

Run (controller)

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| <ul style="list-style-type: none"> run the game | <ul style="list-style-type: none"> CommandLine (calls) SceneManager (calls) |
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CommandLine (Basic Command Line Interface)

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| <ul style="list-style-type: none"> Identifies inputs and sends to associated controller classes | <ul style="list-style-type: none"> All controller classes |
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Quest Manager (Controller)

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| <ul style="list-style-type: none"> Receive input information from console Call CompleteQuest, AcceptQuest, FailQuest | <ul style="list-style-type: none"> CompleteQuest (calls) AcceptQuest (calls) FailQuest (calls) |
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CompleteQuest (Use case)

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| <ul style="list-style-type: none"> Modify Quest Entities Modify Player quest journal and add rewards and remove quest items if any | <ul style="list-style-type: none"> Quest (Modify) Player (Modify) QuestManager (called by) |
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AcceptQuest (Use case)

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| <ul style="list-style-type: none"> Modify Quest entities Modify Player's quest journal and add quest items if any | <ul style="list-style-type: none"> Quest (modify) Player (modify) QuestManager (called by) |
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FailQuest (Use case)	
<ul style="list-style-type: none"> • Modify Quest entities • Modify Player's quest journal and remove quest items if any 	<ul style="list-style-type: none"> • Quest (modify) • Player (modify) • QuestManager (called by)

Abstract		
Quest (Entity)		FetchQuest, CombatQuest
<ul style="list-style-type: none">• Store state of quest (unaccepted, accepted, failed, completed)• Store rewards for quest completion		<ul style="list-style-type: none">• FailQuest (modified by)• AcceptQuest (modified by)• CompleteQuest (modified by)

FetchQuest (Entity)		Quest
<ul style="list-style-type: none">• Store item required for completion	<ul style="list-style-type: none">• FailQuest (modified by)• AcceptQuest (modified by)• CompleteQuest (modified by)	

CombatQuest (Entity)		Quest
<ul style="list-style-type: none">• Store information about combat requirement for completion	<ul style="list-style-type: none">• FailQuest (modified by)• AcceptQuest (modified by)• CompleteQuest (modified by)	

CharacterManager (Controller)

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| <ul style="list-style-type: none"> • Recieves input information from console • Calls the multitude of case classes we haven't come up with yet | <ul style="list-style-type: none"> • InventoryChange (modified by) |
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InventoryChange (Use case)

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| <ul style="list-style-type: none"> • Adds or removes an item from a Character entities' inventory | <ul style="list-style-type: none"> • Character (modifies) • PlayerCharacter (modifies) • NonPlayerCharacter (modifies) • CharacterManager (called by) |
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Abstract

Character (Entity)

NonPlayerCharacter, PlayerCharacter

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| <ul style="list-style-type: none"> • Stores Inventory • Stores stats such as Health, Mana?, Stamina?, Trashiness • Stores specific actions (such as combat moves) | <ul style="list-style-type: none"> • InventoryChange (modified by) |
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PlayerCharacter (Entity)

Character

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| <ul style="list-style-type: none"> • Store Skills/Proficiencies (such as level 2 proficiency in stealing) | <ul style="list-style-type: none"> • InventoryChange (modified by) |
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NonPlayerCharacter (Entity)

Character

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| <ul style="list-style-type: none"> • Stores dialogue • Stores quests available from this npc | <ul style="list-style-type: none"> • InventoryChange (modified by) |
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CombatManager (Controller)

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| <ul style="list-style-type: none">• Receives input information from the console• Calls Damage, StatusEffect, EndCombat | <ul style="list-style-type: none">• Damage (calls)• StatusEffect (calls)• EndCombat (calls) |
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Damage (Use case)

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| <ul style="list-style-type: none">• Calculates whether an attack lands• If the attack lands, calculates damage• Modifies Character entity to reduce their temporary health (as apposed to their maximum health) | <ul style="list-style-type: none">• Character (modifies)• PlayerCharacter (modifies)• NonPlayerCharacter (modifies)• CombatManager (called by) |
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StatusEffect (Use case)

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| <ul style="list-style-type: none">• Modifies a Character entity to have a status effect. | <ul style="list-style-type: none">• Character (modifies)• PlayerCharacter (modifies)• NonPlayerCharacter (modifies)• CombatManager (called by) |
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EndCombat (Use case)

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| <ul style="list-style-type: none">• Handles completing combat• Sends rewards if any to CharacterManager• Sends changes if any to WorldStateManager | <ul style="list-style-type: none">• CombatManager (called by)• WorldStateManager (sends changes)• CharacterManager (sends rewards) |
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WorldStateManager (Controller)

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| <ul style="list-style-type: none"> • Takes input from other classes and executes related use cases | <ul style="list-style-type: none"> • All other controller classes • TextCommandLine (Receives input) |
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ModifyWorldState (Use case)

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| <ul style="list-style-type: none"> • Placeholder for use cases that will modify world state • receives information from WorldStateManager • Modifies world state | <ul style="list-style-type: none"> • WorldStateManager (called by) • WorldState (modifies) |
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WorldState (Entity)

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| <ul style="list-style-type: none"> • Holds variables pertaining to player choices • Holds variables pertaining to night/day • Holds variables pertaining to other information that would affect surroundings. | <ul style="list-style-type: none"> • ModifyWorldState (modified by) |
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Abstract

SceneManager (Controller)

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| <ul style="list-style-type: none"> • Receives input from CommandLine about when the player moves locations or "affects" a location • Decides which scene to display based on the world state | <ul style="list-style-type: none"> • DisplayScene (calls) • CommandLine (receives input from) |
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DisplayScene (User case)

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| <ul style="list-style-type: none"> • Returns the description of the current scene as a string | <ul style="list-style-type: none"> • SceneManager (called by) • Scene (accesses) |
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Scene (Entity)		SpecificSceneChildClasses (entities)
<ul style="list-style-type: none">• Holds variables of all NPCs present• Holds a description of the area• Holds a variable of what areas connect to this one		<ul style="list-style-type: none">• DisplayScene (modified by)