Use Case 1: Starting the Game

Objective

- To start playing the game

Pre-conditions

- Player can connect to a LAN (if playing multiplayer)

Post-conditions

- Success
    - Single player game starts
    - Players able to join lobby and start the game
- Failure
    - App crashes
    - Player disconnect from the LAN

Actors

- 1-4 Players

Triggers

- Player launches the app

Normal flow

- Start Screen
    - Choose Single player

Alternative flow 1

- Start Screen
    - Choose Multiplayer
        - Join game
            - Exit lobby
            - Starting room: initial action word choice

Alternative flow 2

- Start Screen
    - Choose Multiplayer

- Host game
  - Exit lobby
  - Starting room: initial action word choice
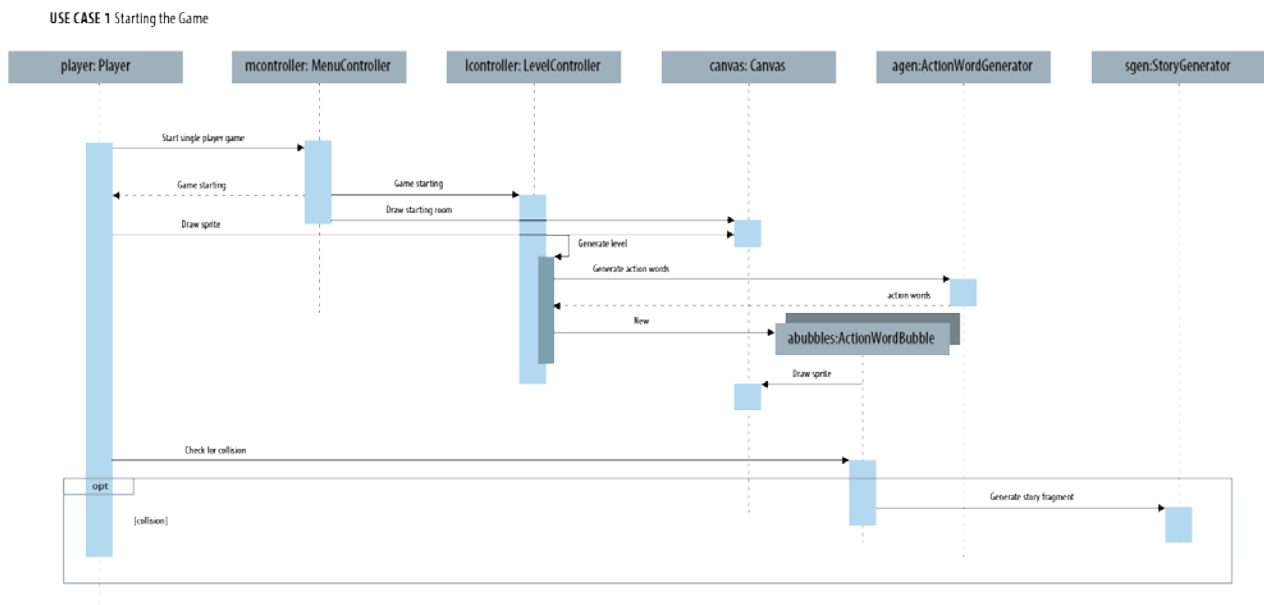
Exception flow

- Start Screen
  - Choose Multiplyaer
    - Join game/Host game
      - Disconnect from LAN
      - Return to Start Screen

Interacts with

- Triggering action word prompts

Open issues

- Do all players have to give assent before the game starts or can the host choose to start whenever it wishes?

