

Fixit Ticket

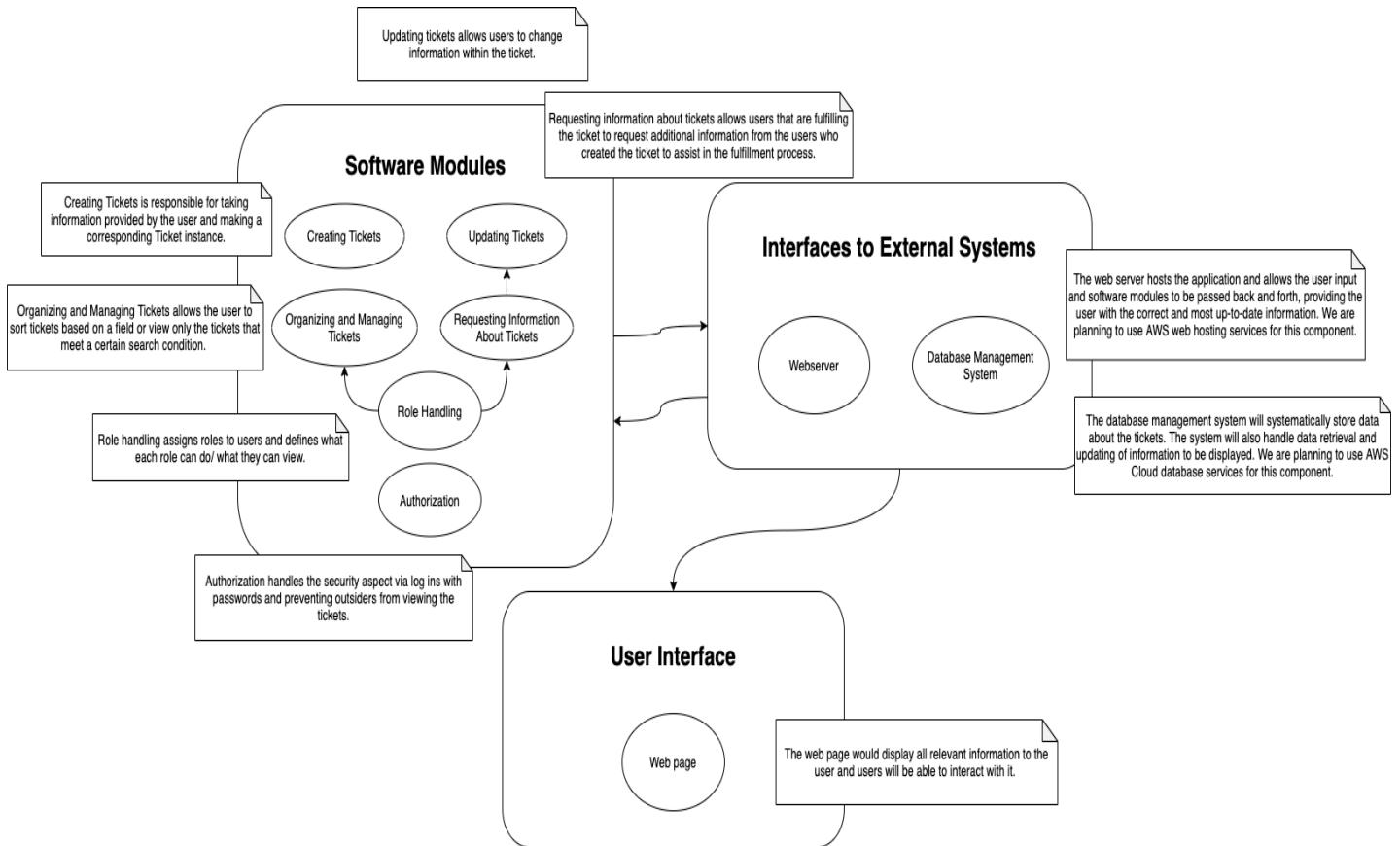
<https://github.com/comp195/senior-project-implementation-fix-it-ticket>

