**Technical Choices**

1. **Physics Implementation**
   * Use **Newtonian Gravity**:
   * Ein Bild, das Schrift, Text, weiß, Zahl enthält.

     KI-generierte Inhalte können fehlerhaft sein.
   * Allow **different masses**.
   * Start with **Euler's Method** for integration, upgrade to **RK4 or Verlet later**.
2. **Visualization Approach**
   * **Matplotlib (Animated Plot)** is a good first choice since it's simple and effective.
   * **Pygame** or **VPython** would give smoother animations, but we can evaluate later.
   * Implement **trails** to visualize paths.
3. **Interactivity**
   * **Tkinter (GUI Framework)** for user inputs.
   * **Buttons for predefined cases** like the **figure-eight solution**.
   * **Simulation speed control** using a slider.
   * **Pause/Resume functionality**.
4. **Data Logging**
   * Save positions, velocities to a **CSV or JSON file** for later analysis.

**Time Units (Simulation Timer)**

A good assumption is:

* **1 time unit = 100 day**
* dt = 0.01 → **Each frame advances the simulation by 1 days**