Team Unicade

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HACK THE BUBBLE 2019

TRAJECTORY SIMULATION

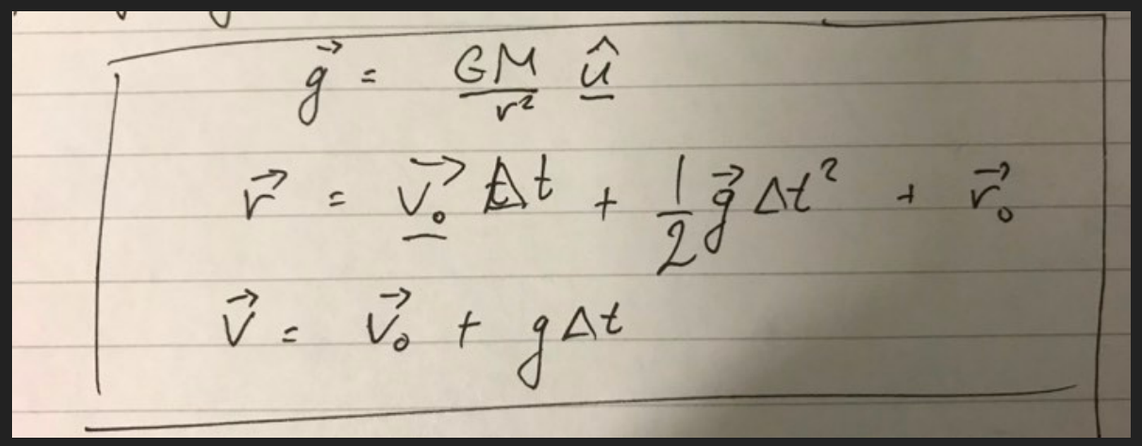
Gravitee Wars (FunkyPear, 2010)

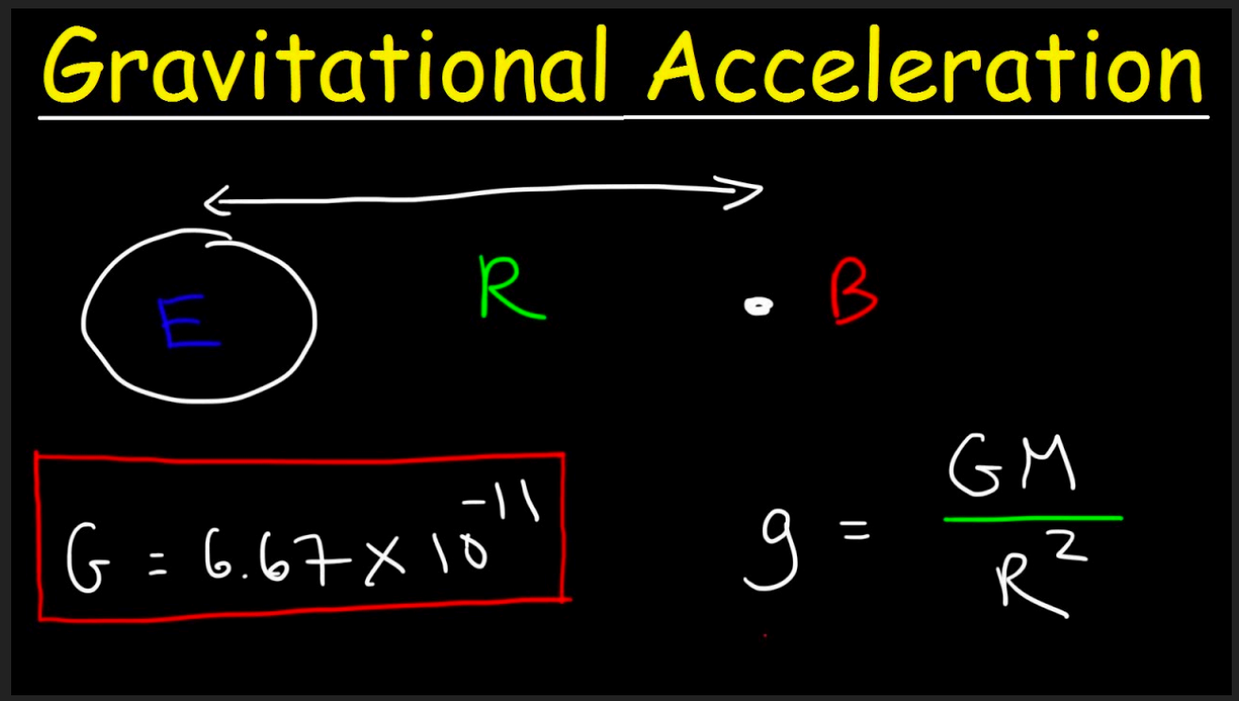
(RIP FLASH GAMES)