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System Architecture



Hardware, Software, and System Requirements

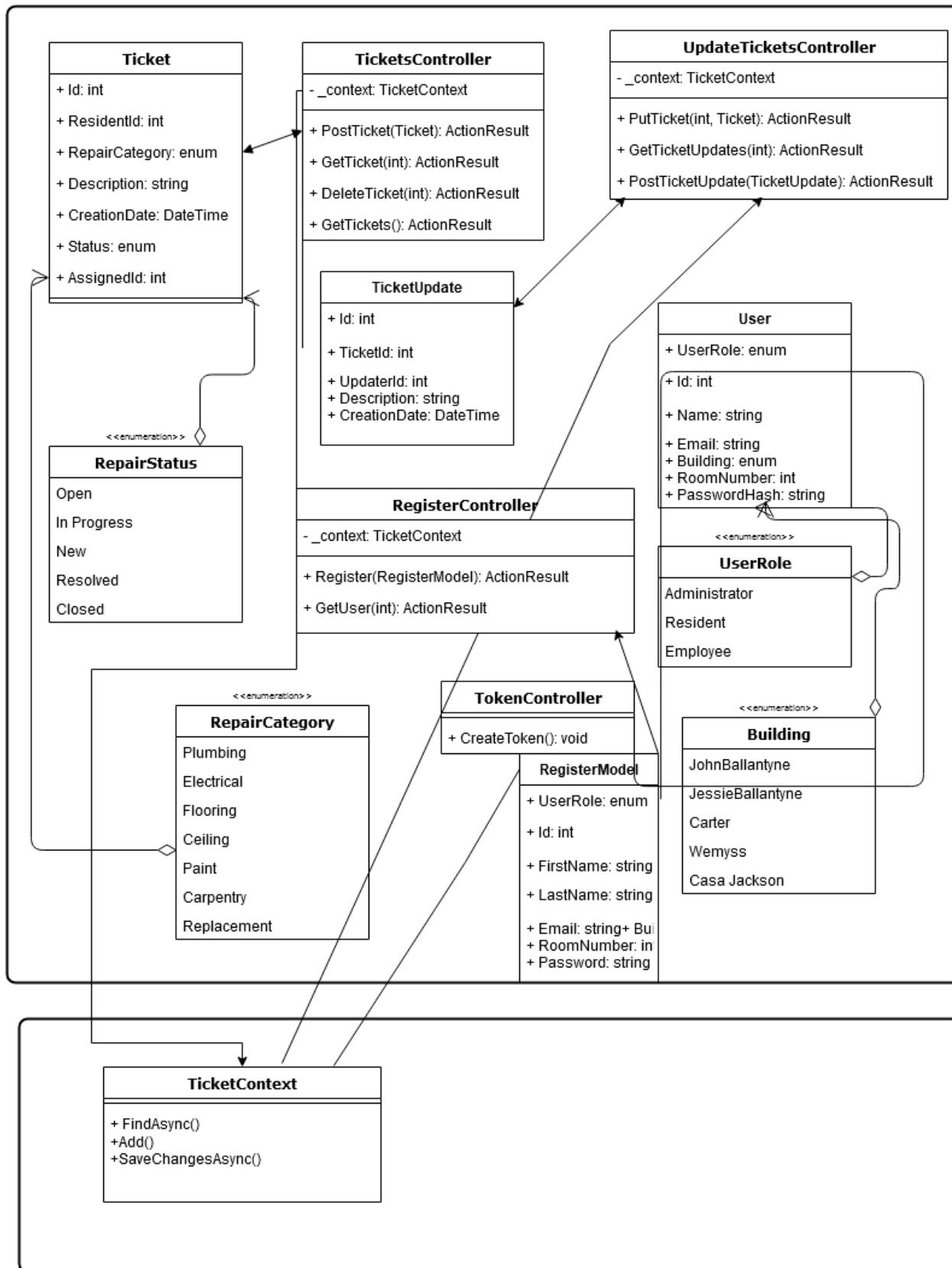
As our software will be hosted in the cloud, the only requirement on the end user is a compatible browser. We will support the latest versions of Chrome, Firefox, Safari, and Microsoft Edge.

