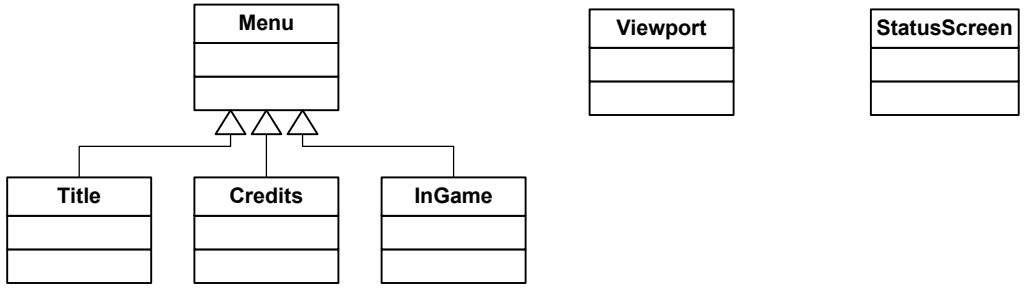
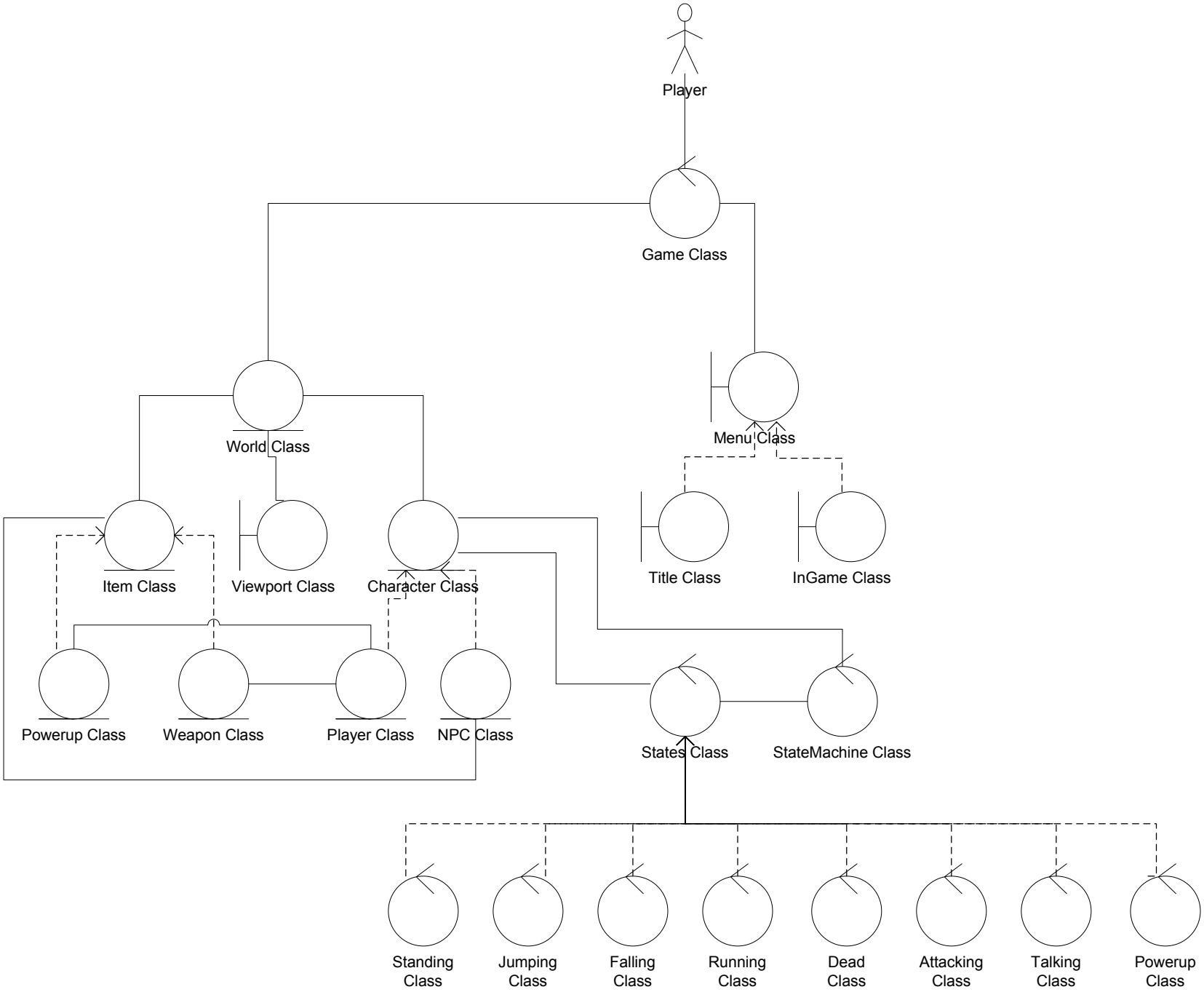
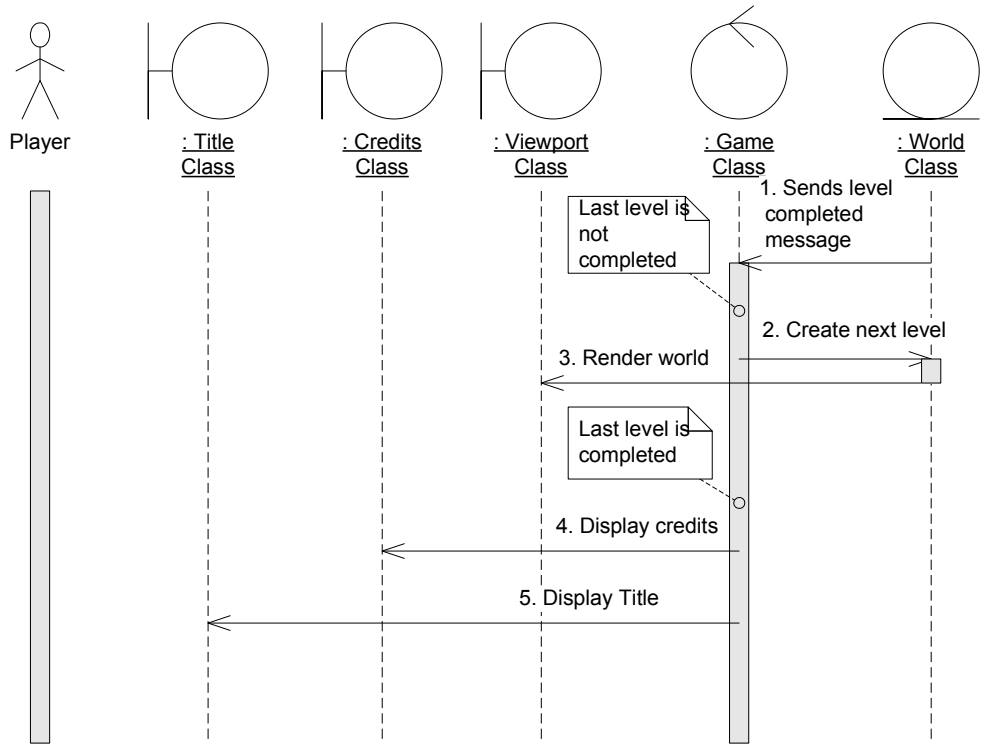
Boundary Classes



