

Hi there, my name is Geraldo.

My main concern designing games is scalability. The best ideas can fall flat if the development is not viable.

For this specific project I aimed on spending most of my time designing a Modular Item System that would integrate well with a Dialogue and Inventory System. I chose to add a Dialogue System even though I was not briefed to do so because it dramatically increases Player Experience adding more interactions to NPCs and also by my time estimations it would be possible if I increased my workload a bit.

Using ScriptableObjects, I defined a structure for the Items that fit the project briefing and retain scalability. These Items can be allocated at will to DataShop ScriptableObjects which define what Items are available for the Player to buy.

The same approach is used to design the Dialogue System, swapping the Item and DataShop for a DialogData that can be coupled to a NPC and offers choices (Talk, Shop or Leave) to the Player.

All Systems were designed with a Plug and Play mentality with extra focus in Modularity, as If I was designing the necessary tools first for the systems that would come instead of attacking the systems directly.

I chose to keep the Inventory System more limited because I was running short on time but It still works with the same modularity. Simply assigning an Item to a Customizable Slot (Head, Shoes, Top, etc) triggers observer pattern behaviors that makes all the necessary code for the changes to reflect in the Game View.

I also took some time to implement from scratch the foundations of what I believe any game should have such as a Scene transition system, which allows for more complex menus and overall organization, a Settings menu for handling Window Mode, Resolution and VSync.

I avoid at all costs direct dependencies between UI Elements and their Managers with other Systems. Instead I use ScriptableObjects as a middleman.

ie: Player Spends Money → PlayerHUD (SO) triggers Event → Currency UI

This helps mitigate time lost to Missing References problems and other scalability related problems which happen as the project slowly grows in complexity.

Hope you like my mini demo and my overall skills!

Thanks in advance,
Geraldo