



Elective 2 (MAD 2) Mobile Application Development 2
Midterm Project

GameDev using Flutter Casual Games Toolkit

Title: Manananggo

Overview

Manananggo is a Filipino-themed mobile game inspired by the classic Dino Game concept. However, instead of a dinosaur, players control a mythical creature called the Manananggal. During the day, the protagonist appears as a majestic eagle, symbolizing strength and freedom. The eagle, which is also the Philippine national bird, represents pride and resilience. As night falls, the character transforms into the fearsome Manananggal, representing the darker side of folklore. The day-and-night cycle changes dynamically based on the player's run distance, adding an extra challenge to the gameplay. Players must adapt to these transformations while navigating obstacles and surviving as long as possible.

Design Concept

- **Theme:** Inspired by Filipino mythology, the game brings the legend of the Manananggal to life. The day-and-night cycle creates a dynamic experience, making the player experience both the beauty and terror of this folklore.

Development Process

- **Technology Stack:**
 - Provider for state management
 - Custom audio controller for sound effects and music
- **System Features:**
 - Day-Night Cycle: Implemented using the player's run distance to switch between eagle and Manananggal forms.
 - Movement Mechanics: Players control the character using simple jump and dodge mechanics, avoiding obstacles and surviving as long as possible.
 - Scoring System: Points are earned based on the distance travelled and obstacles avoided.

Technical Decisions

- **State Management:** Provider was chosen to manage the game state efficiently.
- **Graphics and Animation:** Flutter's built-in widgets and external packages enabled smooth animations and transitions.
- **Audio Implementation:** An audio controller was developed using a custom audio library.

Chosen Theme and Its Significance

- The Manananggal is an iconic creature in Filipino mythology, representing fear and mystery. By incorporating this myth, the game promotes cultural heritage and introduces players to Philippine folklore.
- The use of the Philippine eagle as the daytime form adds a patriotic element, celebrating the country's national bird, which symbolizes strength, courage, and resilience.
- The contrast between day and night symbolizes the duality of nature and the inner conflict within the character, providing a deeper narrative experience.

PANGASINAN STATE UNIVERSITY
Urdaneta City Campus



College of Computing
INFORMATION TECHNOLOGY DEPARTMENT
