

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 DisplayDialogue |
|--|---|

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) |
|--|---|

DisplayDialogue (Use Case)

- | | |
|--|--|
| <ul style="list-style-type: none"> • Handles interactions with npcs | <ul style="list-style-type: none"> • NonPlayableCharacter • Player • AcceptQuest • CompleteQuest |
|--|--|

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) |
|--|--|