Title :

Salu-Salo: A VR Cooking Game Simulating the Making of Filipino Cuisines

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Background :

Simulation Games are especially popular in a Virtual Reality setting for their immersive yet engaging gameplay. Of these games are Cooking Simulation games, where players simulate the creation process of a dish through a virtual screen. However, the use of Western and Italian cuisines within these games are prominent, leading to a lack of variety and representation for cuisines from other countries, especially in Southeast Asia. While other studies have already focused on cuisines from countries such as Indian and Malaysian cuisines, there is yet to be one dedicated for the Philippines, whose cuisine is also not presented well in other forms of media, especially in the genre of cooking games.

Targets:

- Utilize a game engine's capabilities in developing a VR game that allows players to simulate the process of cooking a Filipino cuisine.

- Present three (3) different dishes from each of the main islands in the Philippines (Luzon, Visayas, and Mindanao) with proper validation of its recipes.

- Evaluate the player's performance of cooking Filipino cuisine in a Non-Guided game mode

Proposed Method

Salu-salo is a VR Cooking Simulation Game that is made using the Unity Engine. This engine is being utilized due to its support for VR development and beginner-friendly interface. Because the game will be presenting and centered around Filipino Cuisine, validations must be made. To do so, recipes from Filipino chefs and published Filipino cookbooks will be used.

Moreover, Blender is used to create the 3D models for the game due to its compatibility in exporting assets to the Unity Engine. The study also uses Figma for UI/UX design because of its simple yet effective features.

The game will be tested in Mapua Malayan Colleges Mindanao Campus wherein the participants range from the ages 18-25 based on GWI's survey wherein the interested users for VR ranges between the ages 16-34 (Buckle, 2016). These participants will be randomly selected and will be testing its features to provide feedback on the mechanics and bugs or issues that they may face.

Proposed Method:
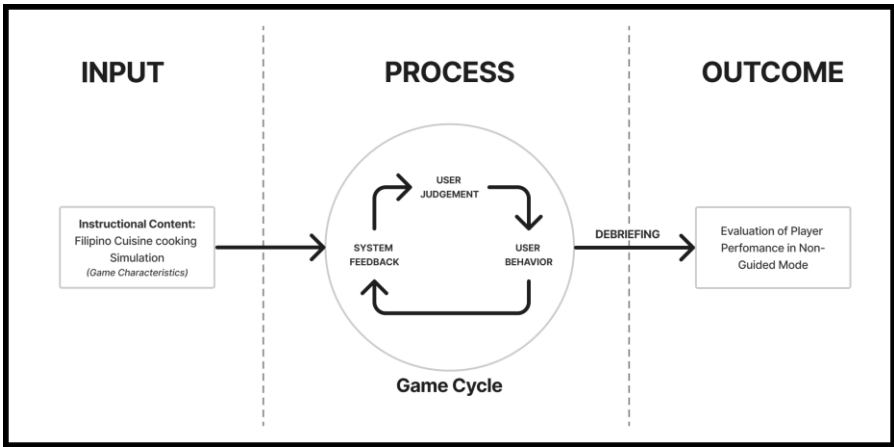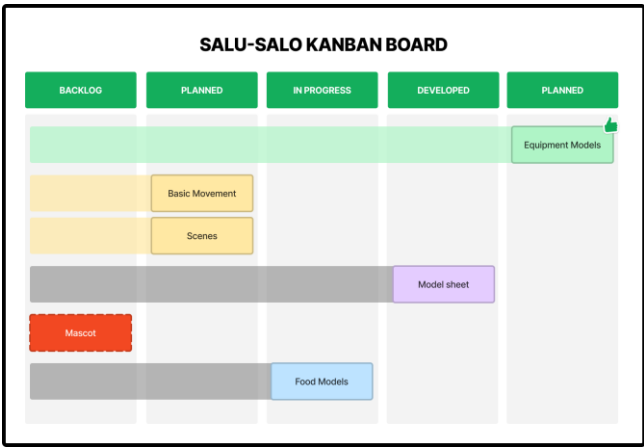
Agile Kanban is used as the development methodology of the project. It allows to for the simplification and visualization of the work to showcase its continuous improvement (Wakode, et.al., 2015) which is perfect for the game development cycle and will maximize its efficiency. Additionally, the conceptual framework for the proposed project will be an Input-Process-Outcome model adapted for game design by Garris, et.al. (2002). This framework is separated into three parts; Input, Process, and Outcome. The framework also emphasizes on the looping process which targets player retention, engaging its user rather than simply putting it down afterwards.

