

Project Specification

Project Title

“Teach the baby to walk”

1. Project Overview

Baby Steps is a **3D learning-based game** that simulates how a baby gradually learns to walk. The player controls a baby character who starts by **crawling**, then **standing with support**, and finally **walking independently** by completing different levels.

The core idea of the game is **progressive learning and balance control**, where the baby improves movement skills through repeated attempts, failures, and balance recovery similar to real-life development.

2. Project Objectives

- To design a **3D character-based game** with progressive difficulty
 - To simulate **learning behavior** through balance, movement, and physics
 - To implement **level-based gameplay mechanics**
 - To practice teamwork, game design, and development skills
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3. Game Concept & Storyline

The game follows a baby who wants to reach **attractive objects** such as toys, food, and colorful items placed in the environment.

- At first, the baby can only **crawl**

- Later, the baby attempts to **stand and walk**
- The baby may **lose balance**, fall, and regain balance
- Over time, the baby becomes more stable and confident
- Baby will earn points if it collects the good objects and loose points which are harmful to it.
- There will be two modes of the game. One is **game mode** and the other is **free mode**. In game mode there will be **4 levels** where the baby will complete its walking and the game will be finished. But in free mode users can move the baby freely without any level upgrade and time limit.

Once the baby successfully walks without losing balance, the game ends.

4. Gameplay Mechanics

Player Controls

- Movement (forward/backward/left/right)
- Balance control (manual or semi-automatic)
- Speed control (slow movement at early levels)

Learning & Balance System

- Balance is represented by a **stability meter**
 - Early levels: balance meter drains quickly
 - Later levels: balance improves automatically
 - Falling does not end the game, it teaches recovery
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Rewards & Collectibles

- Toys
 - Food items
 - Rattles, balls, teddy bears
 - Harmful: knives, scissors, etc.
 - Each attractive collectible increases balance and score and each harmful does the opposite.
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5. Game Levels

Level 1: Crawling Stage

- Baby can only crawl
- Very slow movement
- Collect nearby toys
- No standing or walking
- Falls when collide

Level 2: Walking stage(1)

- Baby can stand briefly
- Balance meter introduced
- Baby may fall frequently

Level 3: Walking stage(2)

- Baby walks slowly
- Balance improves little
- Collectibles placed farther apart and more
- Special ability introduced

Level 4: Walking stage(3)

- Baby walks smoothly
- No balance loss
- Roams freely.

Free Mode:(Activates after level 4 completion):

- Baby roam around freely and fast
- Anyone can explore the game without interruptions