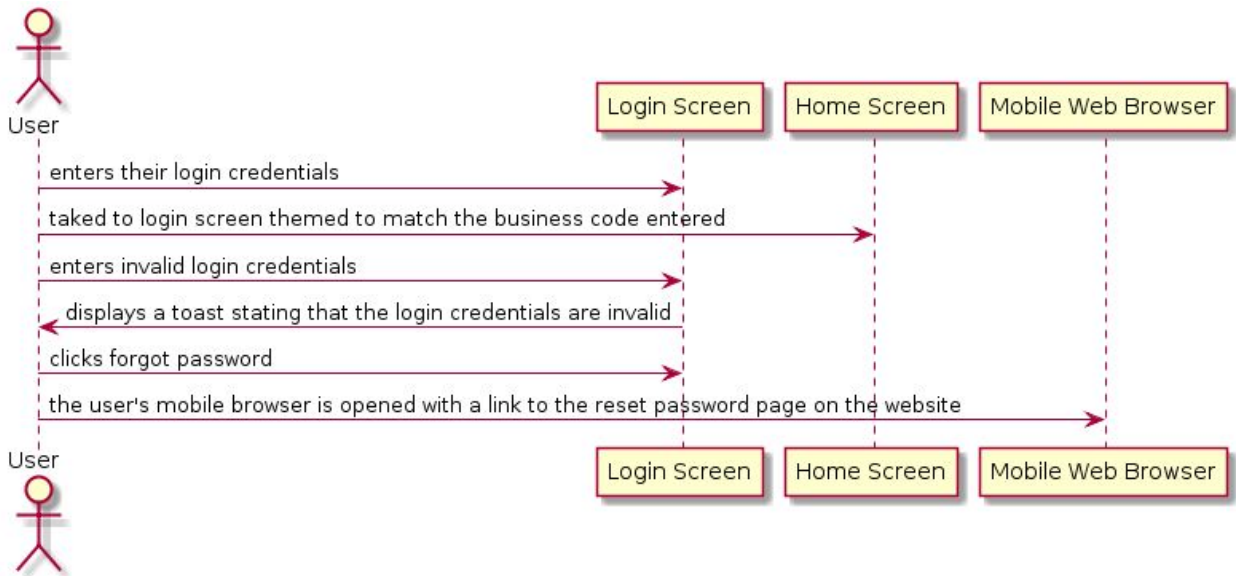
User Login: As a user, I should be able to log into HRadvocate using my personal set of credentials (username, password) so that I can access my own account within the system.



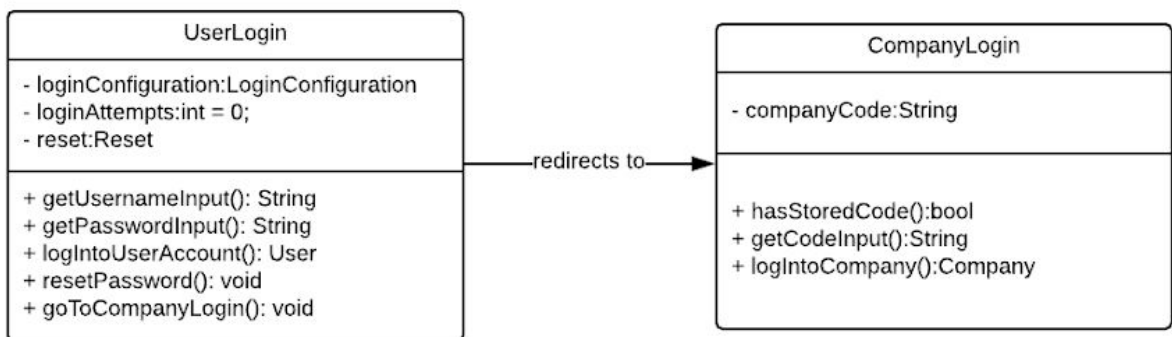
User Logout: As a user, I should be able to logout of HRadvocate so that my information is protected.