USE CASE 1 Starting the Game

Use Case 2: Interacting with in-game objects

Objective

- To interact with an in-game object (immersive experience; player collaboration)

Pre-conditions

- Players have started the game

Post-conditions

- Success
  - Object responds if player chooses to interact
  - Nothing changes if player chooses not to interact
- Failure
  - App crashes
  - Player disconnect from the LAN (for multiplayer)

Actors

- 1-4 Players

Triggers

- Player walks over in-game object

Normal flow

- Dialogue pops up, prompts player
  - Player chooses to interact further
    - Object responds
    - Aesthetic changes to environment
    - Trigger action word prompts
    - Affect global mechanics (eg. increased gravity)
    - Reveal more storyline

Alternative flow

- Dialogue pops up, prompts player
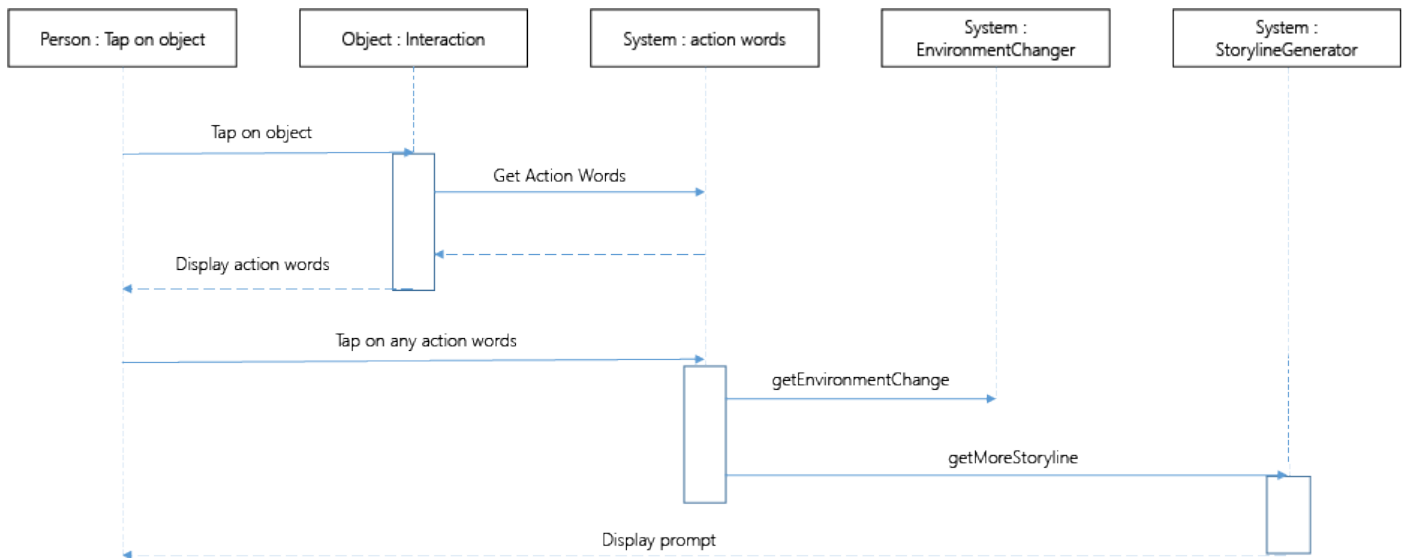 - Player chooses not to interact further

Exception flow

- Multiple players try to interact with the object at the same time

Interacts with

Open issues

- How to prevent multiple players from interacting with the same object simultaneously?

Use Case 3: Interacting with enemies

Objective

- Kill/avoid enemy or get killed by enemies

Pre-conditions

- Players have started the game
- There are enemies on the map

Post-conditions

- Player kills enemy
    - o enemy disappears
    - o enemy respawns after a while/ is permanently gone
- Enermy kills player
    - o player respawns at original spawn point

Actors

- 1- 4 players

Triggers

- Attack and collide into enemy
- Collide into enemy without attacking

Normal flow

- Press A button
  - o Collide with enemy
  - o Enemy dies

Alternative flow

- Collide with enemy
  - o Player dies

Interacts with

- Trigger action words prompt

Open issues

User Case 4: Interacting with other players

Objective

- To interact with other players

Pre-conditions

- Players have started the game
- Multiplayer game

Post-conditions

- Players gain new information

Actors

- 2-4 Players

Triggers

- Players collide (overlap) with each other and press the A button

Normal flow (aesthetic interaction)

