Chess Giant: Exclusive Chess Platform System Analysis and Design

Background

A client reached out who wished to have a platform, called "Chess Giants", for elite chess players with a rating of 2200 or higher. The site will require members to pay a $1500 annual membership fee. To become a member, players must go through an approval process by the administrator until an automated integration with US Chess (www.uschess.org) is developed later.

The site will enable members to:

- Play chess with other members online.
- Challenge other members via email.
- View the top 10 players and challenge them to a game.
- Post and discuss game strategies and results, with moderation by the administrator for content management.

Project Goal

The goal of this project is to implement a system that will allow Chess Giants to become the leader for elite chess players in the industry.

Project Detail

As the Business Analyst for this project, I conducted the Stakeholder Interview, analyzed the business needs and designed the wireframes of the system as addressed below to achieve the goal of the project.

1. Stakeholder interview and Requirement Gathering
    - Through an interview with Jim, I dived deeper into understanding the business and gathered requirements, which I later used to define the project's scope.
    - Some of the questions asked during the initial stakeholder interview includes:
        - What are you trying to achieve by building Chess Giants?
        - How do you envision your players using your website? What can players do and cannot do?
        - How much of a budget do I have to build this system?
        - What does your schedule look like for us to review the process document?
2. Requirement Gathering
    - Next, I translated business needs into project scopes, defined functional and non-functional requirements, and generated the Business Requirements Document (BRD).
3. Identify Functional Areas and Build Decomposition Diagram
    - There were 5 Functional Areas highlighted in this project: Registration, Payment, Game, Admin, and Forum.
        - **Registration**:
            - Handled player sign-up, email verification, player rank verification, and account establishment.

        - **Payment:**
            - Processed payment and sends payment confirmation email.
        - **Game:**
            - Encompassed game-related processes on the site, including searching for and challenging players, the actual game played, and saving player's record of winning or losing the games.
        - **Admin:**
            - Managed Membership application and its approval, reviews content posted/uploaded by members, and removes inappropriate content.
        - **Forum:**
            - Allowed players to create and publish a thread and post comments on selected posts.
4. Designs (Activity Diagram):
    - The Activity Diagram used a UML Diagram and visualized how activities flow from one to the next, including how the system responds to prompts given by the player on the site. There were 2 Activity Diagrams designed for this project.
    - **The first Activity Diagram**:
        - Highlighted the step-by-step journey a player takes to search and challenge other players on the site.
    - **The second Activity Diagram**:
        - Showed the steps when a player posts their game on the forum.
5. Data Model and Wireframes
    - Data Model:
        - I used the Crow's Foot ER Diagram for the Game and Forum Functional Areas.
        - This Logical Data Model represents the organization's data and shows the relationships between different entities in the identified Functional Areas.
    - Wireframes
        - Taking the Activity Diagrams above, I designed the Wireframes on Microsoft Visio.
        - The Wireframes visualizes the steps taken by the player in searching and challenging players and when the player wants to post a thread or write comments on an existing thread on the Forum.
        - Additionally, I provided the Use Case statements for each case that showed how the system responds to actions taken by users.