# Teammate Reputation System (TRS)

Second week progress report

Anar Nyambayar  Wade Zhong  Hongtian Lin  Yuxiang Lin

Duke Kunshan University

February 11, 2026

# Overview

1. Introduction
2. Simple System Diagram
3. Demonstration
4. AI Statement
5. Quiz

# Team members

**Anar Nyambayar**

Fav code editor:

Neovim

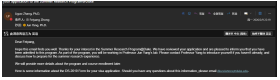
**Feiyang Zhong**

Heading to:

Duke Summer Research

Feeling:

Nervous & excited

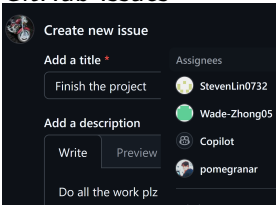


**Hongtian Lin**

**Yuxiang Lin**

Fav code editor:

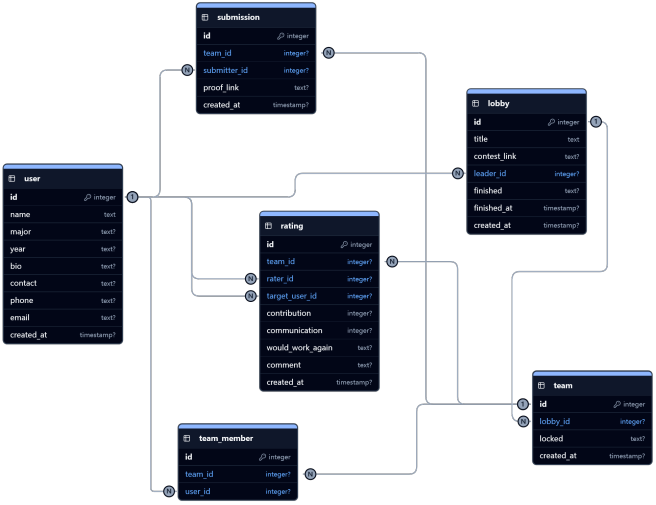
GitHub Issues



# Backend

- **Framework:** Flask (Python) with server-side rendered pages (Jinja2 templates)
- **Data layer:** Flask-SQLAlchemy (SQLAlchemy ORM)
- **Database:** SQLite (local file DB, e.g., `teamrank.db`)
- **Models / tables:** User, Lobby, Team, TeamMember, Submission, Rating
- **How data access works:** Python objects → ORM queries → generated SQL
- **Notes:** simple schema evolution for SQLite (no full migration tool yet)

# Database Schema (ER Diagram)

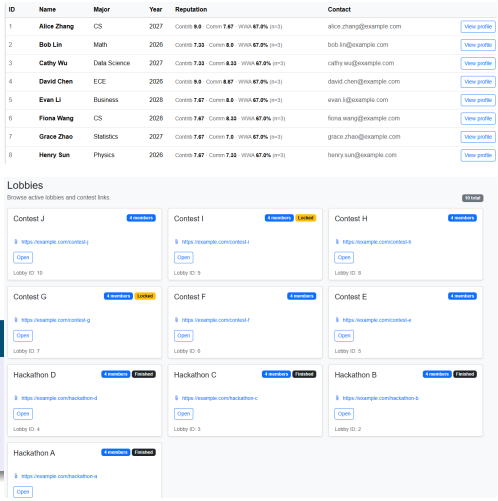


# Database Seeding

- **Goal:** generate stable demo data (no empty pages)
- **Workflow:** reset tables → insert records
- **Seeded:** `User`, `Lobby`, `Team`, `TeamMember`, `Submission`, `Rating`
- **Effect:** `/login` and `/lobbies` ready immediately

## Run

```
python seed_db.py
python app.py
```



| ID | Name | Major | Year | Reputation | Contact | |
|---|---|---|---|---|---|---|
| 1 | Alice Zhang | CS | 2027 | Contrib 9.0 · Comm 7.67 · WWA 67.0% (n=3) | alice.zhang@example.com | View profile |
| 2 | Bob Lin | Math | 2026 | Contrib 7.33 · Comm 8.0 · WWA 67.0% (n=3) | bob.lin@example.com | View profile |
| 3 | Cathy Wu | Data Science | 2027 | Contrib 7.33 · Comm 8.33 · WWA 67.0% (n=3) | cathy.wu@example.com | View profile |
| 4 | David Chen | ECE | 2026 | Contrib 9.0 · Comm 8.67 · WWA 67.0% (n=3) | david.chen@example.com | View profile |
| 5 | Evan Li | Business | 2028 | Contrib 7.67 · Comm 8.0 · WWA 67.0% (n=3) | evan.li@example.com | View profile |
| 6 | Fiona Wang | CS | 2026 | Contrib 7.67 · Comm 8.33 · WWA 67.0% (n=3) | fiona.wang@example.com | View profile |
| 7 | Grace Zhao | Statistics | 2027 | Contrib 7.67 · Comm 7.0 · WWA 67.0% (n=3) | grace.zhao@example.com | View profile |
| 8 | Henry Sun | Physics | 2026 | Contrib 7.67 · Comm 7.33 · WWA 67.0% (n=3) | henry.sun@example.com | View profile |

Lobbies

Browse active lobbies and contest links.

