3D Tic-Tac-Toe Project Requirements Summary Report

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Product Overview and Description Summary

3D Tic-Tac-Toe is an extension of the century old game of Tic-Tac-Toe. This game will be available on both mobile platforms (iOS and Android) and as a website for PC users. The game will include new rules and features that will encourage play and competition among players. It could have up-to 4 players with each trying to win the game before others. The game board will be a cube shape resulting in 6 total surfaces where the game can be played. The game will have power ups and charms to make the game more exciting, engaging and competitive. It will be free-to-play with players having the option of purchasing different power ups and avatars for their gameplay.

Requirement Summary

Functional Requirements

The functional requirements cover all of the main components of the game that the user will be able to see. It goes through all of the necessary components that make the overall product so good. It was broken down into various aspects such as those related to gameplay, postgame, maintenance, etc. With the fulfillment of said requirements, anybody would be able to get a general understanding of the general product.

Data Requirements

We developed many requirements that made sure to have the user able to access data seamlessly via the database that helps identify various information. This includes player currency, avatars, play history, win record, etc. Including this data to be accessible to all users ensures the game gives off a competitive look and informs the user on how they are progressing.

Performance Requirements

We developed multiple requirements that ensured that the user will have a lag-free experience when the user communicates with either the system itself or other users. Other requirements in this section involve interaction with other APIs such as social media companies so they can communicate with each other. These will make the game give off a very professional look that will stand next to all of the mainstream games

Dependability Requirements

The product ensures various requirements where the user can feel safe whenever they are using it in every single aspect. They will be assured that their data will not be lost and along with that, other requirements will entail that the system wide failures will be minimal at best. It is important for the users to feel like they can play the game whenever they want. With that said, if there is some sort of problem, then there is a specific time period where all the problems need to be solved. Users will also be rest assured that even if the game ends abruptly, then it is necessary for the product to automatically save people.

Maintainability and Supportability Requirements

We identified four main use cases for system maintenance. From those we developed eight functional requirements that dealt with the main tasks the system would need to operate at peak performance. From the use cases and functional requirements we thought of thirteen non-functional requirements related to maintenance and supportability. All of the requirements have a corresponding acceptance test. Some tests apply to more than one requirement.

Security Requirements

Security is a crucial aspect of ensuring the game is a worry free zone for users to download the game. We developed multiple requirements that include the safety and security of the users private information. We also ensured that the source code is not available to the public and that users will be notified of any crash reports. Many of the security requirements documented will be listed on the required terms of service page, which ensures the safety and privacy of the user. The user will not be able to access the game without accepting the terms and conditions.

Usability and Humanity Requirements

The usability and functionality requirements focuses on making the user experience better by looking at the look and feel of the game. It is a crucial and important part of the requirements and the game. We need to make sure that we have an appropriate environment for all players which means including a user friendly environment for players with disabilities and remove any toxicity and toxic players.

Look and Feel Requirements

The look and feel of the product must first match the standards of the client company, Board Games 2.0 INC. This is to ensure that this product matches with all of the other similar products that they have to further the overall branding. Then, there will be specific requirements imposed that will encourage beginner players to play more and other mechanisms to make players be proud of their accomplishments. Thus they will have to be non-trivial but not hard enough to make it seem impossible. That is the balance that the product will achieve.

Operational and Environmental Requirements

We developed multiple requirements that ensured the gaming environment was a smooth process for the user. This ensured requiring the game available on IOS, android, and desktop devices alike, as well as ensuring the required storage is available for downloading the game.

Legal requirements

Since our product would be distributed globally, it would have to comply with different laws and regulations depending on the country. We developed four legal non functional requirements that cover the dimensions of privacy, disability, communications and accounting. In order to test these requirements our legal department would have to review and approve our system design.