INSPIRATION

BEGINNING CONCEPTS

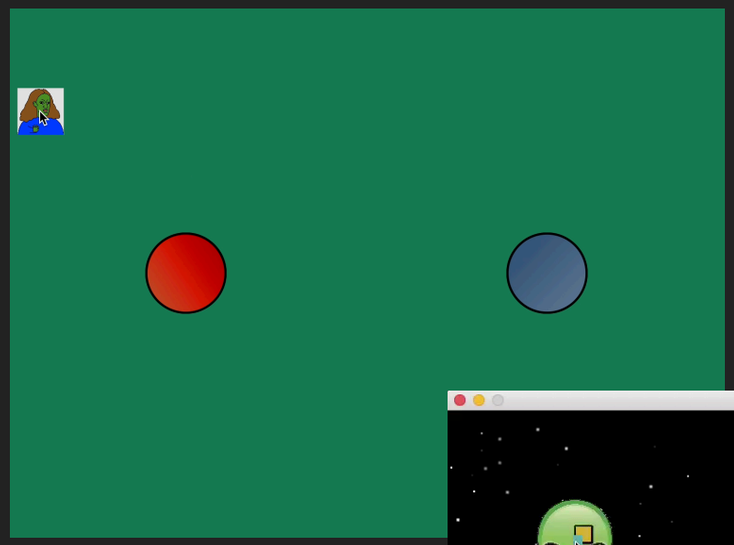
- Movement around celestial bodies
- Determining movement through distance and mass
- Simulation/game for shooting a projectile
- 2D vs 3D

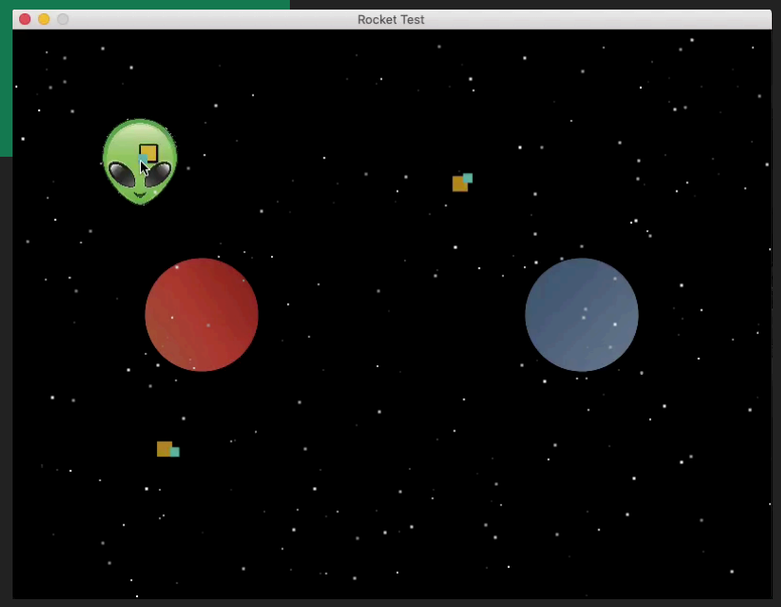




USING PYTHON

- Formulas work!
  (after some tweaking on arbitrary constants)
- Some problems, though:
  - Scalability
  - Drawing paths
  - No in-built functionality
  - Safety





USING UNITY

- Formulas also work!
- A 3D-space is already built-in
- Has many features which promote the development of an interesting and helpful user interface
- Very well-documented and is highly reputed

DEMO DEMO DEMO

FUTURE PLANS

(Probably nothing, honestly)

- Optimising Python arcade and turning it into a functional game, including:
  - Calculating and displaying a ‘ghost’ trajectory
  - User-created or randomly generated environments
- Developing the Unity simulator further:
  - Improving camerawork + other QoL features
  - More functionality (fast-forward, undo)

THANK YOU!