10 total

Contest J — 4 members — https://example.com/contest-j — Open — Lobby ID: 10

Contest I — 4 members · Locked — https://example.com/contest-i — Open — Lobby ID: 9

Contest H — 4 members — https://example.com/contest-h — Open — Lobby ID: 8

Contest G — 4 members · Locked — https://example.com/contest-g — Open — Lobby ID: 7

Contest F — 4 members — https://example.com/contest-f — Open — Lobby ID: 6

Contest E — 4 members — https://example.com/contest-e — Open — Lobby ID: 5

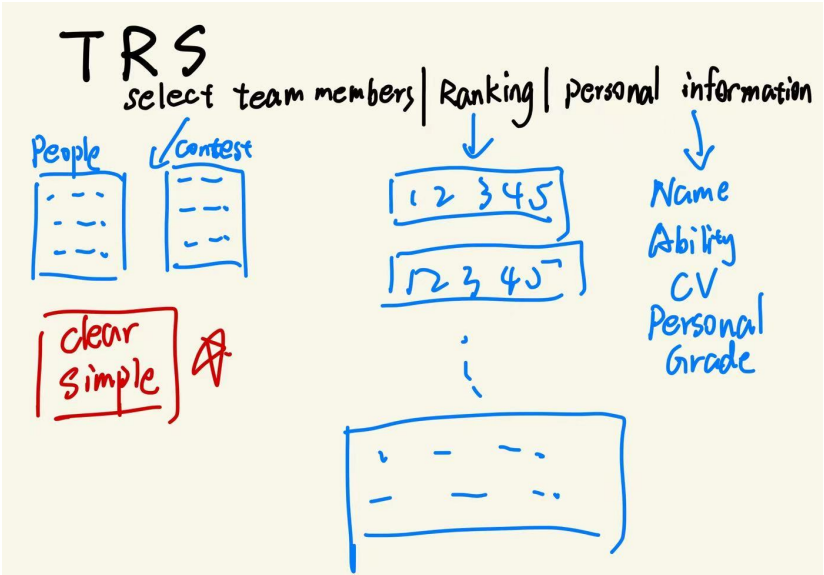
Hackathon D — 4 members · Finished — https://example.com/hackathon-d — Open — Lobby ID: 4

Hackathon C — 4 members · Finished — https://example.com/hackathon-c — Open — Lobby ID: 3

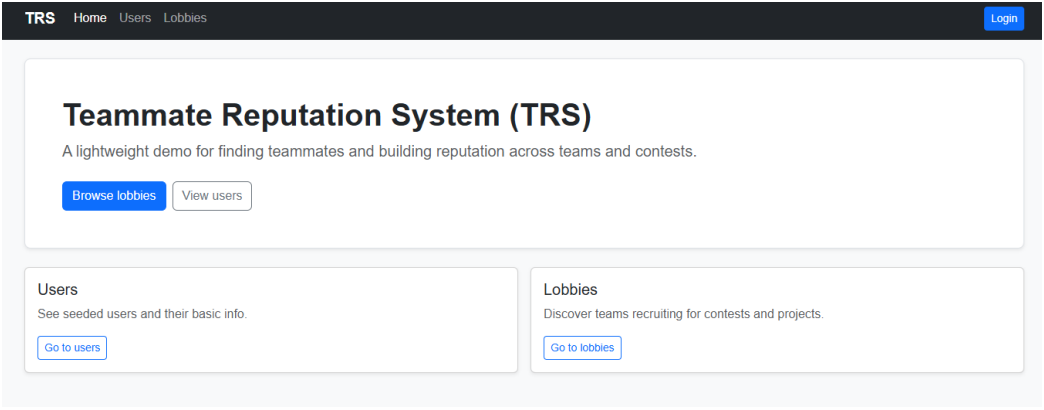
Hackathon B — 4 members · Finished — https://example.com/hackathon-b — Open — Lobby ID: 2

Hackathon A — 4 members · Finished — https://example.com/hackathon-a — Open

# Diagram


TRS
select team members
Ranking
personal information
People
Contest
clear
simple
1 2 3 4 5
1 2 3 4 5
Name
Ability
CV
Personal
Grade

# Demonstration




Demo of the full workflow

# The End