External Interfaces

For our web server, we will be using Amazon EC2. The documentation is located at this website: <https://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/concepts.html>.

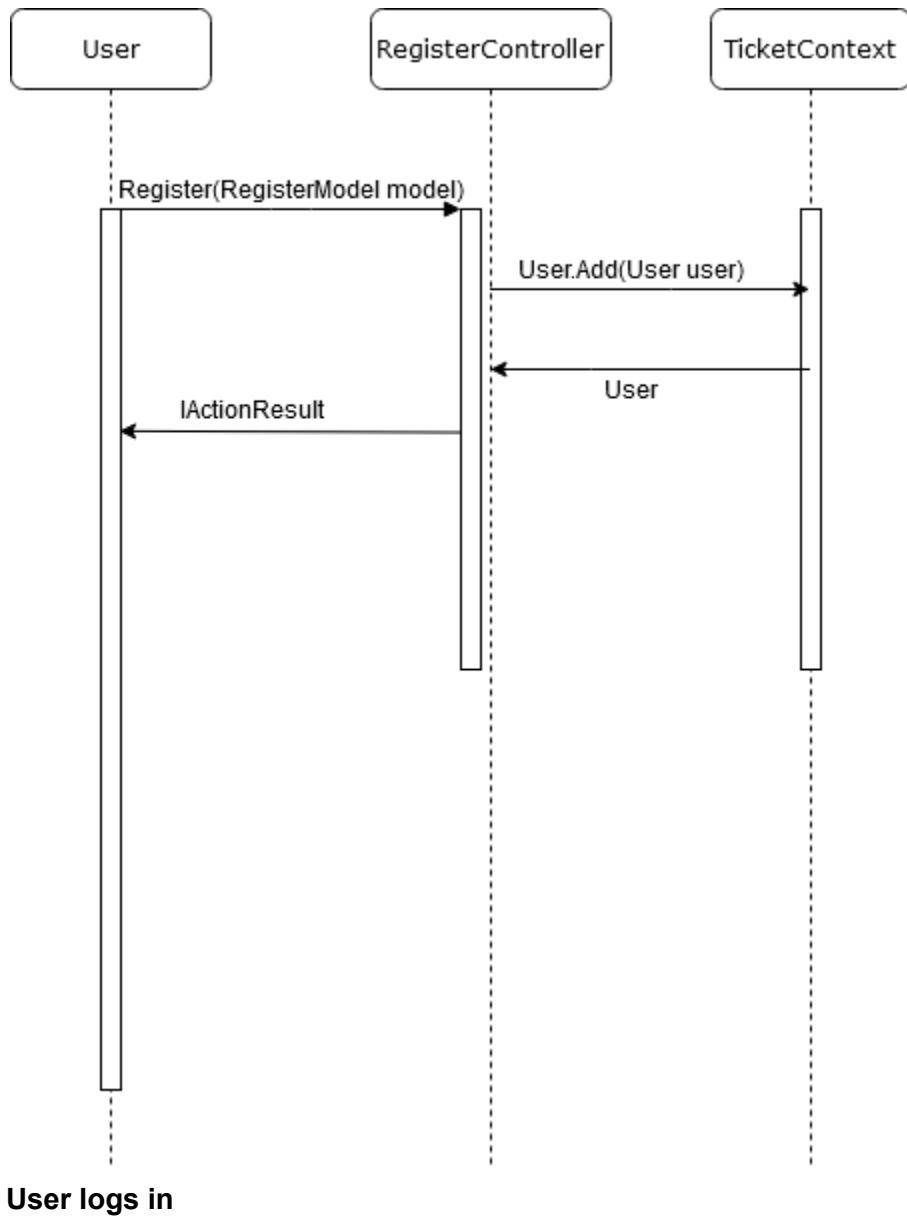
We used the same web server to host our database management system using SQL Server. Documentation for SQL Server can be found at this website:
<https://docs.microsoft.com/en-us/sql/?view=sql-server-ver15>