Proposed Method:
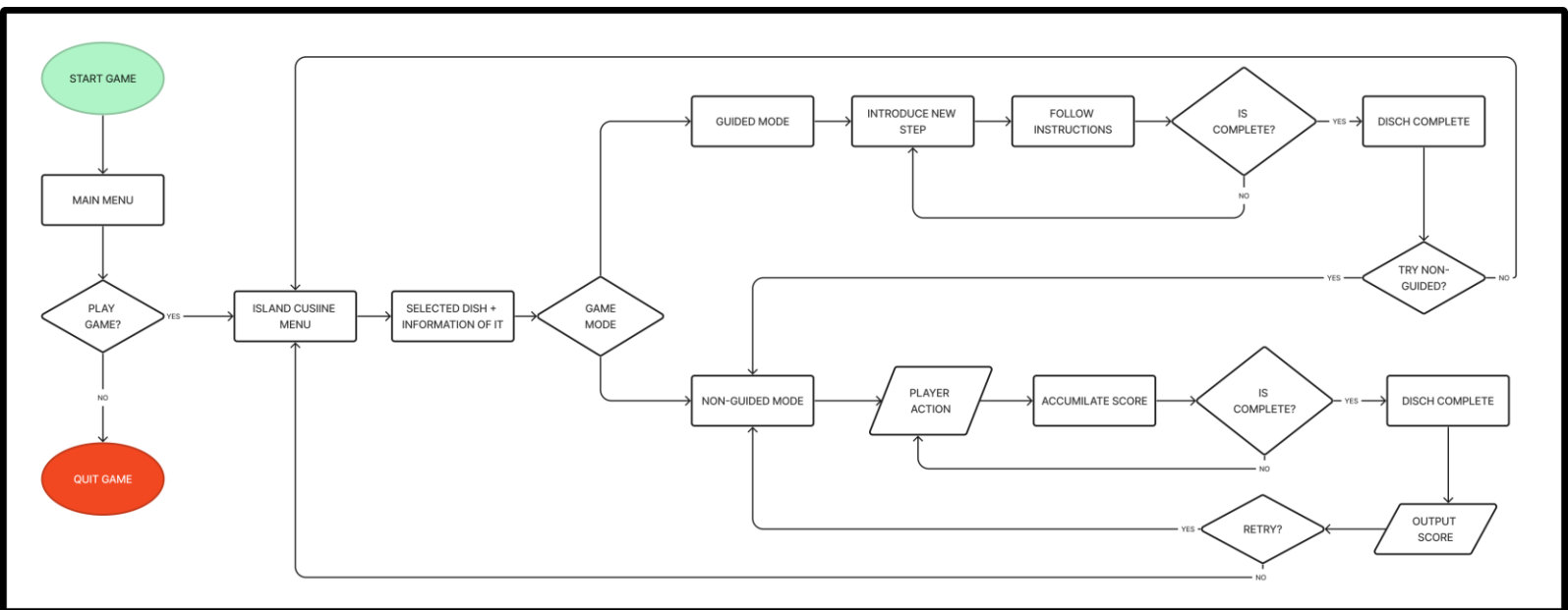
The game will follow a Non-Linear approach of gameplay. This allows the player to have more options and freedom to navigate the game's features. Additionally, the player will be given two modes to try, Guided and Non-Guided. Guided Mode lets players follow certain steps in creating a certain dish whereas Non-Guided Mode has players accumulate points to evaluate their performance and will be presented with a medal post-game pertaining to their score. Furthermore, the scores in non-guided mode will be stored in a game file and with the player's consent will be collected for analysis.

Technological
- Innovation in VR Technology
- Validation of Filipino Cuisine
- UI/UX Design

Societal
- Cultural Preservation and Promotion
- Education and Entertainment
- Accessibility and Inclusivity

Collaborative
- Utilization of Diverse Tools
- User Feedback and Improvement
- Potential for Community involvement
- International Collaboration

Output/Outcome:

Technological

- Innovation in VR Technology

The output of the project is a VR game developed using the Unity Engine. It may lead to innovations in VR game development techniques and technologies, potentially contributing to advancements in the field of virtual reality.

- Validation of Filipino Cuisine

The use of authentic Filipino recipes from chefs and cookbooks in the game can establish a validation method for creating realistic and culturally accurate culinary simulations, which may be valuable for future culinary research and simulation development.

- UI/UX Design

The utilized Figma for UI/UX design is a technologically sound choice, as Figma is known for its collaborative and user-friendly features. It demonstrates the use of contemporary design tools in game development.

Output/Outcome:

Societal

- Cultural Preservation and Promotion
- Education and Entertainment
- Accessibility and Inclusivity

> *The game can serve as an educational resource for individuals interested in cooking and Filipino cuisine. It can be made available to the public for learning and entertainment purposes, potentially enhancing culinary knowledge and appreciation.*

Output/Outcome:

Collaborative

- Utilization of Diverse Tools

The collaboration with Filipino chefs and the use of the published Filipino cookbooks can lead to partnerships in the culinary industry, potentially promoting these experts and their work.

- User Feedback and Improvement

Involving participants for testing and feedback creates a collaborative relationship with potential users, leading to improvements in the game's quality and user experience.

- Potential for Community involvement

The project may create a community of individuals who share an interest in Filipino cuisine and cultural heritage, fostering connections and relationships among enthusiasts.

- International Collaboration

The use of internationally recognized software tools like Unity, Blender, and Figma showcases the potential for international collaboration in the development of cultural and entertainment content.

Conclusion:

1. Targets:

- Develop a VR Cooking Simulation Game using Unity Engine for players to simulate cooking Filipino cuisine.
- Present three distinct dishes from Luzon, Visayas, and Mindanao with validated recipes.
- Evaluate player performance in cooking Filipino cuisine in a Non-Guided game mode.

2. Method (Idea):

- Utilize Unity Engine for VR development.
- Ensure authenticity with validated Filipino recipes from chefs and cookbooks.
- Create 3D models in Blender, design UI/UX with Figma.
- Apply Agile Kanban for efficient development, with a focus on player engagement.
- Offer Non-Linear gameplay with Guided and Non-Guided modes.

3. Societal Impact:

- Scientific: Advances in VR technology, culinary simulation validation, and UI/UX design.
- Societal: Cultural preservation, education, accessibility, and inclusivity.
- Collaborative: Diverse tool utilization, user feedback, community involvement, international collaboration.

4.Economic Impact:

Potential economic opportunities through commercial success for game developers and local businesses.