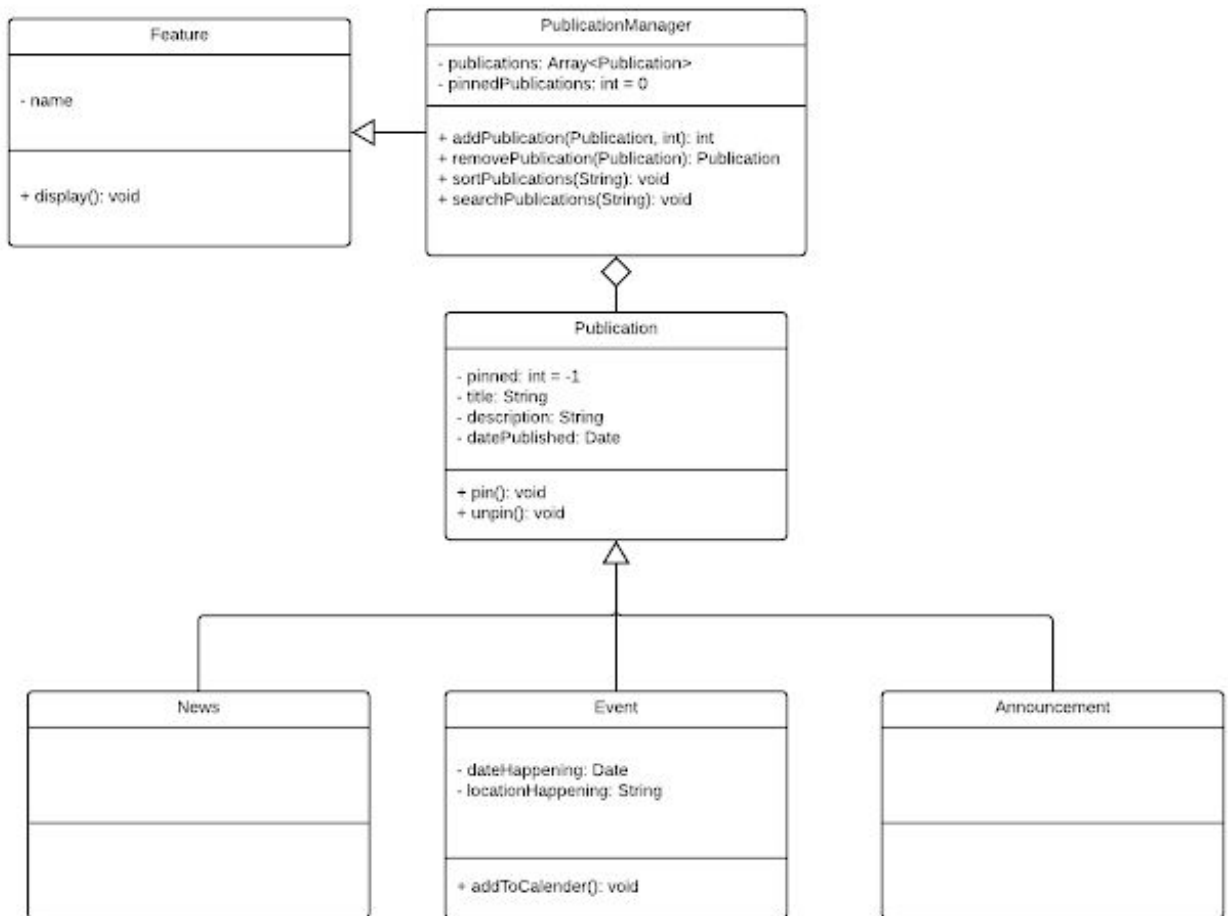
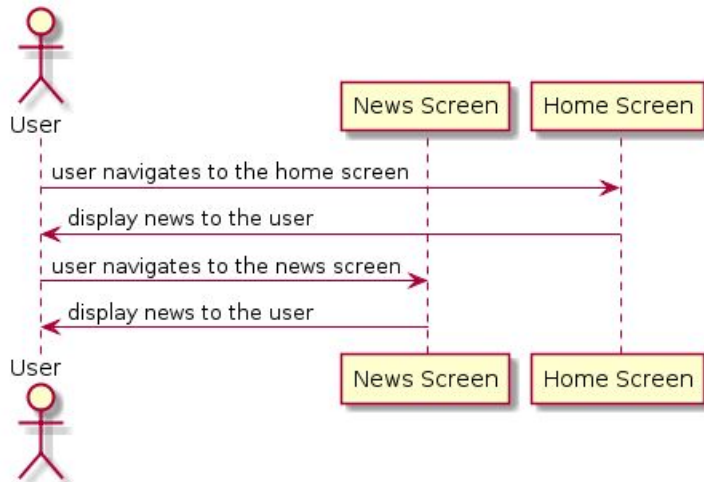
Password Reset: As a user, I should be able to indicate that I need to reset my password, and be taken to a password reset interface, so that I can restore access to my account.



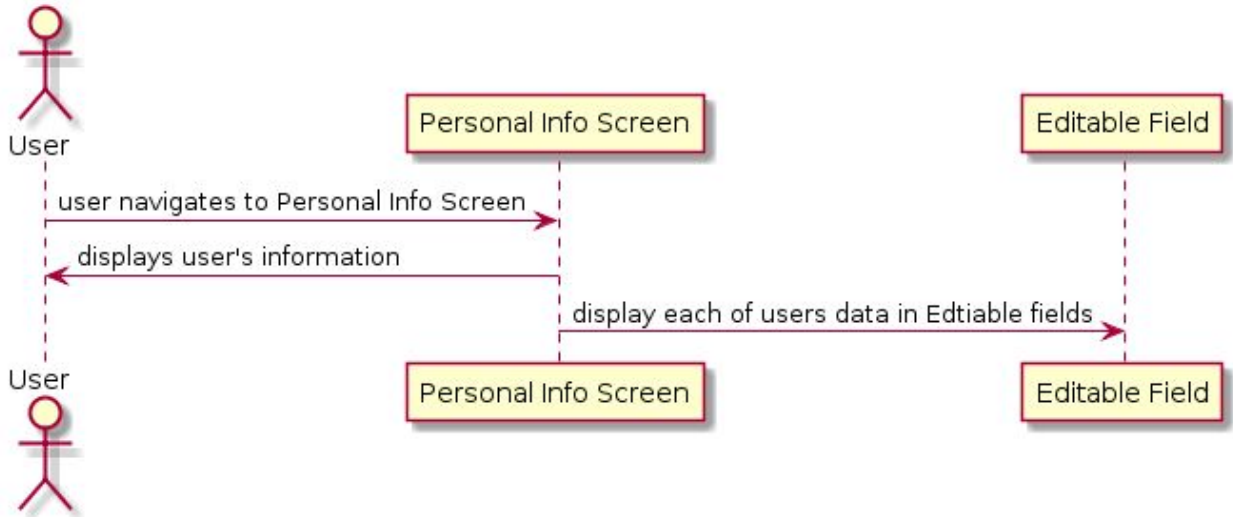
Company Logout: As a user, I should be able to navigate back from the login screen to the company code screen in case I mistyped the code, changed companies, or have multiple companies using HRadvocate.



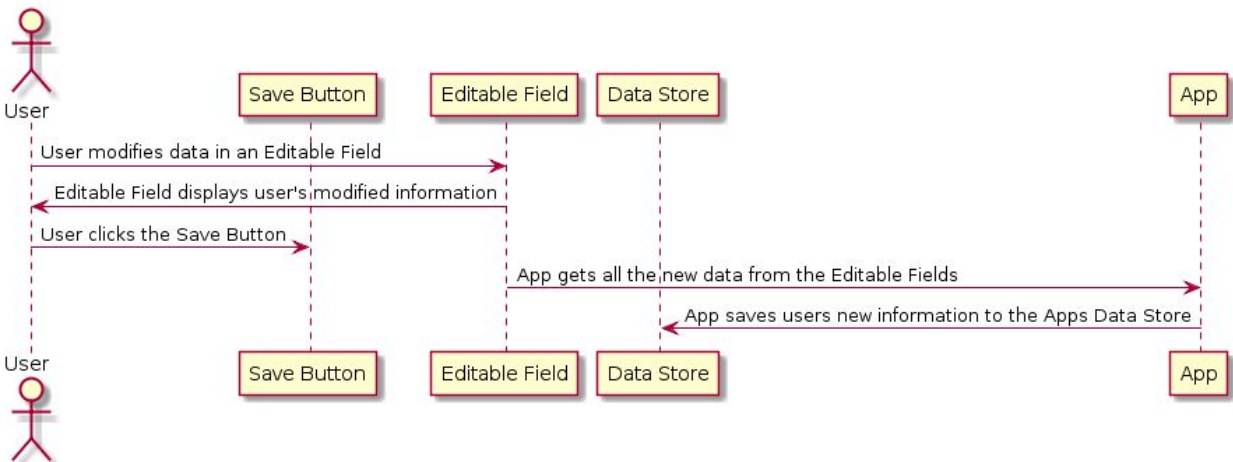
View Publication: As a user, I should be able to view the news/events/announcements available in the system