Software Design

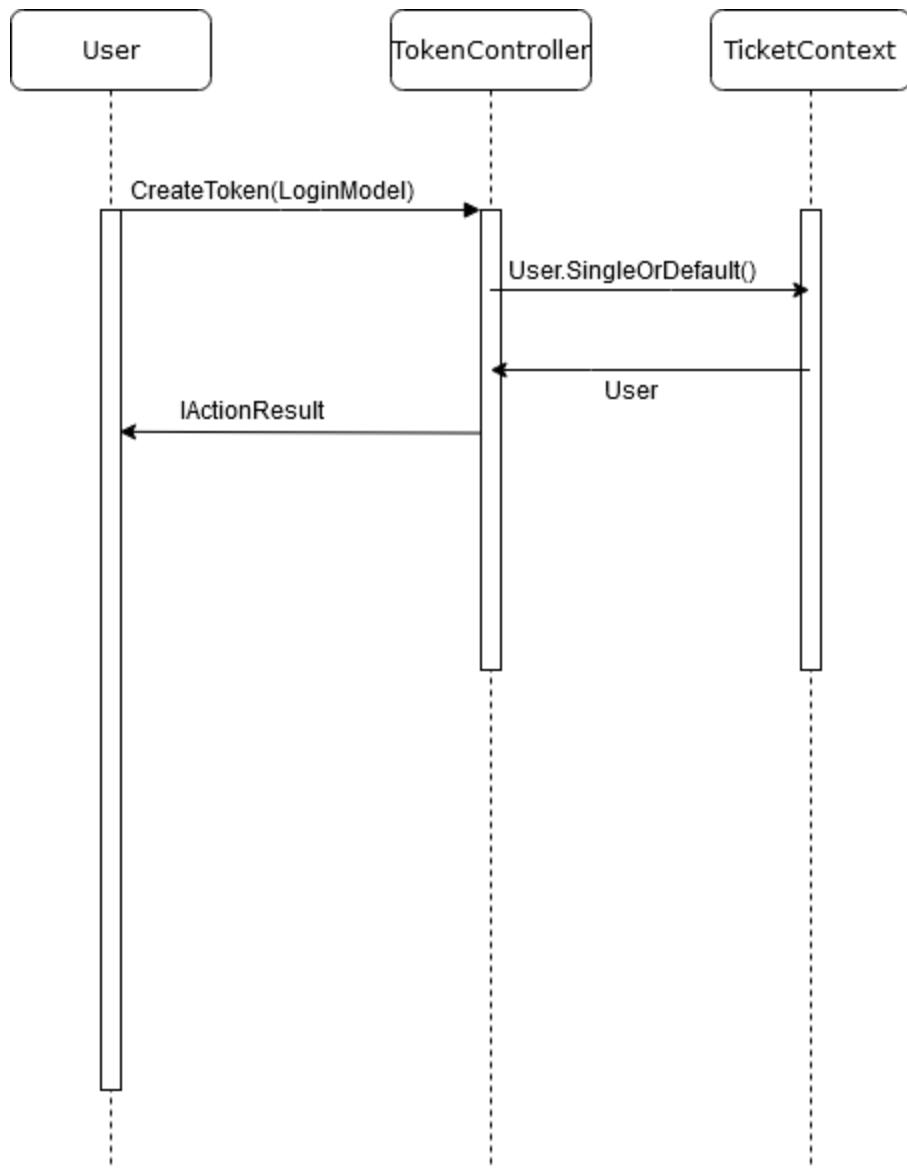


Interaction Diagrams

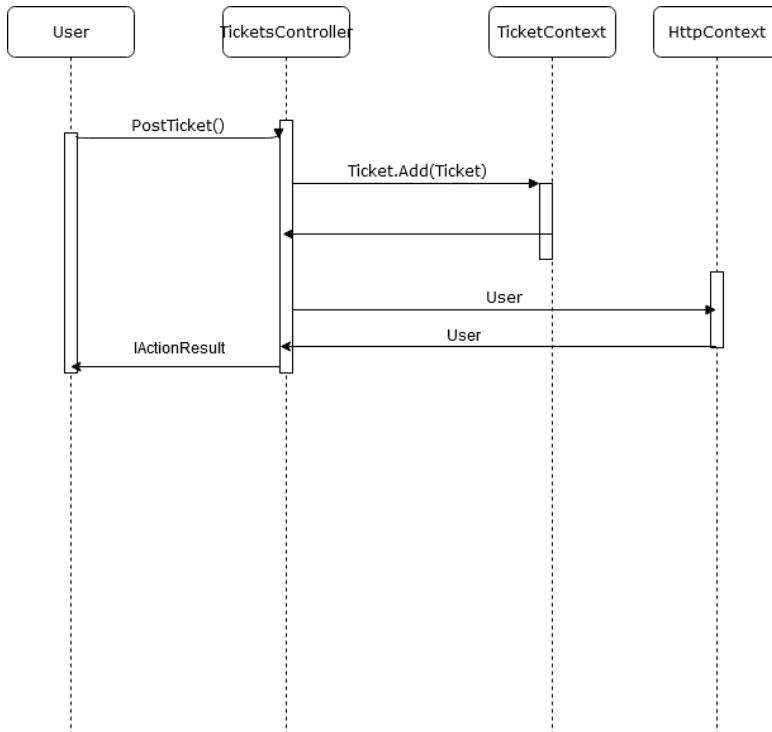
User registers



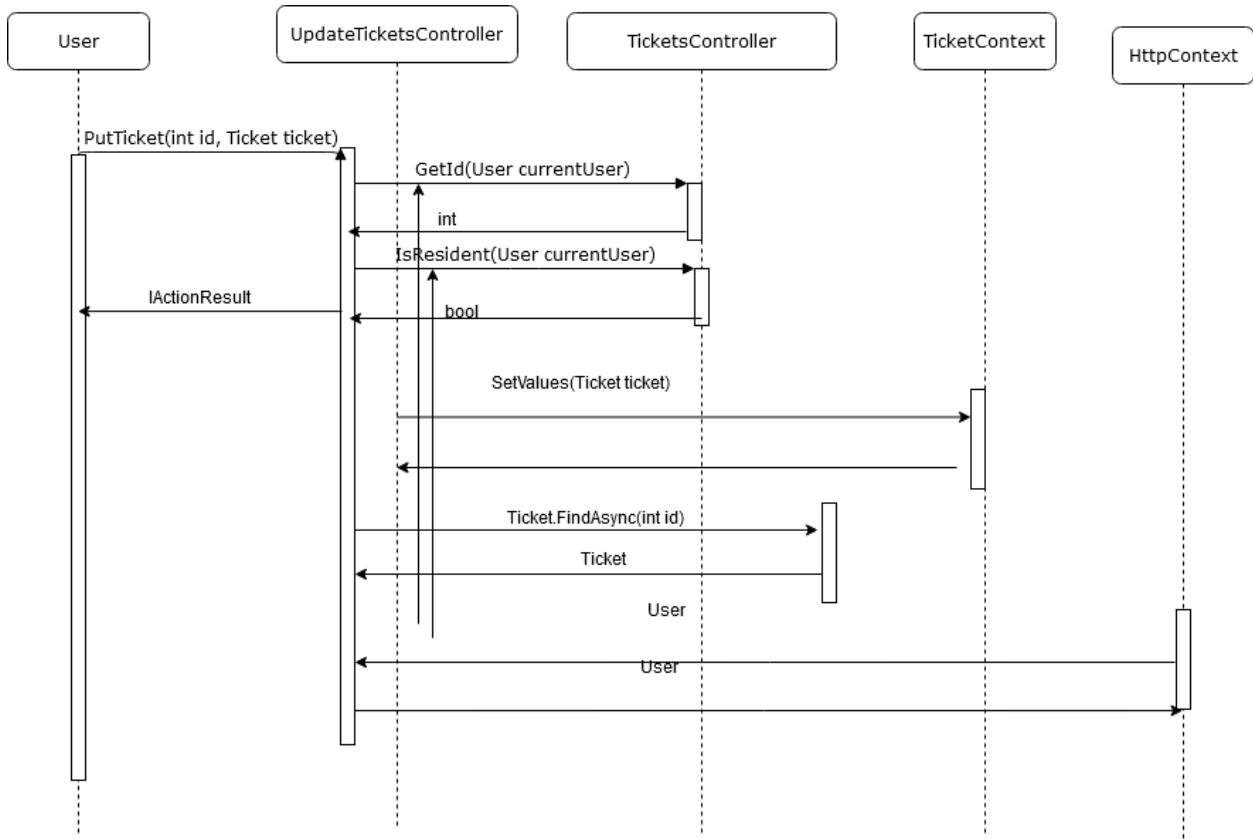
User logs in



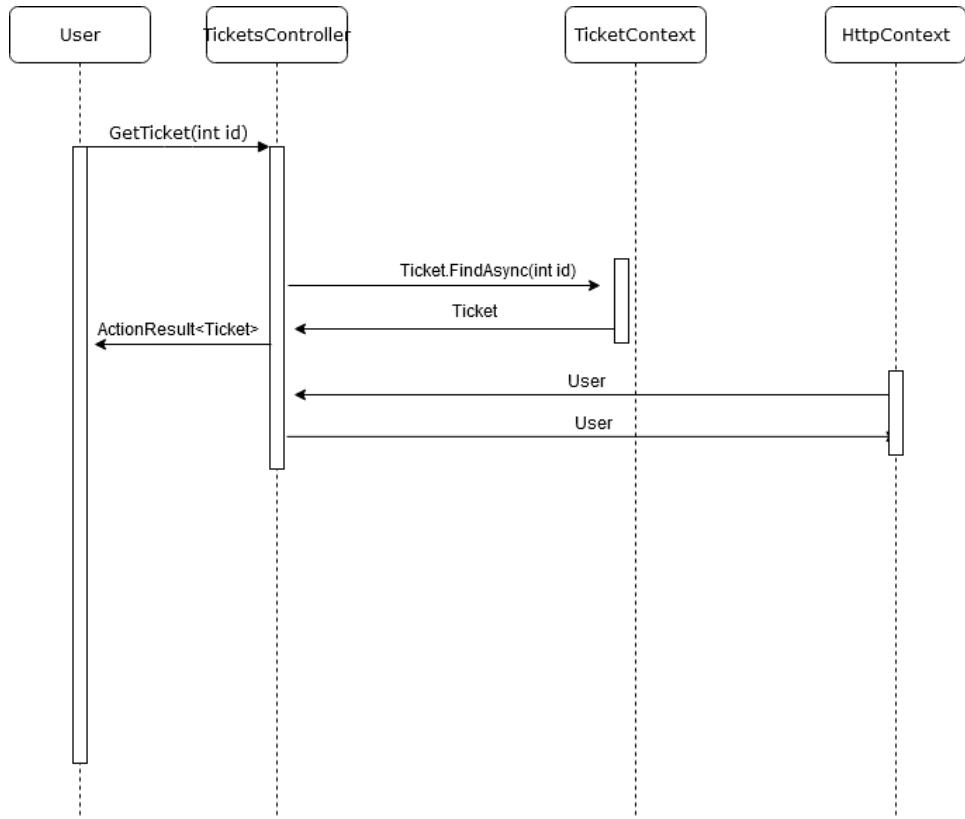
User creates ticket



User updates ticket



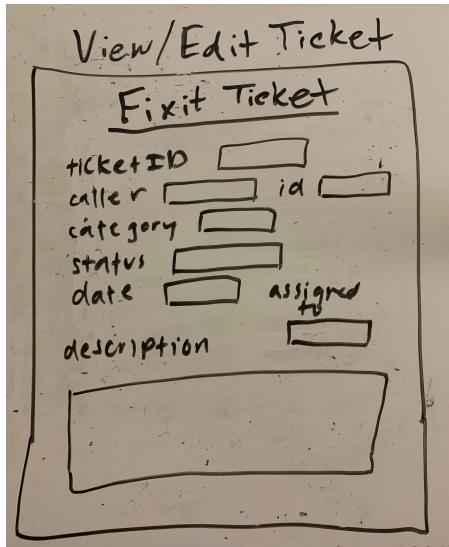
User gets ticket



Design Considerations

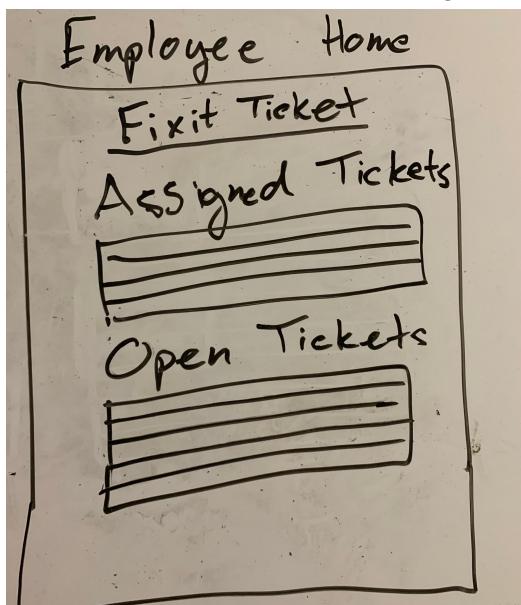
We utilized singleton classes - `TicketsController`, `UpdateTicketsController`, `TokenController`, and `RegisterController`. We did this because we