



ShortStack

[Demo](#)

[Source](#)

Group 808:
Jack Rifkin
Joseph King
Celia Burrington
Vanessa Ashley Balin

Our Features:

In the Q&A platform Stack Overflow, users often face the challenge of unanswered questions, which diminishes the platform's usefulness and limits the value users derive from it. To address this issue, we designed and implemented several features aimed at enhancing user engagement and information accessibility.

Rewards:

We introduced a gamified reward system that allows users to earn points and complete challenges. These challenges unlock unique profile frames and titles, enabling users to showcase their involvement and achievements within the platform.



Unlockable profile frames

Communities:

To improve information discovery, we implemented a "Communities" feature. This enables users to engage with smaller, topic-specific groups, making it easier to find relevant content and encouraging knowledge-sharing in a structured manner. Within communities, users can collaboratively create and edit articles, view and answer community-specific questions, and participate in polls by creating or voting on them.

Notifications:

Notifications: Implemented notifications for specific actions that are done. Users can change their notifications settings to determine what they receive.

Technology Stack & Design

Our features were implemented in the existing fakeStackOverflow codebase. Communities are their own objects—which hold a name, members, questions, articles, and polls. A user can add a question, article, and poll to communities. Challenges are their own object as well; they are assigned to a user once they ask a question or answer a question. Once the user accomplishes the challenge, they are given the associated reward. Notifications are part of the User schema, and contain the notification type, as well as the source of the notification.

Our continuous integration pipeline runs an automated test suite on the frontend and backend components, and then deploys the site using Render. We store our data in a MongoDB database.

Community Page

Notifications Page

Profile - Challenges Page

Future Work

There are several enhancements that could further improve our features.

Community Privacy Settings:

Introducing the option to make entire communities private so all content is accessible only to those within the group. Additionally, adding the option to post individual questions, polls or articles privately to a community.

Expanded Challenges:

To further boost user engagement, more unique and specific challenges could be added, for example:

- First Responder: Be the first to answer 20 questions
- Viral: Receive 20 upvotes on a question in 24 hours

These enhancements would encourage timely, high-quality contributions and provide users with additional incentives to stay active and engaged.

SSO:

To make sign up easier and accounts more secure, we could implement SSO functionality, allowing users to create an account using an existing account from Google, Github, etc.