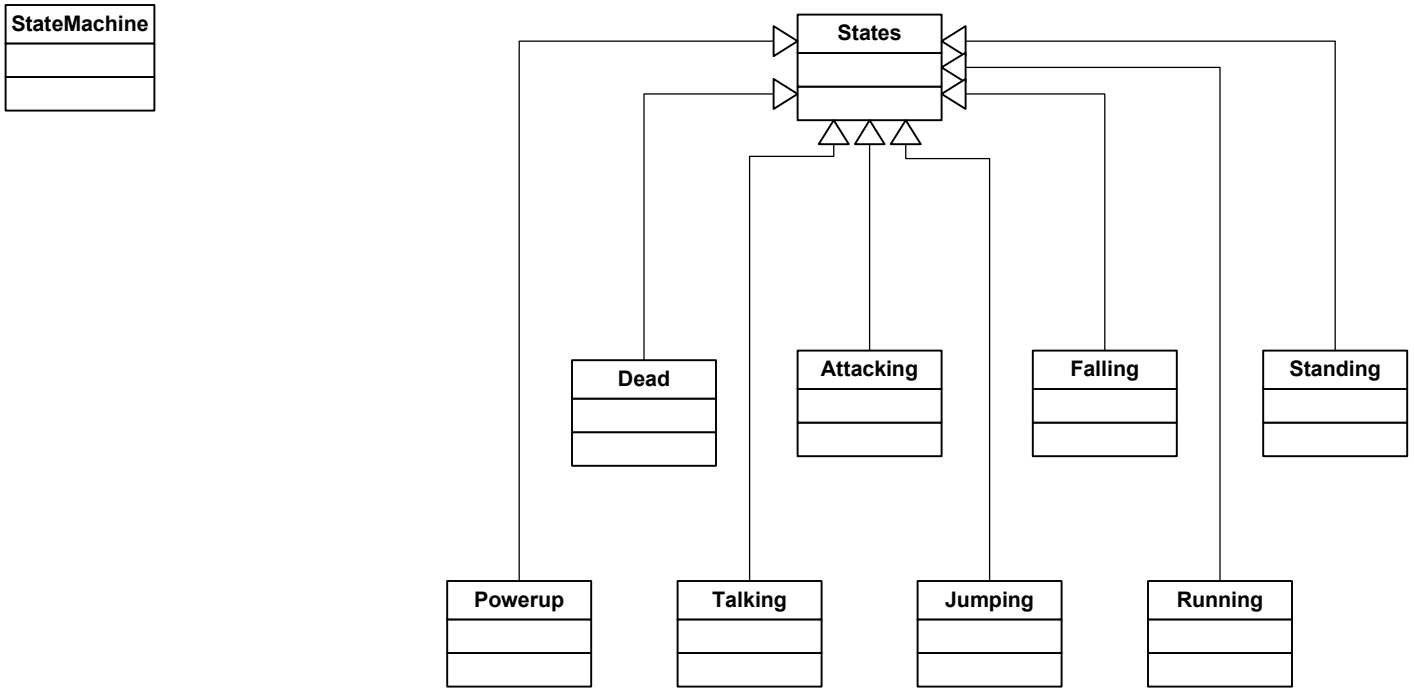
# Class Diagram



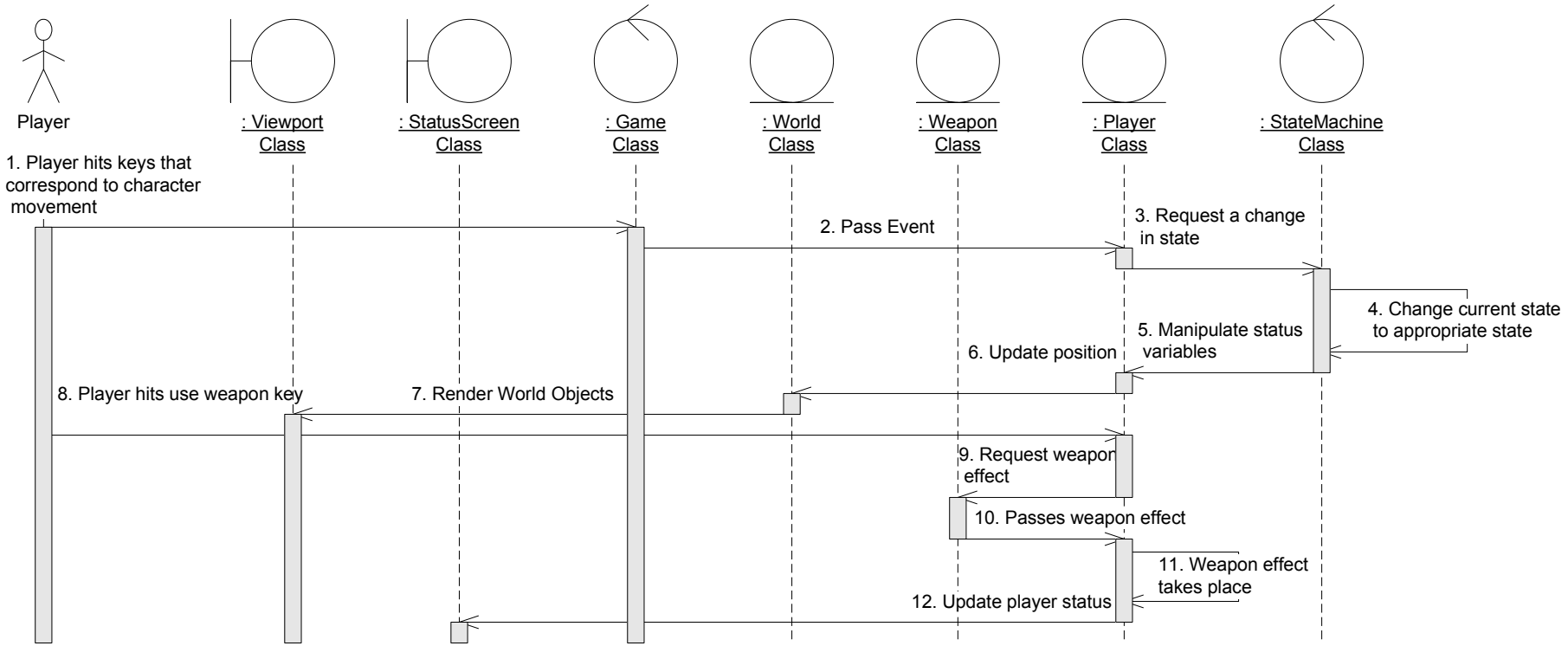
# Completes Level



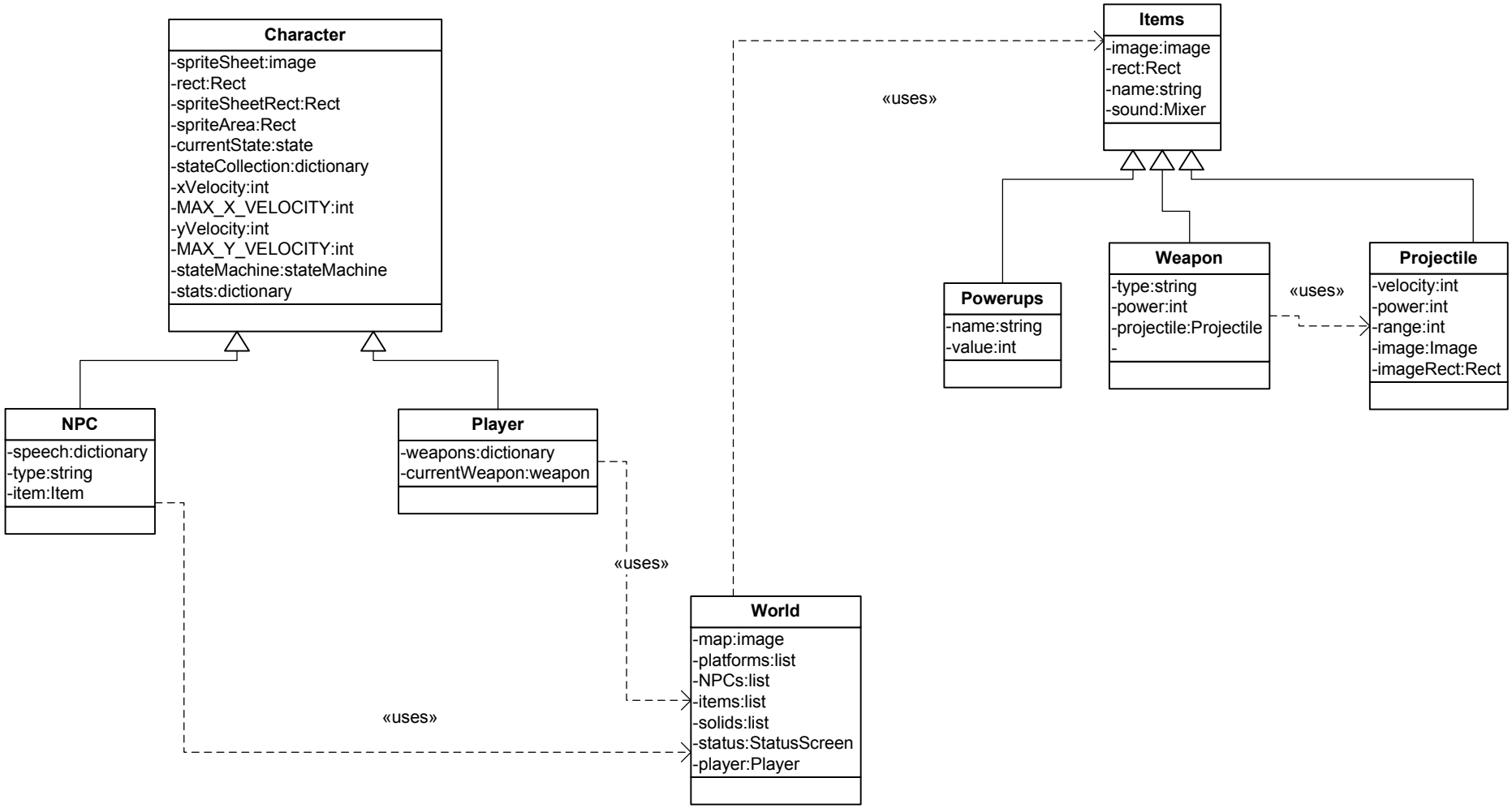
Control Classes



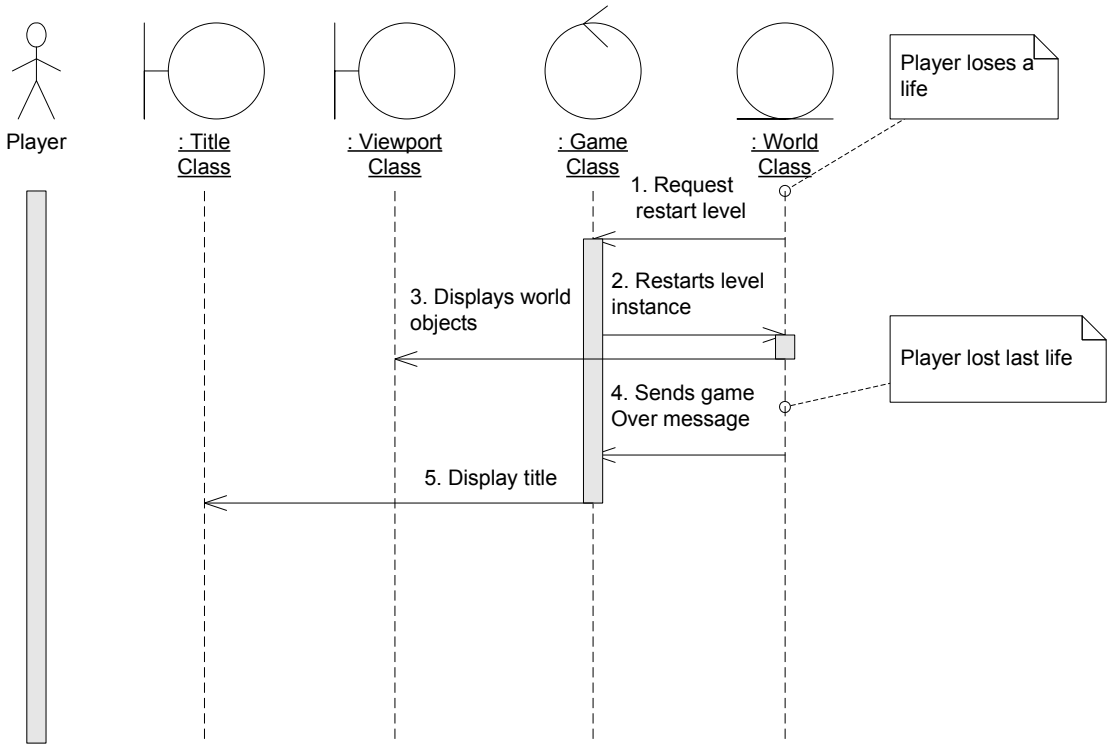
# Control Character



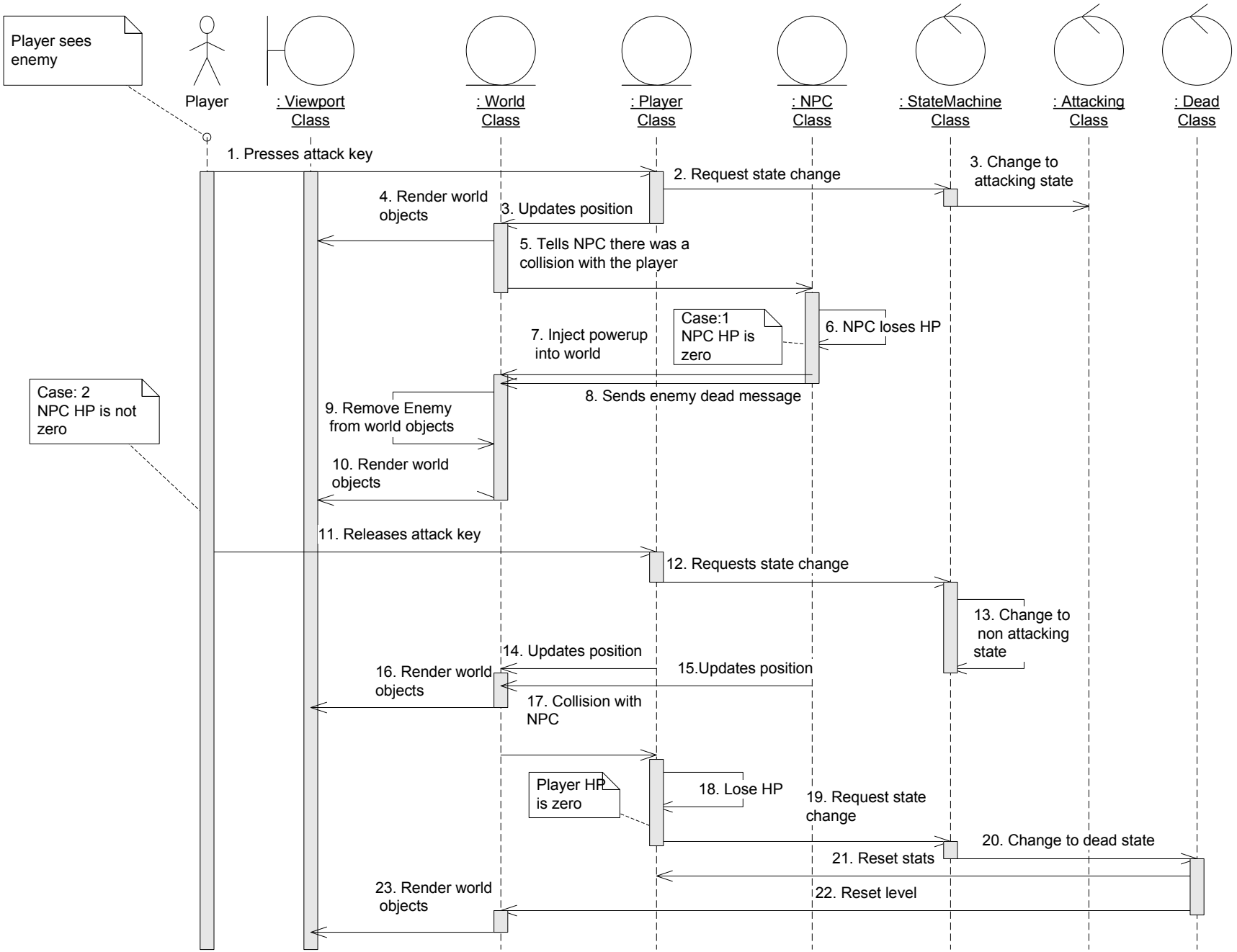
# Entity Classes



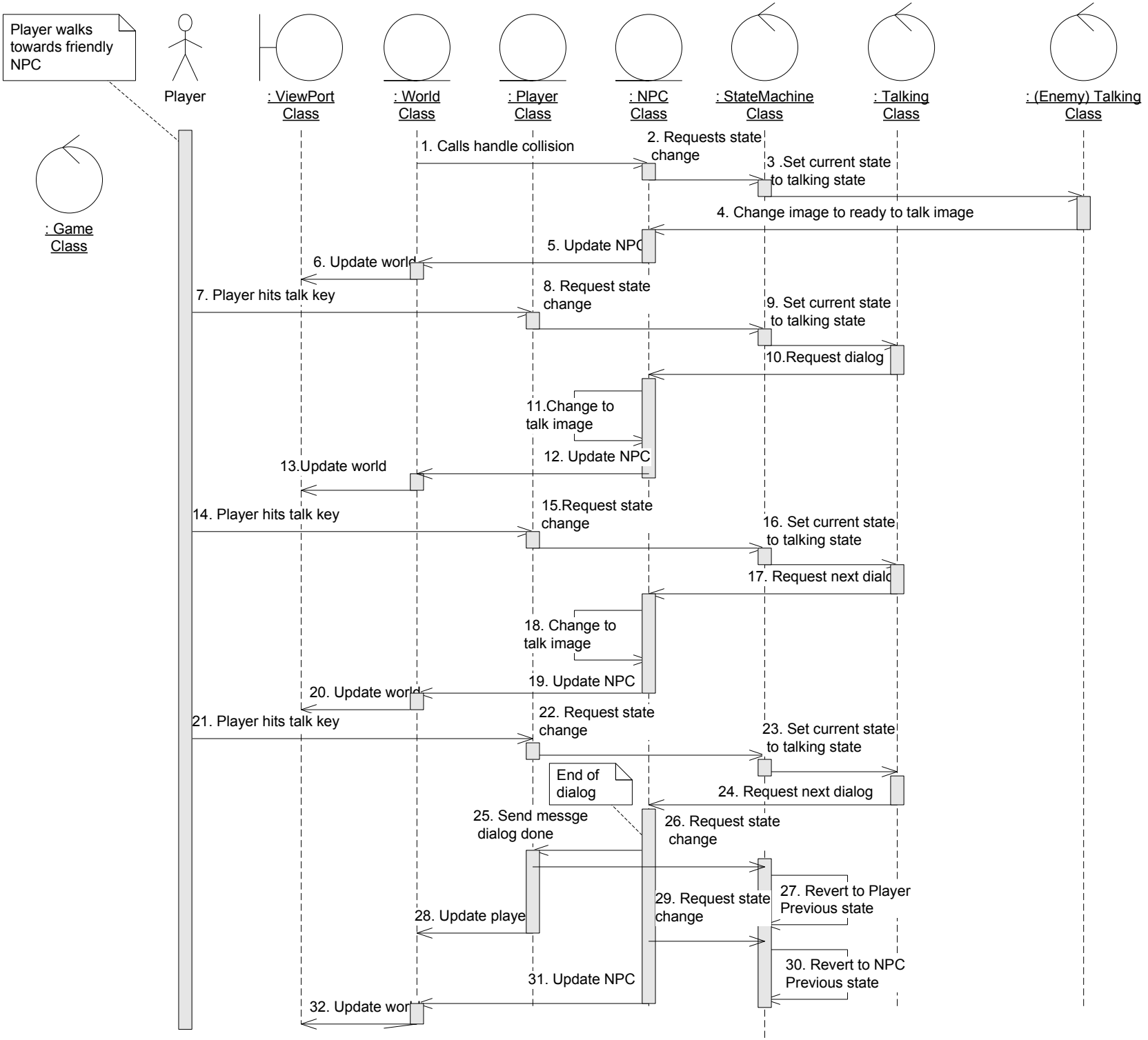