knew that although we didn't need multiple instances of classes to manage the API endpoints, we did need classes solely responsible for doing so.

User Interface Design



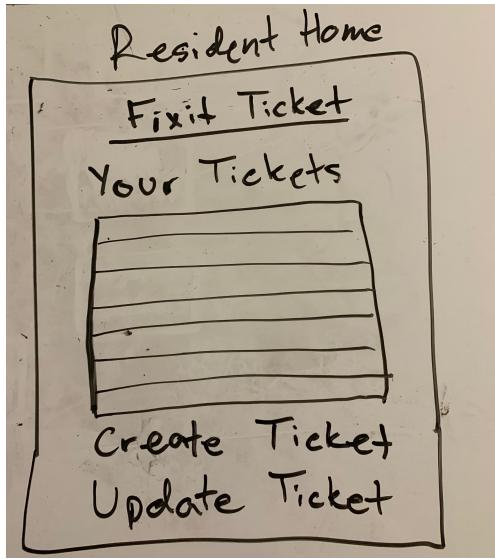
Create/View/Edit Ticket

This screen will allow the user to view a ticket after having clicked on it from a list of tickets. Alternatively, the user can reach this screen with a blank ticket by clicking on the link to create their ticket in the resident home page listed below. Depending on their permissions, a user will be able to edit or delete an existing ticket.



Employee Home Screen

This is the home screen visible to employees, all users who are assigned tickets by managers. Employees can click on tickets leading to the view/edit ticket screen.



Resident Home Screen

This is the home screen visible to residents, all users who create tickets for repairs. Residents can view their created tickets, and click on tickets to view them or add new details. Residents can also create new tickets by clicking on the 'Create Ticket' link. Residents cannot view or interact with other tickets.

Glossary of terms

There are no terms we expect to be unfamiliar or ambiguous to the reader.

References

Wikimedia Foundation. (2021, August 26). *Class diagram*. Wikipedia. Retrieved September 13, 2021, from https://en.wikipedia.org/wiki/Class_diagram.

Piter _OS, & Noviff. (2017, January 12). *How to write a proper class to connect to database in Java*. Software Engineering Stack Exchange. Retrieved September 13, 2021, from <https://softwareengineering.stackexchange.com/questions/339598/how-to-write-a-proper-class-to-connect-to-database-in-java>.