

The Queens Gambit Chess Institute of Greater Pittsburgh

Executive Summary

Community Partner

Ashley Priore, Founder and CEO

Student Consulting Team

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Angela Chen

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Background

The Queens Gambit Chess Institute of Greater Pittsburgh exists to empower youth through chess. Founded in 2014, Queens Gambit has served over 4,000 youth to provide a safe space for youth to learn leadership skills through the power of chess.

Queens Gambit facilitates unranked chess tournaments by creating Swiss pairings (specific to chess) by hand, which consumes unnecessary time and results in errors. For students, the current process diminishes potential learning opportunities in chess.

In a prior CMU IS Consulting project in 2022, Queens Gambit received Relationship Manager, a Ruby on Rails application to track partner relationships, which were crucial to the organization's programs.

Project Description

Project Opportunity

The Queens Gambit Chess Institute of Greater Pittsburgh presented the team with two issues:

1. Relationship Manager no longer had access to the data and had additional issues (bugs).
2. Instructors had difficulty running unranked chess tournaments.

Project Vision

The team's vision for the project was (1) to improve chess tournament accessibility for all students and (2) to improve the database for Relationship Manager in order to aid Queens Gambit in providing students more opportunities to test their skills in chess (with tournaments) and in maintaining the organization's relationships with partners.

Project Outcomes

To meet the project opportunities, the team:

1. Migrated Relationship Manager's database to Digital Ocean, as it was affordable.
2. Resolved all user interface (UI) issues and bugs (flaws) for Relationship Manager.
3. Introduced SWIPS, a chess tournament software, to instructors and students.

Project Deliverables

To facilitate the continued use of Relationship Manager and SWIPS, the team included:

- **Updated Relationship Manager Documentation:** building upon prior documentation.
- **GitHub Repository for Relationship Manager:** private repository with the application.
- **Deployed Relationship Manager:** on Digital Ocean.
- **Digital Ocean Documentation:** to aid in potential database and deployment issues.
- **SWIPS Documentation:** videos and walkthroughs for instructors and students.
- **Project Artifacts:** meeting notes and supplementary process visualizations.

Recommendations

Beyond the deliverables from project, the team recommends the following:

For SWIPS (Chess Tournament Software):

- Introducing SWIPS to more instructors and students before running larger unranked tournaments in the community.
- Incentivizing instructors and students (or parents) to create SWIPS accounts to begin tracking students' progress in unranked tournaments and share results.

For Relationship Manager (Ruby on Rails Application):

- Assign an individual to maintain the application's database and deployment.

Student Consulting Team

Emmeline Wetzel served as the project manager. She is a third-year student majoring Information Systems with minors in Human-Computer Interaction and French and Francophone Studies. She will be interning at Oracle this summer and is hoping to initially work in software engineering while doing nonprofit work on the side.

Saatvik Korisepati served as the client liaison. He is a fourth-year student majoring in Information Systems and Computer Science. He will be working at Amazon Web Services as a software developer after graduation. Saatvik's aim is to be an entrepreneur and business leader within the technology industry.

Angela Chen served as the documentation and technical lead. She is a senior studying Information Systems, Statistics and Machine Learning. After graduation, she will be working at Cadence Design Systems as an AI & ML software engineer.

Lisa Leung served as the design lead and brings prior technology consulting experience with multiple nonprofits and small businesses in the city of Pittsburgh. She is a senior in Information Systems and Human-Computer Interaction with a minor in Societal and Human Impacts of Future Technologies. Lisa Leung is looking towards a career in product management and aims to be an entrepreneur in the future.