Group 28 Coding Final Summary
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Product

Our design project "Chess of Champions" is a cross-platform, multiplayer game played upon a 2D board. This game combines the two extremely popular games of chess and League of Legends into one game where each player battles 3 others with the goal of destroying their bases.

The project utilizes a 2-dimensional graphical user interface, as well as a diverse game client that manages account information, DLC, and other important information stored within external servers. The game also supports a rich, skill-based matchmaking system and support for online play, co-op play vs AI, and support for alternative game modes released during seasons or as they become popular.

Requirements
Main Functional Requirements
- ❖ *The game should be able to be launched with ease as a typical executable file.*
- ❖ *User data such as level, DLC, and other information must be stored both client and server-side, to allow for online and offline play.*
- ❖ *Users should be able to report bugs, issues, and players that show poor sportsmanship.*
- ❖ *The product must be able to run on Windows, Consoles, and Mobile Devices in a cross-platform manner.*

Main Non-Functional Requirements
- ❖ *Performance*
  - ➢ *The game must be stable, with an emphasis on high average fps over 60.*
- ❖ *Maintenance*
  - ➢ *Servers should run 24/7, with the ability to patch new updates over the course of seconds in order to have uninterrupted playability.*
- ❖ *Usability*
  - ➢ *The product should have skill based matchmaking and a means of teaching players the rule-set of the game in order to facilitate stress-free play and longevity of player support.*

Design Goals

- ❖ *Our product must be enjoyable, competitive, and provide players with the ability to socialize.*
- ❖ *Anyone can play the game. The game must be Easy to learn, but hard to master.*
- ❖ *Our product must have adaptability, so the product must constantly be able push updates with stability.*
- ❖ *Our product must have reliability to ensure players don't experience system crashes / No loss of their player data.*
- ❖ *Must include optimal performance to ensure there is little to no lag to so that players are able to play the game smoothly.*

Test Plans

- ❖ *Our product will include different testing phases, including closed alpha, closed beta, and open beta.*
- ❖ *To test the product and how well the product stands, we will be testing how multiple connections are able to be handled throughout the server and the client.*
- ❖ *We will have administrators and testers constantly push for bug fixes and look for bugs.*
- ❖ *Users will be able to submit bugs / glitches / exploits they may have encountered.*
- ❖ *Each platform should carry with it a specific suite of testing to ensure that no platform carries with it bugs unique only to that platform. Communication with specific third-party companies, such as Sony Playstation or Microsoft Xbox may be needed to facilitate patching.*