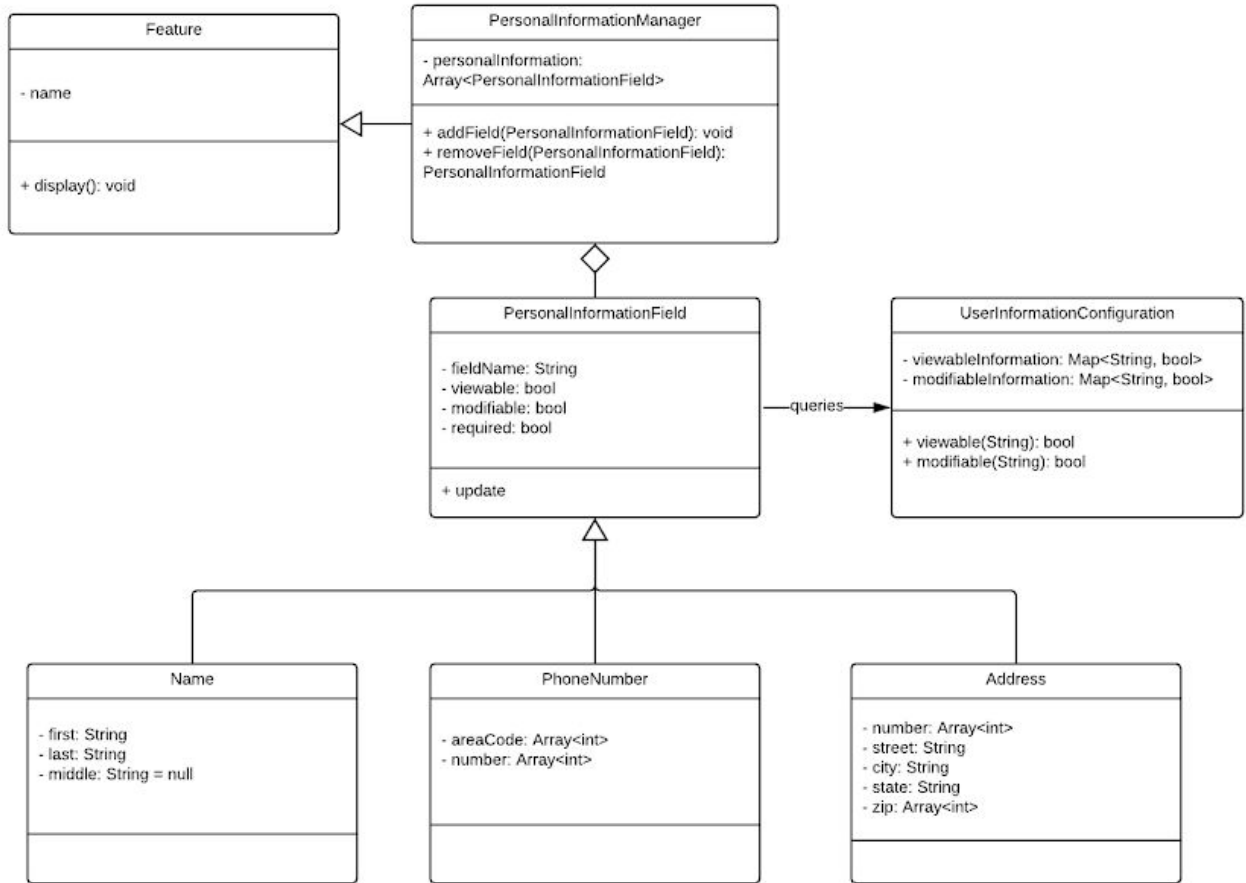


View Personal Information: As a user, I should be able to view my personal information (in a variety of fields) so that I can verify its accuracy or retrieve it for my own use.

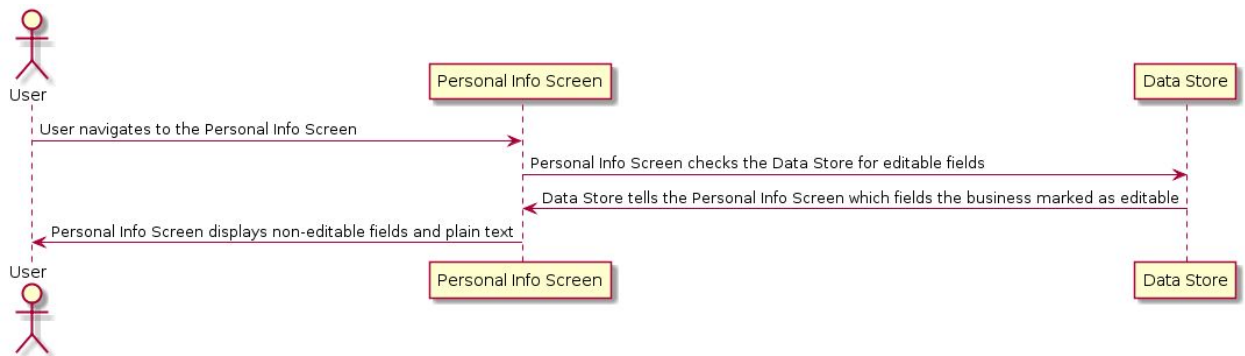


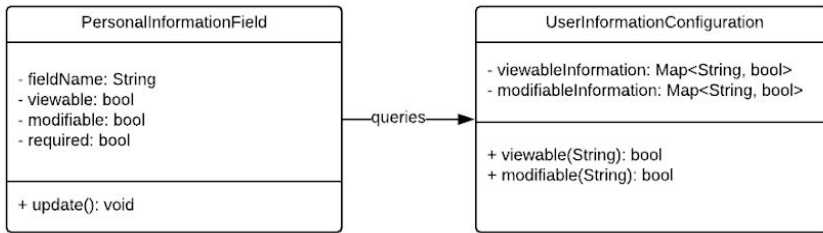
Modify Personal Information: As a user, I should be able to modify my personal information so that I can keep it up-to-date.





