SQUEEZE! Final Report Summary

Group 2 - Diego Bravo, Nicholas Filipov, Jose Bolanos, Alejandro Bravo

Overview and Educational Purpose

SQUEEZE! is a 2D educational simulation game designed to teach players essential financial literacy and basic business management skills through the interactive experience of running a lemonade stand. Built with accessibility and engagement in mind, the game simplifies financial concepts such as cost management, customer satisfaction, product pricing and managing, and revenue tracking into fun gameplay mechanics.

Instead of aiming for realism or complexity, the game focuses on delivering financial concepts through dynamic simulations in a fun game environment. Players make strategic decisions around purchasing ingredients, crafting products, adjusting prices, and serving customers promptly to maintain a good business rating. Each of these mechanics reflects a fundamental business or economic principle, making learning an integral part of the game experience.

Game Mechanics and Systems

- **Probability & Customer Behavior**: Based on pricing decisions and past performance, a dynamic probability system influences how many customers visit.
- **Crafting & Inventory**: Players combine ingredients to create sellable products. Inventory is updated in real time, and crafting consumes necessary items.
- **Customer Timers**: Each customer has a timer, rewarding fast service with improved ratings and penalizing delays.
- **Rating System**: A 5-star system reflects player performance and directly affects the number of daily customers. Poor ratings may lead to a loss of customers and profit.
- **Dynamic Days**: Each game day ends after all customers are served, and new products or challenges can be unlocked. Ratings influence customer count.
- **Financial Feedback**: At the end of each day, players receive graphs and data visualizations of their performance to support self-reflection and strategic adjustments.
- **Interface & Usability**: The GUI allows intuitive interactions, from managing inventory to setting prices and analyzing finances.

Design Deviations and Adjustments

Compared to the original design document, the game shifted from a proposed 3D first-person interface to a more accessible 2D simulation. A spreadsheet-based analysis system was replaced by simpler, user-friendly graphs. Despite these changes, core goals remained intact: offering players full control of a lemonade stand, the ability to change prices, analyze results, and receive performance feedback. The simplified design supports the educational goal without overwhelming the player.

Testing and Quality Assurance

Testing Focus Areas: The game was stress tested by the development team, with version control allowing synchronized testing across environments. Important gameplay components tested included:

- Start and transition from the welcome screen to gameplay
- Crafting functionality and inventory tracking
- Sale completion and customer satisfaction handling
- Accurate timer functions and rating updates
- Day-end financial summaries and graphs
- Feedback and improvement suggestions based on performance

Sample Test Case Summaries

Test 0 – Star Screen and Buttons

- **Goal**: Ensure smooth transition from welcome to gameplay screen.
- **Criteria**: Pass if the timer bar starts at 10 seconds, controls are responsive, and the game state loads correctly.

Test 1 – Crafting System

- **Goal**: Verify players can craft items if they are in the inventory.
- **Criteria**: Pass if item is added, inventory updated, and proper feedback shown.

Test 2 – Day-End Sales Report

- **Goal**: Ensure players receive accurate earnings and performance measurements.
- **Criteria**: Pass if graphs and summary match in game transactions and ratings.

Conclusion

SQUEEZE! successfully delivers an approachable and interactive way for players to learn key financial concepts through gameplay. Through iterative development and testing, the project evolved into a fully functional 2D simulation game that emphasizes education, decision-making, and strategic thinking. The project remains open for future improvements, including deeper financial modeling or multiplayer scenarios.