**Bayani Memory Game**

Midterm Requirement for Mobile Application Development II

1. **Introduction**

Bayani Memory Game is not only a delightful pastime but also an enriching educational tool that brings to life the heroes and historical figures of the Philippines.

The Bayani Memory Game engaging tabletop game aims to educate and entertain players about the historical personalities and heroes of the Philippines. It provides a captivating gaming experience and a deep cultural concept for players. As they turn over the cards in search of matches, players improve their memory while also learning more about the rich history of the Philippines.

1. **Design**

The Design of Bayani Memory Game educational content, and challenging gameplay, players embark on a journey through Filipino history and culture while honing their memory skills. Key design elements include:

* **Filipino Theme:** The Bayani memory game design maintains a cohesive theme centered around Filipino history and culture. This theme is seamlessly integrated into every aspect of the game, from the card designs to the educational content, creating an immersive and authentic experience.
* **Challenging Gameplay:** The game offers progressively challenging levels to test players' memory skills. Special challenges and obstacles add depth and excitement to the gameplay, keeping players engaged and motivated to improve. Multiple difficulty levels cater to players of all ages and skill levels, making the game accessible and enjoyable for everyone.
* **Educational Content:** Learn about Filipino history and culture while having fun! Each card in the Bayani Memory Game is accompanied by informative descriptions, providing insights into the significance of the historical figures. The game serves as a valuable educational tool for schools, cultural centers, and families seeking to explore the richness of Filipino heritage.

1. **Development Process**

The development process for Bayani memory game involved several key stages:

* **Conceptualization**: The development of the Bayani Memory Game began with the conceptualization stage. This involved brainstorming sessions to outline the game's objectives, mechanics, and overall theme. The goal was to create a game that celebrated Filipino heroes (Bayani) and historical figures while providing an enjoyable and educational experience for players.
* **Artwork and Assets**: The Bayani Memory Game features vibrant and detailed artwork that brings Filipino heroes to life, capturing their essence and significance. Each card showcases a unique bayani illustration, meticulously crafted to honor their contributions to Philippine history. The card design strikes a balance between aesthetic appeal and functional clarity, ensuring an engaging gameplay experience. With intuitive layouts and clear typography, players can easily identify and match pairs of cards during gameplay. Through its captivating artwork and assets, the Bayani Memory Game.
* **Programming:** The Bayani memory game was developed using a combination of Flutter for the UI Design and Dart was used as a programming language for the game development tool and implemented to provide players with an intuitive and visually appealing experience.
* **Testing and Iteration:** Extensive testing was carried out during the development process to find and fix any bugs, and fixing any technical difficulties found during testing was given top priority. Tester feedback was carefully gathered, which resulted in iterative improvements to the game's gameplay, content, and design.

1. **Technical problems:** The Bayani Memory Game encountered several technical challenges. It was challenging to put the card shuffling method into practice, especially when it came to coming up with random configurations that preserved diversity and fairness. A further problem in integrating instructional content was establishing a balance between informational prompts and gameplay flow. To preserve stability and functionality across a range of devices and operating systems, debugging, and fixing software bugs were also continuous activities. Despite these obstacles, diligent problem-solving efforts ensured the successful delivery of a high-quality Bayani Memory Game experience.

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