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PROBLEM STATEMENT

The need for an interactive and competitive platform that enhances mathematical understanding through guided problem-solving, dynamic feedback, and community engagement.

mathXplorer

Project Overview

MathXplorer is an interactive web platform designed to elevate math learning through problem-solving and competition. It features a Socratic dialogue-based chatbot that guides users with thought-provoking questions, a flexible answer submission system, and a rating mechanism inspired by the Codeforces Elo system. With features like personalized challenges, community-driven engagement, and real-time progress tracking, MathXplorer aims to foster a vibrant, collaborative environment for math enthusiasts of all levels.

mathXplorer

Features

- Authorized user can

  - Authenticate them

  - Solve questions

  - Attend contests

  - Throw challenge

- Write blogs

- Do community interactions

- Gain rating

- Chat with the Socratic Bot

mathXplorer

Features

- **Admin Can**
  - Create new problems
  - Approve user submitted problems
  - Host contests
  - Ban users
  - Handle report on community
  - Moderate blogs and comments
  - Manage the usage of bot

Use Cases

- Users register, log in, and track personal progress through visual analytics.

- They participate in contests with a dynamic rating system

- The Socratic chatbot guides users through problem-solving with engaging, question-based support.

Use Cases

- Users create and share custom challenges, interacting with the community through blogs and comments.

- Admins manage contests, approve questions, and ensure a safe, engaging platform experience.

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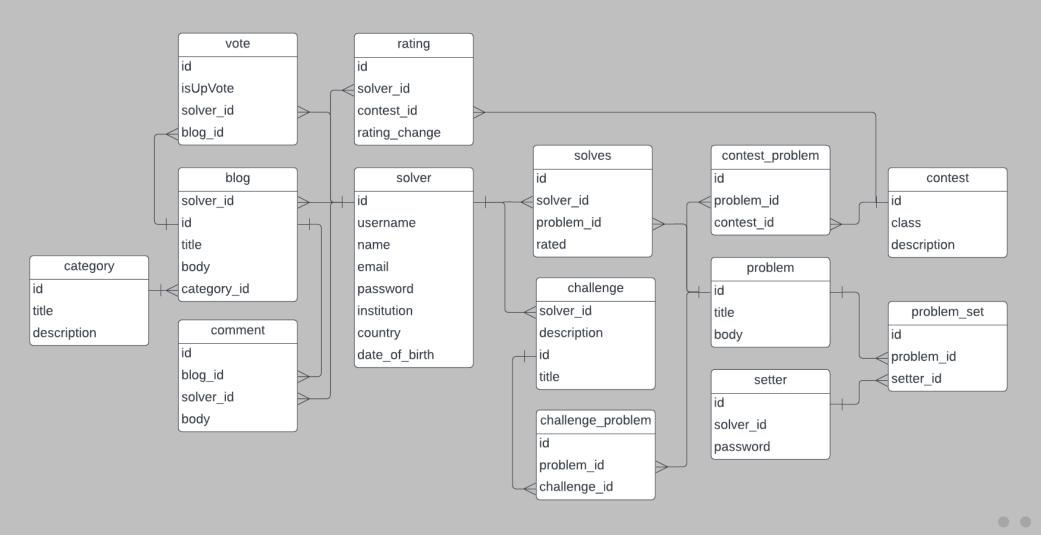# Tools and Technology

Database

DEMONSTRATION