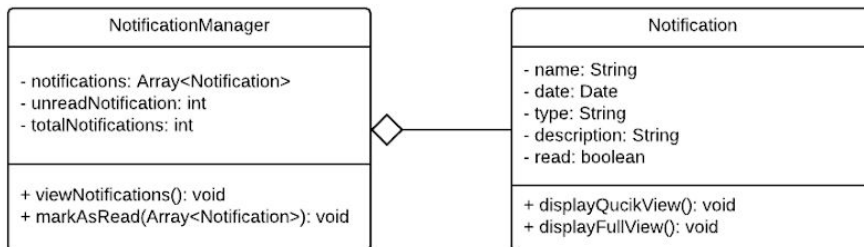
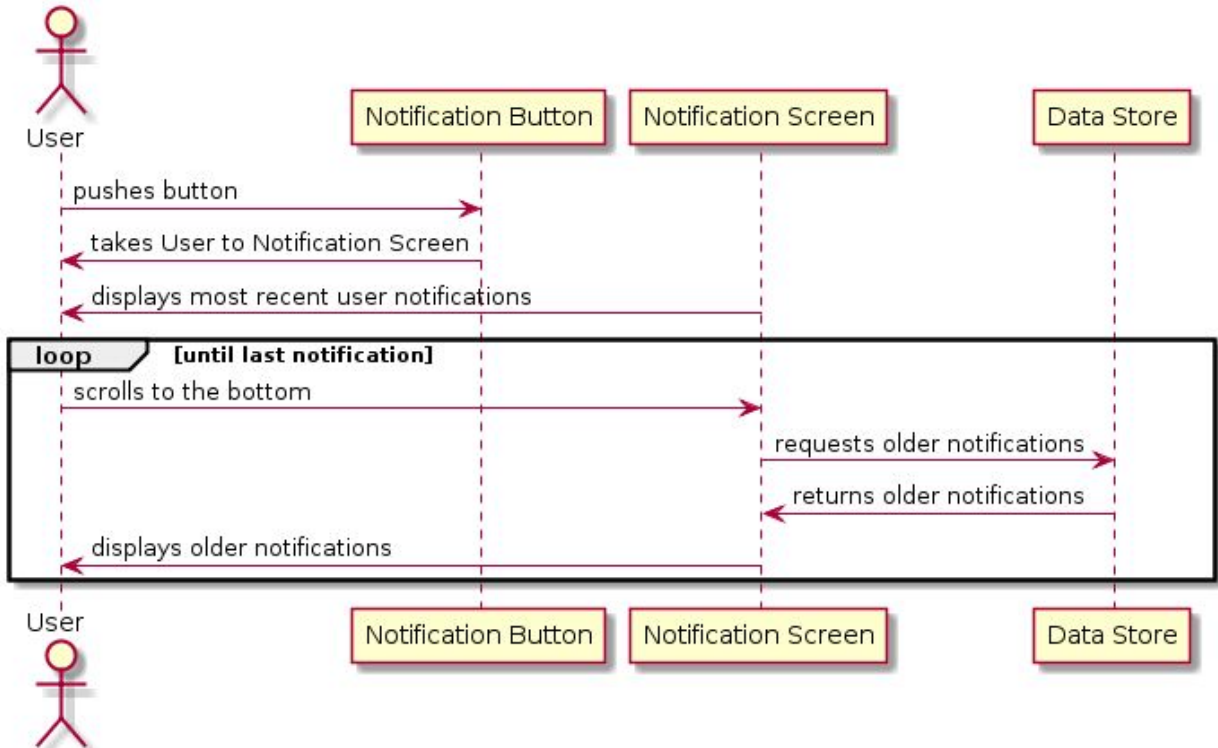
User Restrictions: As a user, I should be prohibited from viewing and/or modifying certain fields depending on my company's security settings.



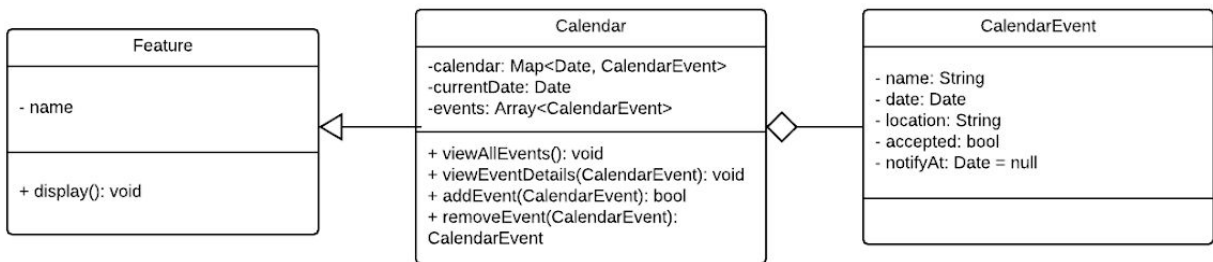
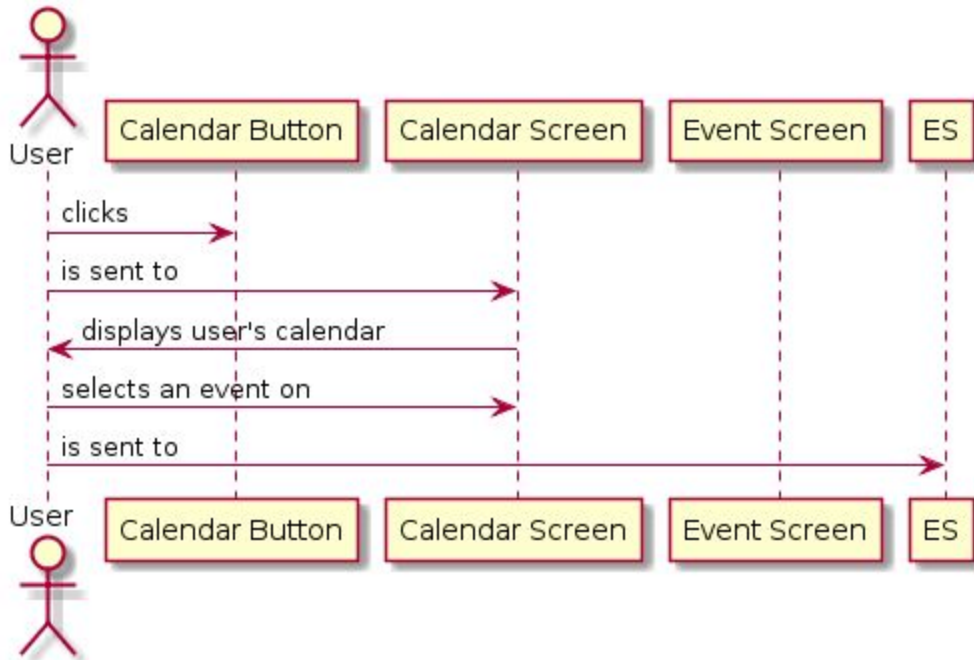


