Scripting for Games 1: P03 Game Development Tool Planning Document

Tool: Player Bars & HUD

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Synopsis:

        I plan on creating a tool that makes redundantly scripting Player Bars (health, mana, skill up) and the HUD with it unnecessary. My tool will be easily imported as a package and will not rely on a previously implemented system to reference for it to work. However, this tool can be hooked up to game systems. This Health Bar HUD tool will provide at least two different HUD visuals options for different game feels, such as the multiple heart/image bar for pixel games or the classic rectangular bars for fighting games. The tool will allow the developer to alter the bars' values in the inspector and will have a tester function to affirm the bars reflect changes in bar values (health decreasing).

Core Elements (list):

➢ Mechanic/System Tool for dropping in generic Bars HUD visuals for players
    o Will have options to choose from (health: hearts vs bar)
    o Includes health, mana, skill charge bars
➢ Will be able to change the generic bar values
➢ Bars will show numerical value out of total value
    o EX: 45/100 (hp)
➢ Bar visuals will update based on change in value
    o Health will turn yellow at 50% hp
    o Lose a heart out of 5 when damaged
➢ Bars' values are adjustable in Inspector
➢ Can be hooked up to Systems later but is independent from one

Implementation:

1. Planning
    a. Design the various layout options of HUDS & bar visuals I want to offer
        i. Separate Canvas' for HUD options
        ii. Differentiate visuals for the various types of bars when designing
            1. Red for health
            2. Blue for mana
            3. Yellow for charge up (purple for max charge)
    b. Assure Self-Contained from referencing outside systems
    c. Decide what scripts are needed for each bar to function

2. Scripts
    a. create one generic script usable by each bar (except maybe skill charge)
    b. Skill Charge bar may require a separate script to reflect max charge visuals (glowing?)
3. Deliverable
    a. Tool will be easily imported via unity package for easy accessibility for game developers