Group name : Non-bug Coding

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Part 3

1. What limitations do you think your game engine would have? Try to explain what these limitations are.

This engine can only render 2d sprites. Thus, it cannot run a 3D game without editing it. The engine takes only keyboard inputs. This engine does not include complex AI component. Obstacles can only move on a limited patterns and does not interact with other game objects, can only trigger the actions. This engine uses simple main loop. Therefore, the speed that game will reach its CPU cap would be much faster. Also, if there is a drawback from any process (ex. AI - pathfinding), it will delay the whole loop.

2. How can you adapt your game engine in order to accept a different game genre? You may use diagrams, UML, etc. to help illustrate your example.

Our engine can easily adapt any 2d side scrollers such as shooters, platformers, . So far, the engine can only process simple physics and rendering. Enemies or obstacles in this game does not need an AI component to it. However, if AI component is built in more complex NPCs and obstacles can be implemented. In addition, if Input Manager component is edited to accept mouse inputs, then the engine can handle games such as top view RPG and RTS. The processing speed can be solved by changing the main game loop into multithread.