Fails to Complete Level



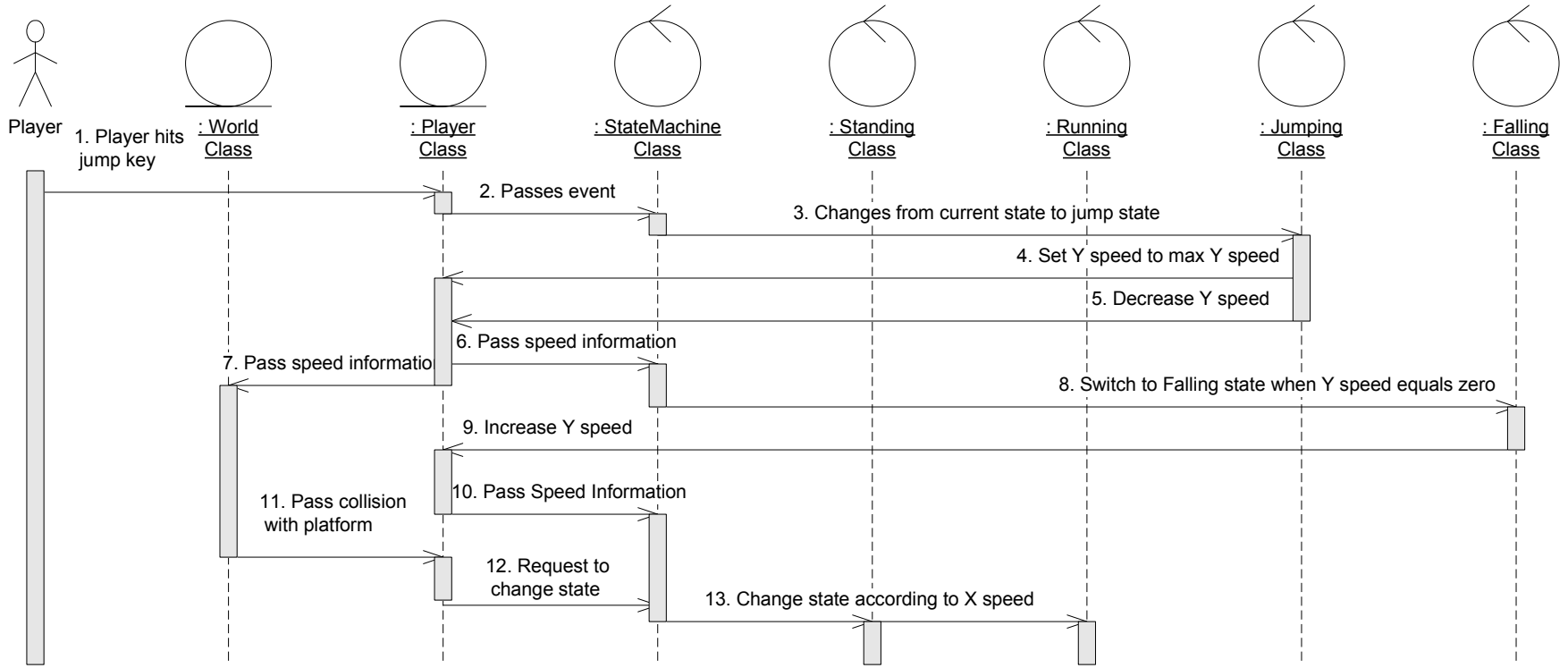
# Interact with Enemy NPC



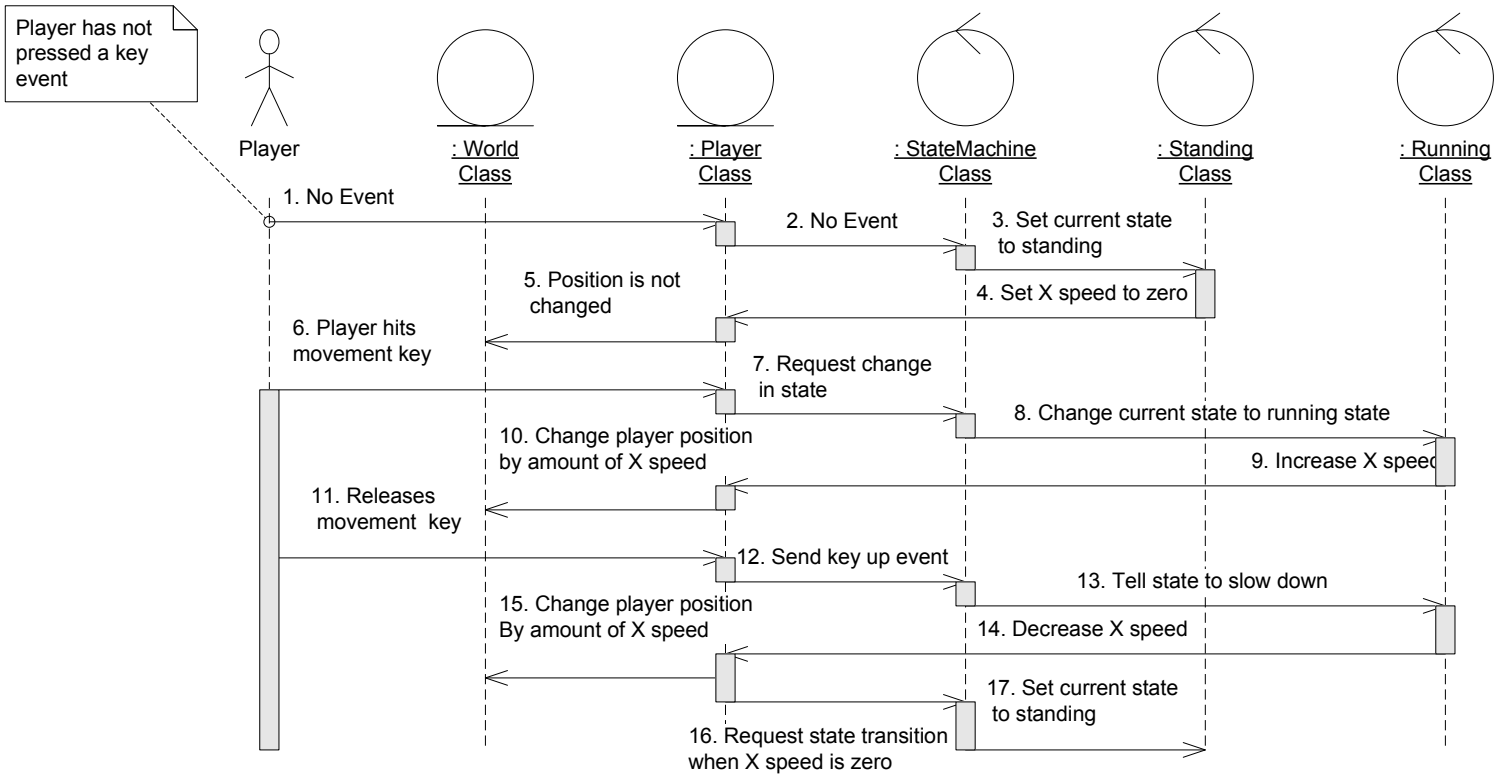
# Interact with Friendly NPC



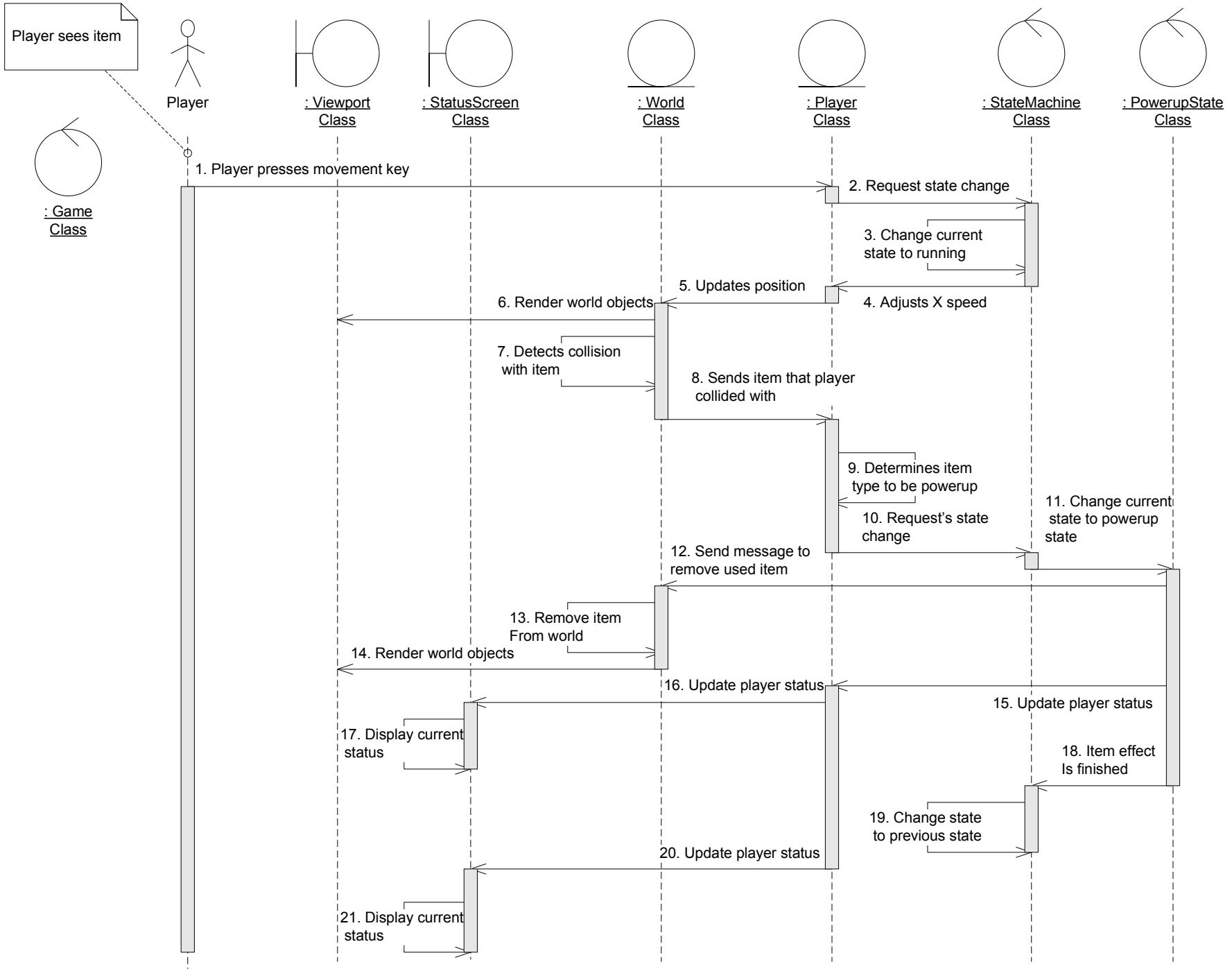
# State Transitions



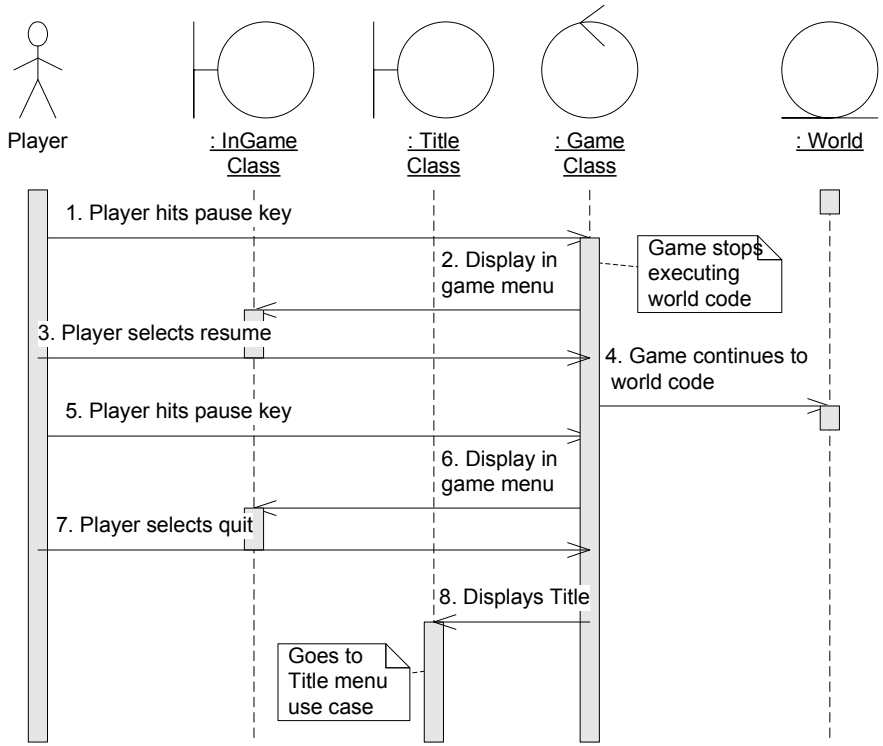
# State Transistions



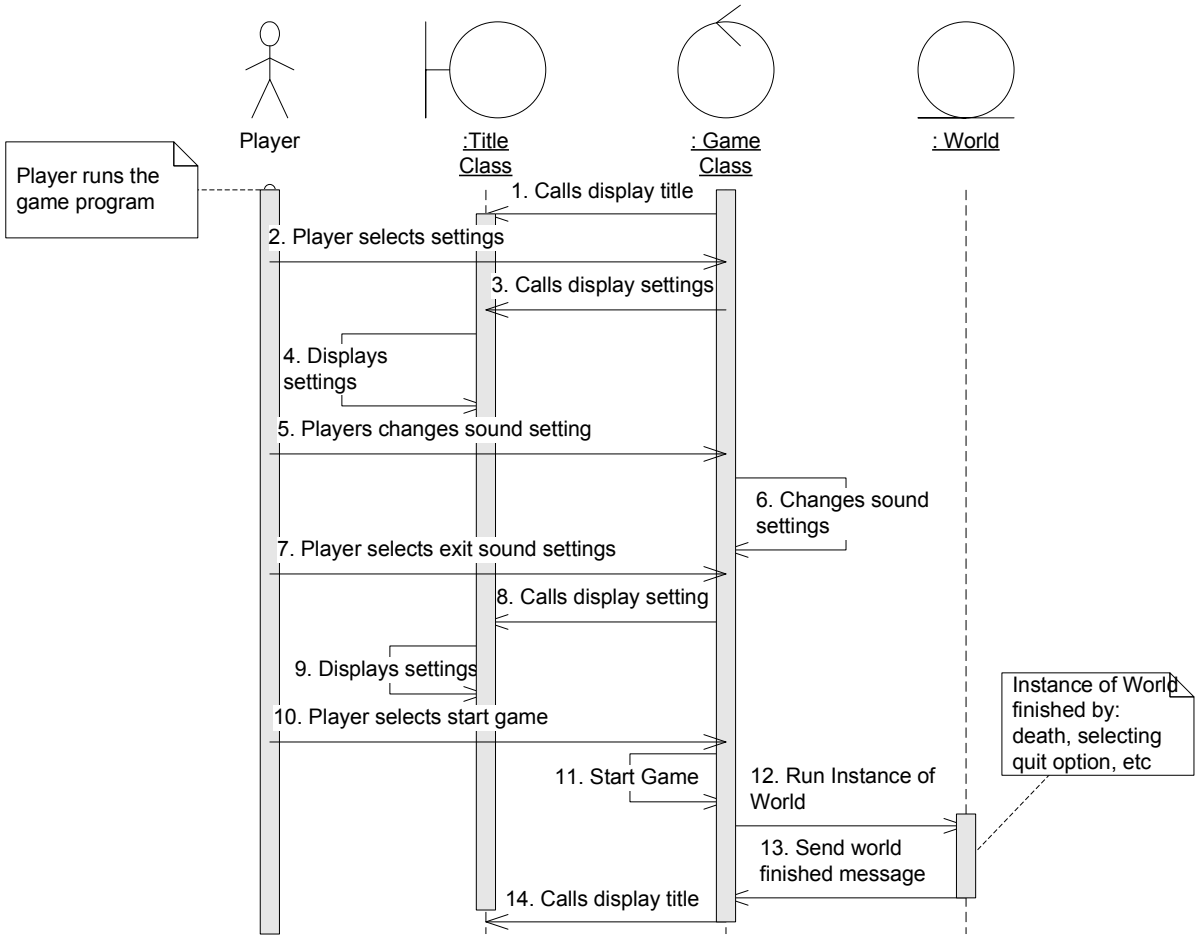
# Use Item


Player sees item
