Requirements document for Chess Giants

Date: 4/1/2022  
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Revision History

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| Revision number | Date | Reason for revision | Revised by |
| 1 | 4/1/2022 | Initial Draft | LVH Nguyen |
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1. Scope statement
   1. Website that allows users to register for an account if their chess rating is 2200 or higher on  [www.uschess.org](http://www.uschess.org/) site
   2. Website that allows users to play chess online
   3. Website that allows users to search for games or find other players
   4. Website that allows users to challenge others online and via emails
   5. Website that able to save users’ game histories and moves of each game
   6. Website that able to display top 10 players who won the most games
   7. Website that allows users to leave comments on chess games and exchange ideas
   8. Website that able to accept and process transactions
   9. Website that allows users to update/change their personal information such as account email, password, address, credit card information
2. Out of scope
   1. The website will not automatically retrieve rating from  [www.uschess.org](http://www.uschess.org/)
   2. The website will not allow users to record their match highlight
   3. The website will not allow advertising
   4. The website will not be available in any other language except English
   5. The website will not automatically assign players to a chess game
3. Goals

To become the most successful and exciting online playing website for professional chess players around the world

1. Objectives
   1. Create a website that allows master level chess players around the world to find friends, play online game and share ideas
   2. Obtain hardware/software that necessary to build a working website
   3. Build a website that is fast, easy to use and convenient for users (more than 80% approve by the study team)
2. Risks
   1. The technical staffs do not have experience with the Chess Master software so it might cost more time to make sure all members are familiar with the technology and able to complete their duties
   2. The deadline of the project might be affected due to lack of communication and meeting between the IT team and stakeholders
3. Constraints
   1. The budget for the project is set at $500,000, which cannot be exceeds in any other circumstances
   2. The project must be completed within 6 to 10 months in order to reduce any competitors beating us in the market
4. Decomposition diagram

Diagram

Description automatically generated

1. Functional requirements
   1. Account Registration
      1. Fill out information
         1. The system shall require applicants to enter their personal information online
         2. The system shall require applicants to create a password with at least 8 characters
      2. Verify email
         1. The system shall send a verification code to the registration email address
         2. The system shall require applicants to provide the code to log in on Chess Giants
         3. The system shall re-send new verification code if the old code is invalid
      3. Check chess rating
         1. The system shall automatically pull the chess rating of applicants from the website [www.uschess.org](http://www.uschess.org/)
      4. Annual fee payment
         1. The system shall require applicant to select payment methods
         2. The system shall require applicant to provide billing address
         3. The system shall proceed with the payment
      5. Issue new account
         1. The system shall issue an account to applicants who passed the verification and payment process
   2. Game Search
      1. Find player online
         1. The system shall display a list of online players
         2. The system shall allow users to search for other players on the list
      2. Challenge a game
         1. The system shall allow users to challenge a game if the other player is online
         2. The system shall allow users to send challenge via email
      3. Start a game
         1. The system shall proceed a match if the other player accepts a challenge, and two players are online
         2. The system shall end the game if one person wins the match
   3. History Tracking
      1. Track game records
         1. The system shall track records of every match from a player
         2. The system shall display WIN if the person wins the match, and LOSE if the player loses the match
      2. Track move records
         1. The system shall track each move in a game of a player
      3. Display top 10 players
         1. The system shall display top 10 of players who have won the most game in a day, week, month, and year
   4. Forum
      1. Write comments
         1. The system shall allow users to write comment on games after they have completed
      2. Check appropriate
         1. The system shall verify if there is any inappropriate language or character from the users’ comments
      3. Share comments
         1. The system shall share the comments in the forum
         2. The system shall allow users to see previous comments
   5. Admin
      1. Delete comments
         1. The system shall allow admin to delete comments if there is any inappropriate language or characters
         2. The system shall allow admin to delate comments if the comments are not relevant to the chess match
      2. Send warnings
         1. The system shall allow admin to send warnings to users who have negative and inappropriate comments via email
      3. Suspend/ Remove account
         1. The system shall suspend if the users have received total 3 warnings
         2. The system shall remove the accounts if the users have negative conduct in a game or in the forum, and cheating
2. Nonfunctional requirements
   1. Security
      1. The system shall have SSL or other type encryption
      2. The system shall have identity management for desktop
   2. Performance
      1. The system shall have an average response time of 1-3 seconds
      2. A verification email should be sent no later than 10 seconds
      3. Each request should be performed in 1 second
   3. Compatibility
      1. The system shall support all kinds of internet browsers, such as Google Chrome, Fire Fox, Internet Explorer, and Safari
   4. Maintainability
      1. The system shall have 80% maintainability for 24 hours
   5. Availability
      1. The system shall be available to all users 99% of the time every month
3. Stakeholders
   1. Jim Sotheby
4. Approvals <leave this blank for now. We will revisit later>