Configuration will be done by each company. This information will be stored on a database along with other configuration information. Before displaying information to the user, the display function will verify that it is viewable. If information is not modifiable, the user will not be able to edit the field.

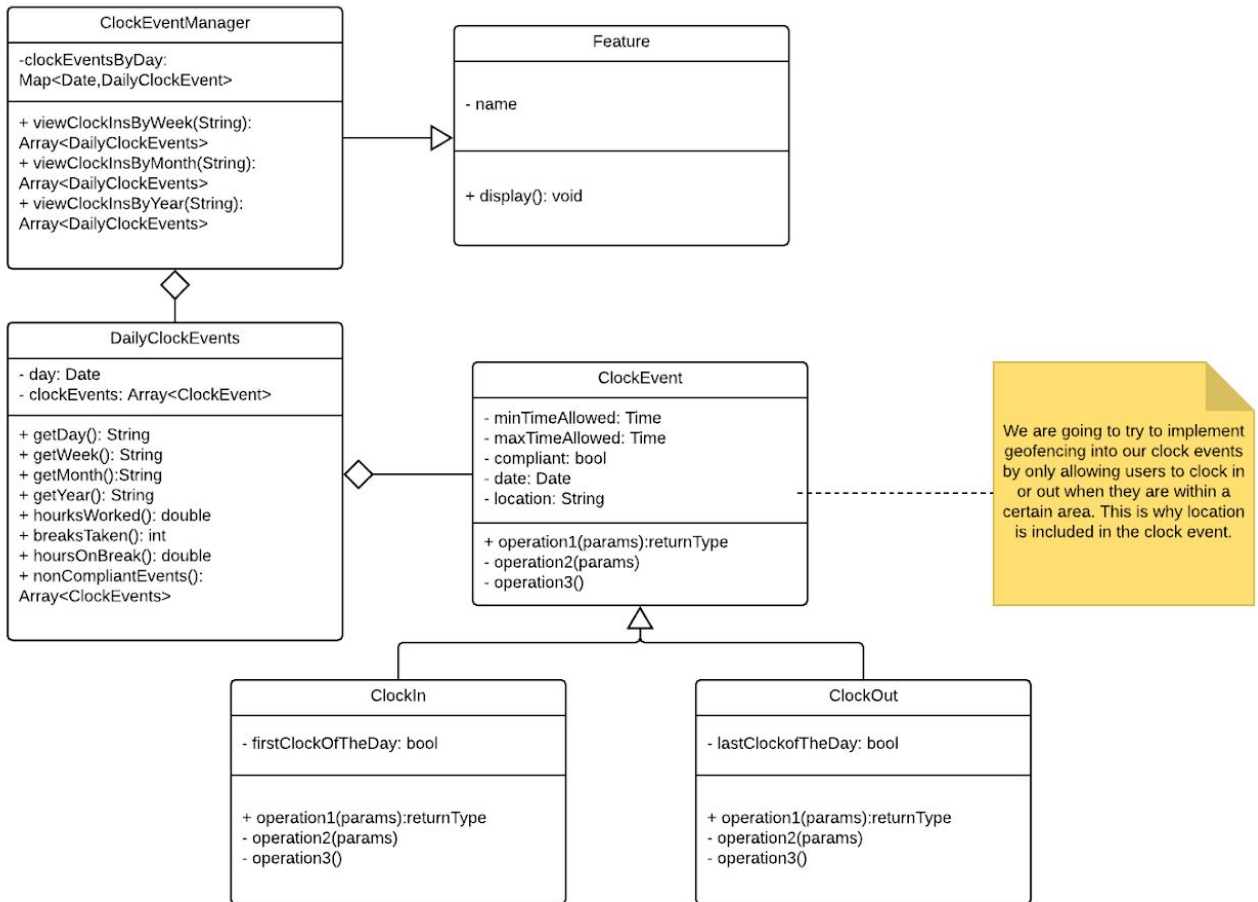
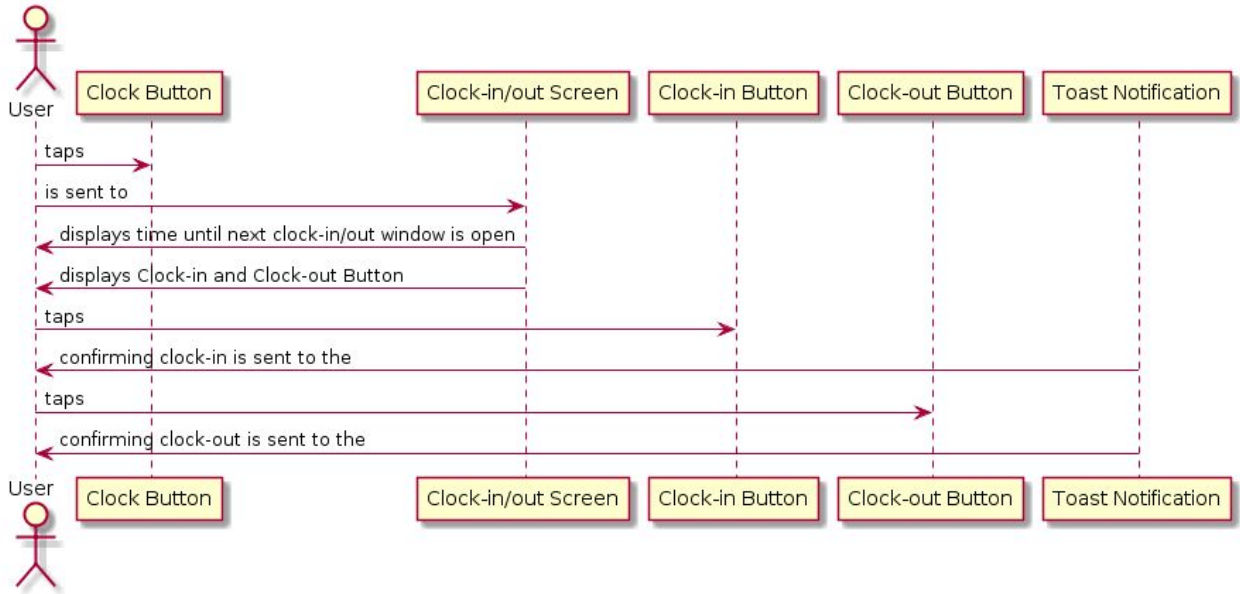
View Notifications: As a user, I should be able to view all the notifications/alerts from the system and modify them.



