CS4530 Final Project: "FakeStackOverflow *Live*"

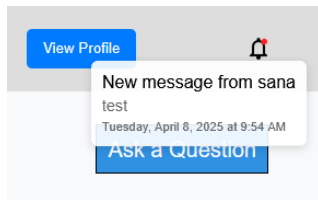Group 412: Anthony, Jasmine, Justyn, Tristan

Our Project: Making FSO Live

The original version of FakeStackOverflow is a greatly functional site. However, when our group looked at that site we thought it lacked responsiveness. While the content updates live, we noticed there was a problem. No one *knows* it's updating live. Posts silently pop into existence, messages appear hidden away in your direct message inbox, and users wouldn't be the wiser. That's why we set out to add a "live" feel to FSO, adding notifications to the site to allow users to be updated whenever a change they care about happens.
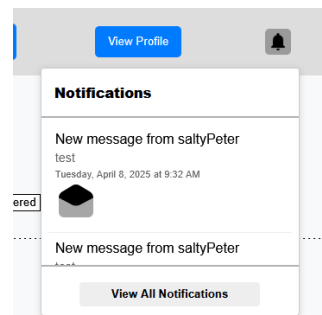
Our site added multiple forms of notifications, notifications for new messages, comments, and answers, and even an indicator for who has read direct messages. These notifications can be silenced if a user prefers to not receive updates, but serve to keep a user informed what's going on in question threads and chat groups that they want to keep up with.

Demo and Source Code

The demo for our version of FakeStackOverflow can be found on render.com at https://cs4530-s25-412.onrender.com/ , and the source code at https://github.com/neu-cs4530/spring25-project-group-412.

An example notification popup

The notification dropdown

The full notification page

Technology Stack/Design

We implemented our notification system into the existing structure of FakeStackOverflow. Each notification is represented as an object storing relevant metadata including the source of the notification, the recipient, the time and content of the triggering event, and the type of content that triggered the notification. We created a subscription system that allows us to track what events users wish to receive notifications for, and once triggered these subscriptions can be used to build the notification object.

Our continuous integration pipeline runs automated tests before deploying both the front and back ends to render.com.
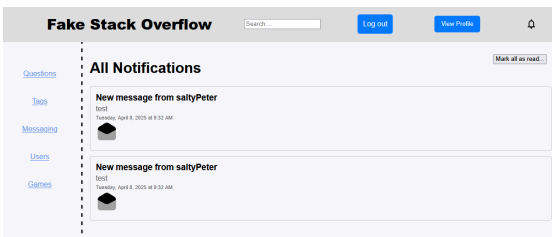
Future Work

Notifications For Answers

One future area we think could be expanded on is the ability for users to receive notifications for answers. Currently, while users can follow questions to get notifications of answers and comments left on that question, there's no way for a user to receive a notification for a comment left of their (or another person's) answer. This was outside the scope of our original project plan, but we think it could be a good extension to the project.

Notification Settings

Another potentially valuable feature that we could add is notification settings. This extension would fit nicely in with our database design, and be a fairly straightforward addition, however it was again out of scope for our original project plan and so we did not add it during this development cycle. An addition like this could allow users to choose to receive more specific notifications, such as notifications for answers to a question but not comments, or even set a "do-not-disturb" period where notifications are silenced.