Player
: Viewport Class
: StatusScreen Class
: World Class
: Player Class
: StateMachine Class
: PowerupState Class
: Game Class
1. Player presses movement key
2. Request state change
3. Change current state to running
4. Adjusts X speed
5. Updates position
6. Render world objects
7. Detects collision with item
8. Sends item that player collided with
9. Determines item type to be powerup
10. Request's state change
11. Change current state to powerup state
12. Send message to remove used item
13. Remove item From world
14. Render world objects
15. Update player status
16. Update player status
17. Display current status
18. Item effect Is finished
19. Change state to previous state
20. Update player status
21. Display current status

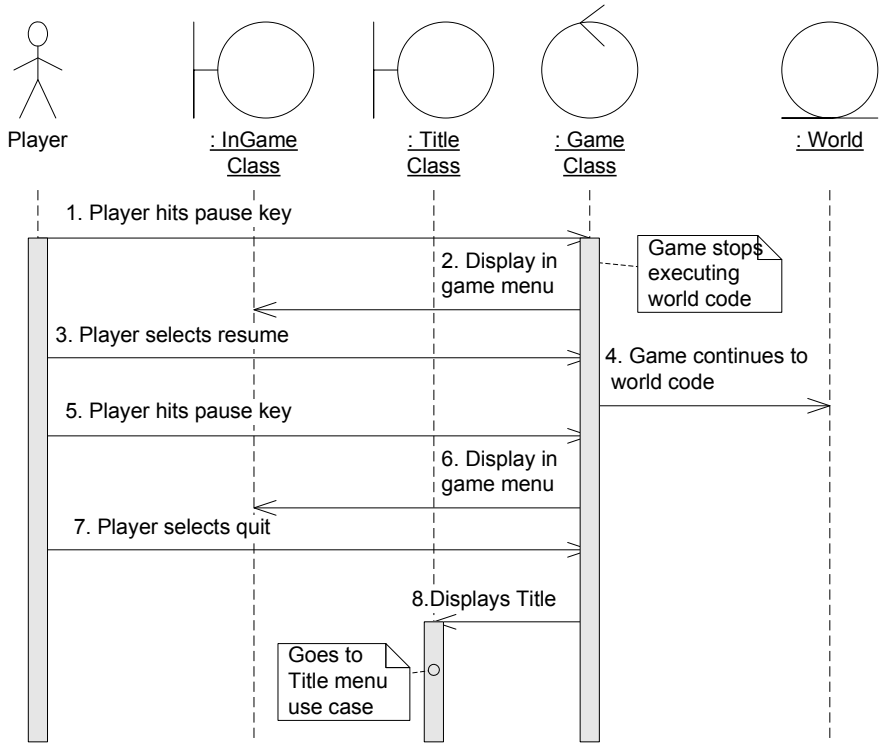
# Uses Menu


Player
: InGame Class
: Title Class
: Game Class
: World
1. Player hits pause key
2. Display in game menu
Game stops executing world code
3. Player selects resume
4. Game continues to world code
5. Player hits pause key
6. Display in game menu
7. Player selects quit
8. Displays Title
Goes to Title menu use case

# Use Menu


Player
:Title Class
: Game Class
: World
Player runs the game program
1. Calls display title
2. Player selects settings
3. Calls display settings
4. Displays settings
5. Players changes sound setting
6. Changes sound settings
7. Player selects exit sound settings
8. Calls display setting
9. Displays settings
10. Player selects start game
11. Start Game
12. Run Instance of World
13. Send world finished message
14. Calls display title
Instance of World finished by: death, selecting quit option, etc

# Uses Menu


Player
: InGame Class
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8.Displays Title
Goes to Title menu use case