View Calendar: As a user, I should be able to access the calendar and view the information in the calendar.

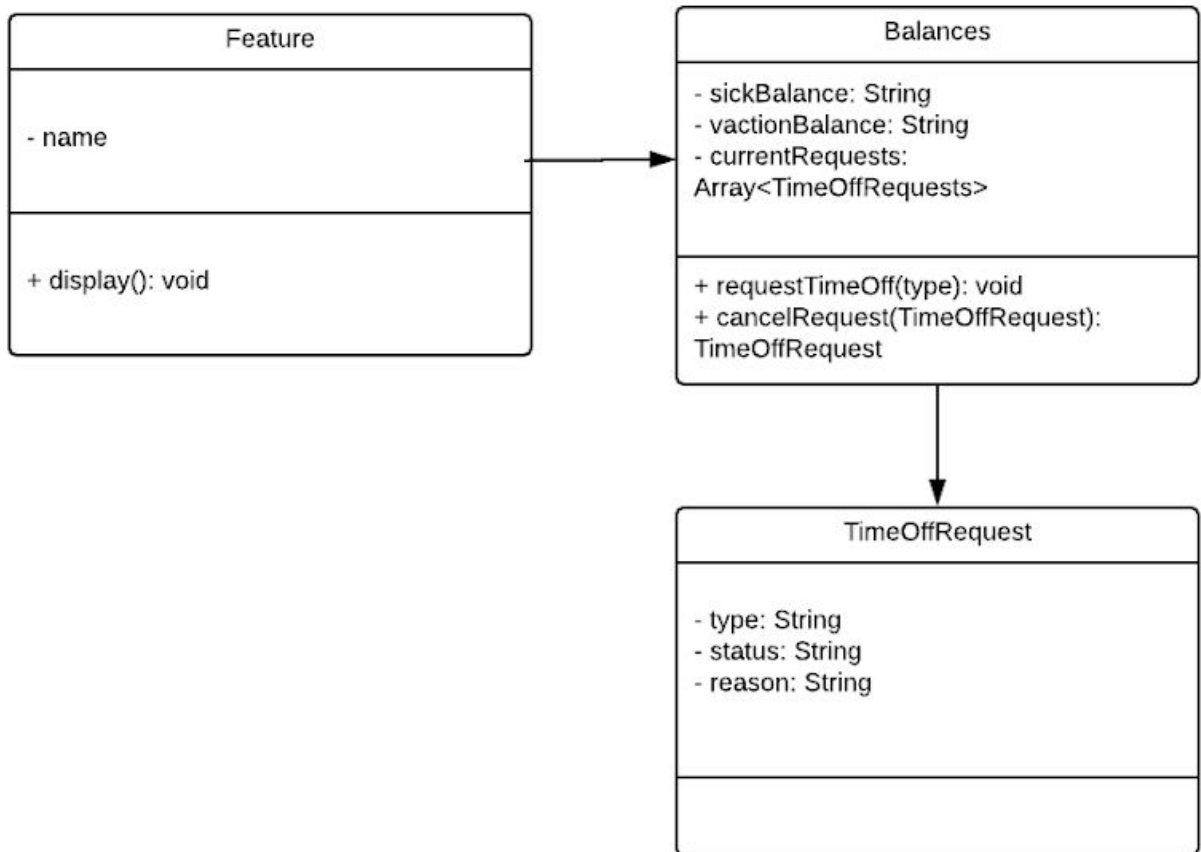
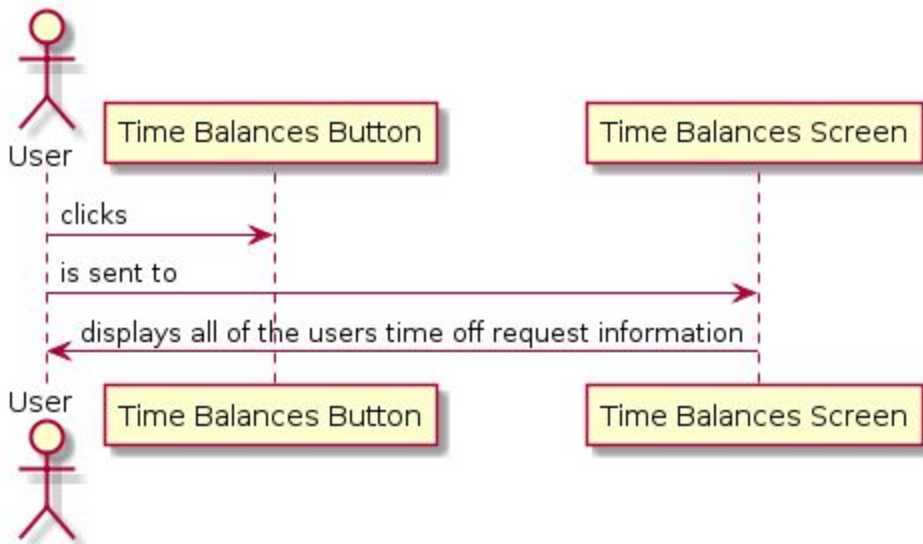


Clock Event: As a user, I should be able to clock in and clock out of work.



