**Use Case Diagram Description**

**Use Case ID and Name:** UC-1 Manage Underage Savings  
**Created By:** Dev Groups  
**Date Created:** Jan 27 2025

**Primary Actor:**  
Child User

**Secondary Actors:**  
Parent User, System

**Description:**

This use case describes the interactions between child users, their parents, and the system to encourage financial literacy and responsible money management for underage users. Children can set and track savings goals, complete financial lessons, and earn rewards under parental guidance and oversight.

**Trigger:**

The child user or parent accesses the system to manage savings or financial activities.

**Preconditions:**

1. Parent has created an account for the child user.
2. Child user and parent credentials have been authenticated.
3. System security features are active.

**Postconditions:**

**Success:**

1. Savings goals are successfully created and tracked.
2. Lessons completed and rewards earned are logged in the system.
3. Parental approvals and activities are recorded.

**Failure:**

1. System logs unsuccessful transactions.
2. Child or parent notified of failed requests.

**Normal Flow:**

1. **Child Account Setup and Goals:**
   * Parent creates the child account and sets initial permissions.
   * Child logs in to set a savings goal (amount, target date).
2. **Savings Tracking:**
   * Child views savings progress on the dashboard.
   * System updates progress with new deposits or transactions.
3. **Parental Oversight:**
   * Parent reviews child's activity and receives notifications for transactions.
   * Parent provides approvals where necessary.
4. **Educational Activities:**
   * Child completes interactive financial lessons.
   * System records completion and awards points.
5. **Gamification and Rewards:**
   * Child earns rewards based on lessons and goals achieved.
   * System notifies the child and parent of achievements.
6. **System Monitoring and Security:**
   * System encrypts sensitive data and ensures secure operations.
   * Notifications sent for updates and milestone completions.

**Alternative Flows:**

**4.1 Failure to Reach Savings Goal:**

* System provides suggestions to adjust goals or save more.

**4.2 Lesson Completion Issues:**

* System offers help prompts for lessons not completed successfully.

**Exceptions:**

**4.1.E1 System Security Breach:**

* System locks the account and sends alerts to users.

**4.2.E2 Transaction Declined:**

* System displays message and records reason for the decline.

**Priority:**

High

**Frequency of Use:**

Daily by child and parent users.

**Business Rules:**

BR-01: Parent approval is mandatory for high-value transactions.  
BR-02: Data encryption must be active at all times.

**Assumptions:**

1. Parent actively monitors and guides the child.
2. System remains secure and available for all users.