

CS4350 Final Project: Gamify Stack Overflow

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Our Feature: Gamify Stack Overflow

Gamifying Stack Overflow creates a more rewarding experience for developers by turning everyday participation into meaningful progress. Through an XP-based system that rewards asking questions, providing answers, and receiving upvotes, users can track their growth and compete on a global leaderboard. They can also gain currency for the cosmetic shop. This feature motivates new and experienced contributors alike.

Demo And Source

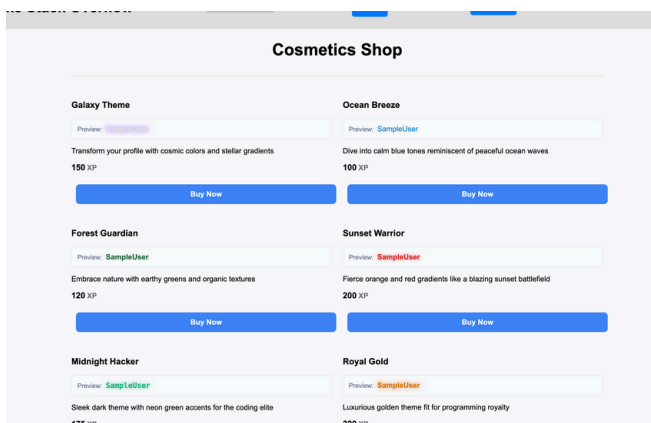
Our demo site is available at <https://fall25-project-fall25-project-group-806-s153.onrender.com/>, and our code is available at <https://github.com/neu-cs4530/fall25-project-fall25-project-group-806>

Our Technology and Stack

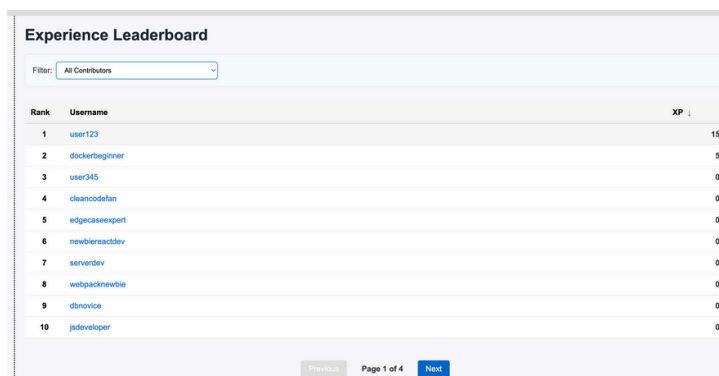
Using a Node.js + Express backend with a MongoDB database, we extend the user schema to support XP, currency, favorites, and cosmetics through API endpoints. Mongoose is used as our ORM for safe schema migrations, while the frontend is powered by React.js to deliver responsive pages for the leaderboard, favorites, and shop interfaces. We also have a huge test suite to make sure everything works as intended.

Future Work

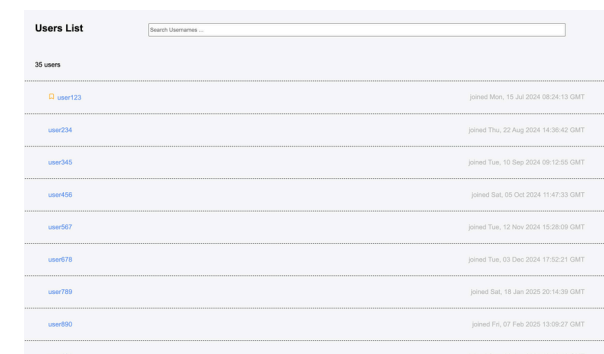
We may include implementing a full tier system and streak bonuses for daily engagement. The cosmetics shop can be expanded with seasonal or rotating items, detailed spending history, and real-time profile previews. We also envision enabling users to create and submit their own custom cosmetics.



These cosmetics can be bought for experience/currency and these styles will apply to your username wherever displayed when purchased



The leaderboard can be filtered to show new contributors, old contributors, and all. Leaderboard ranks are on every user profile



Favorite users are identified by an icon on the users page