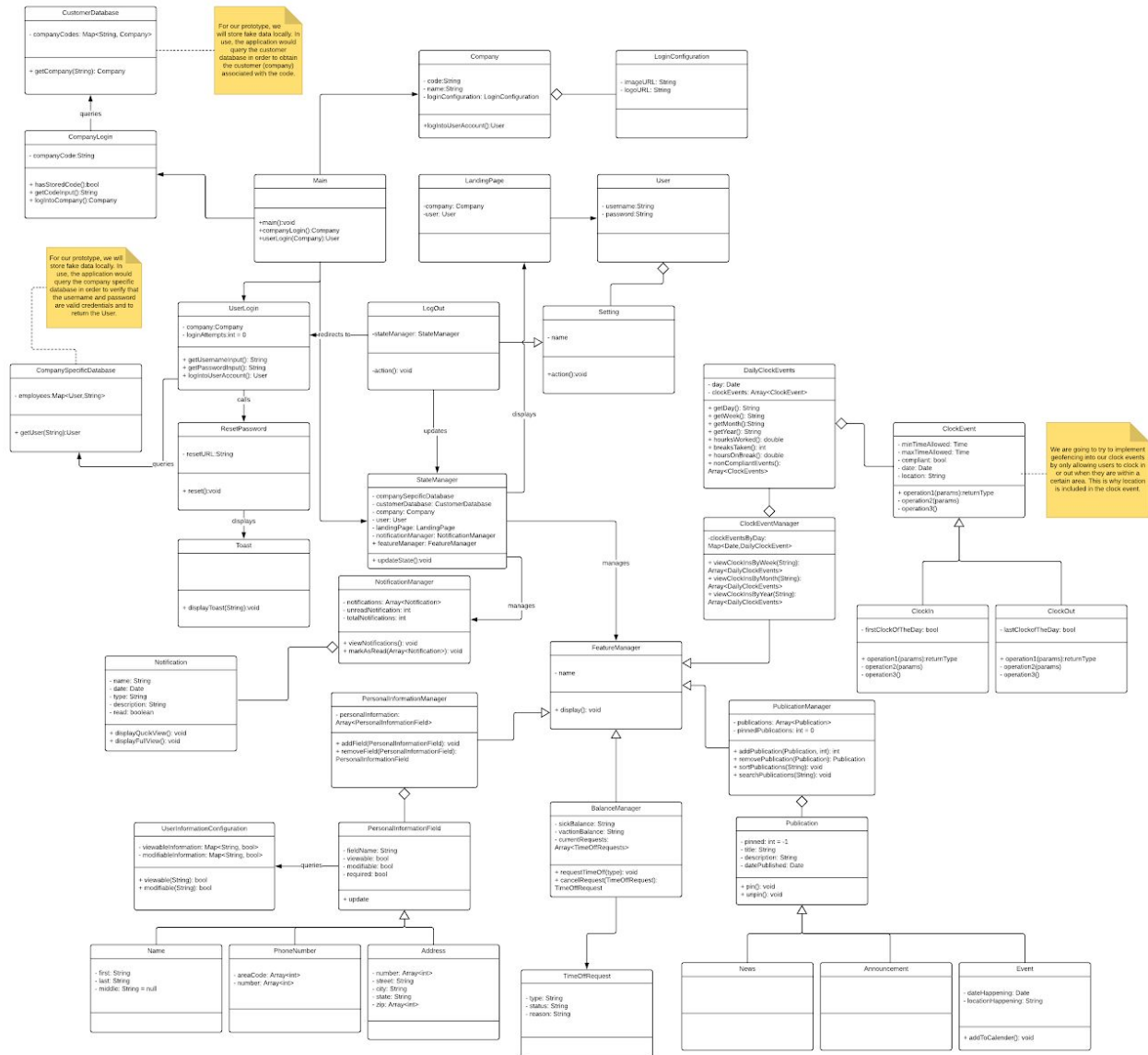
We are going to try to implement geofencing into our clock events by only allowing users to clock in or out when they are within a certain area. This is why location is included in the clock event.

Time Balances and Requests: As a user, I should be able to view time off requests/approvals/balances in my time card and request time off.



