

Run (controller)

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

CommandLine (Basic Command Line Interface)

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

Quest Manager (Controller)

- | | |
|--|---|
| <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) |
|--|---|

CompleteQuest (Use case)

- | | |
|--|---|
| <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) |
|--|---|

AcceptQuest (Use case)

- | | |
|---|---|
| <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) |
|---|---|

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)

- | | |
|--|---|
| <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) |
|--|---|

InventoryChange (Use case)

- | | |
|--|---|
| <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) |
|--|---|

Abstract

Character (Entity)

NonPlayerCharacter, PlayerCharacter

- | | |
|--|---|
| <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) |
|--|---|

PlayerCharacter (Entity)

Character

- | | |
|--|---|
| <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) |
|--|---|

NonPlayerCharacter (Entity)

Character

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

CombatManager (Controller)

- | | |
|---|---|
| <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) |
|---|---|

Damage (Use case)

- | | |
|---|---|
| <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) |
|---|---|

StatusEffect (Use case)

- | | |
|--|---|
| <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) |
|--|---|

EndCombat (Use case)

- | | |
|--|--|
| <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) |
|--|--|

WorldStateManager (Controller)

- | | |
|---|---|
| <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) |
|---|---|

ModifyWorldState (Use case)

- | | |
|---|---|
| <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) |
|---|---|

WorldState (Entity)

- | | |
|--|--|
| <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) |
|--|--|

Abstract

SceneManager (Controller)

- | | |
|---|--|
| <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) |
|---|--|

DisplayScene (User case)

- | | |
|--|---|
| <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) |
|--|---|

Abstract	
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)