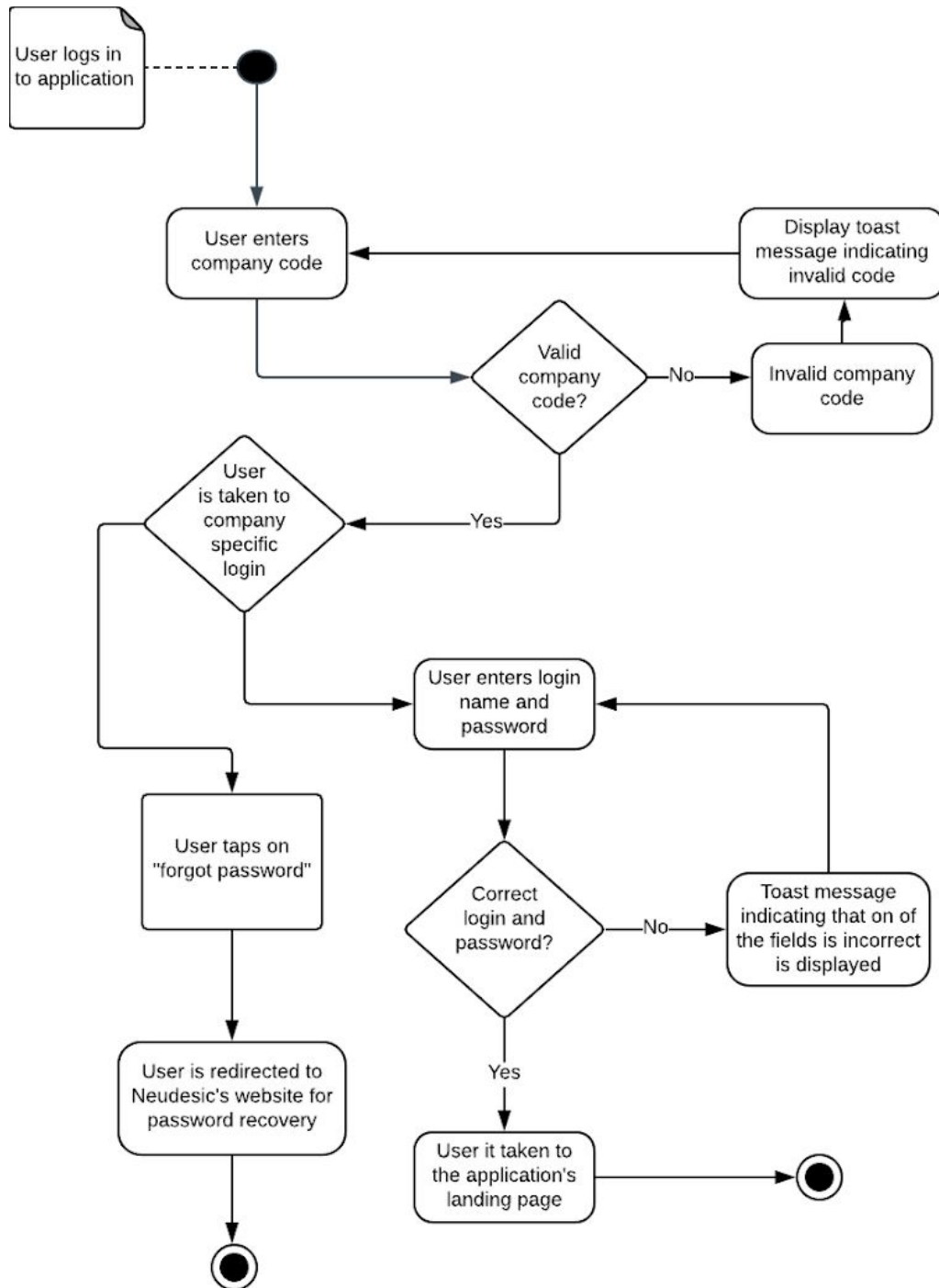
Multi-tier UML Diagram

The diagram displays multiple layers of the design of the system.



Login Activity Diagram

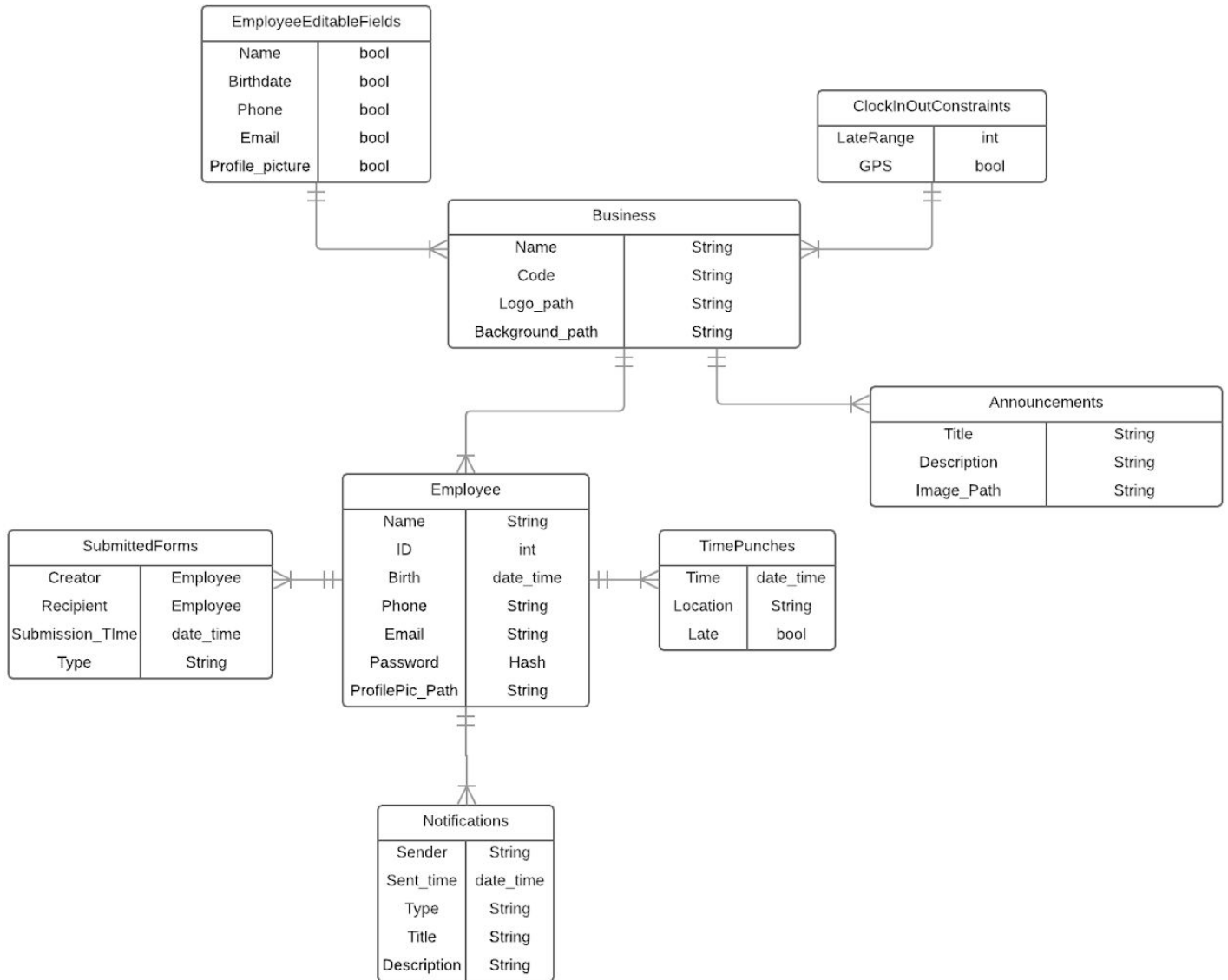
The diagram shows the activity flow of the user when they attempt to login to the application.



6. Entity Relationship Diagrams

Logical Database Schema

The diagram illustrates the relationship of entities in the database of the system.



Data Structure Diagram

The diagram shows how the data is structure in the system.