- One player moves over the other, interaction prompt appears (change in color, or dialogue pop-up)

    - Any one player presses the A button to interact
        - Triggers aesthetic change (sound or animation)

Alternative flow (information passing)

- One player moves over the other, interaction prompt appears (change in color, or dialogue pop-up)

    - Any one player presses the A button to interact
   - Dialogue appears with information

Exception flow (multiple players trying to interact together)

- More than two players overlap/collide, try to interact
    - The first pair that starts to interact is no longer interactable with other players for the duration of their interaction
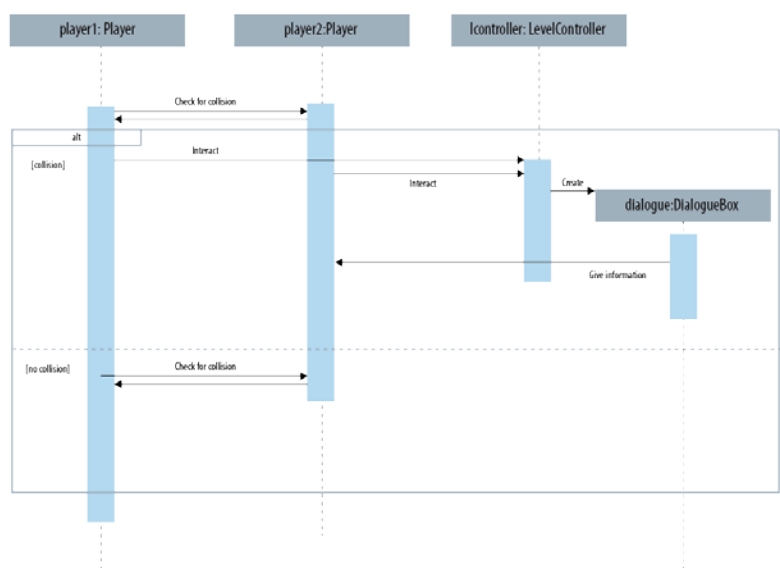   - Interacting pairs interact as normal

Interacts with

Open issues

USE CASE 3 Interacting with enemies
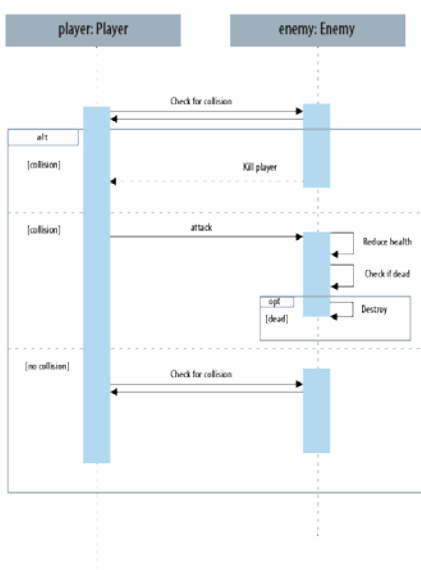
USE CASE 4 Interacting with other players

User Case 5: Triggering action word prompts

Objective

- To allow players to choose story elements that will affect gameplay

Pre-conditions

- Players have started the game

Post-conditions

- Map is altered
- Story is added to
- Triggering next level block

Actors

1-4 Players

Triggers

- Interact with some key object
- Unlocked post boss-fight
- End of level-block

Normal flow

- Action word bubbles appear on screen
  - o Player jumps to touch a bubble and presses A button to choose word
  - o Dialogue appears to elaborate on the chosen scenario
    - Map is altered in some way
      - Aesthetic changes
      - New objects appear on the map
      - Unlock NPC dialogue

Interacts with

- Interacting with objects
- Ending of level block
- Interacting with enemies

Open issues
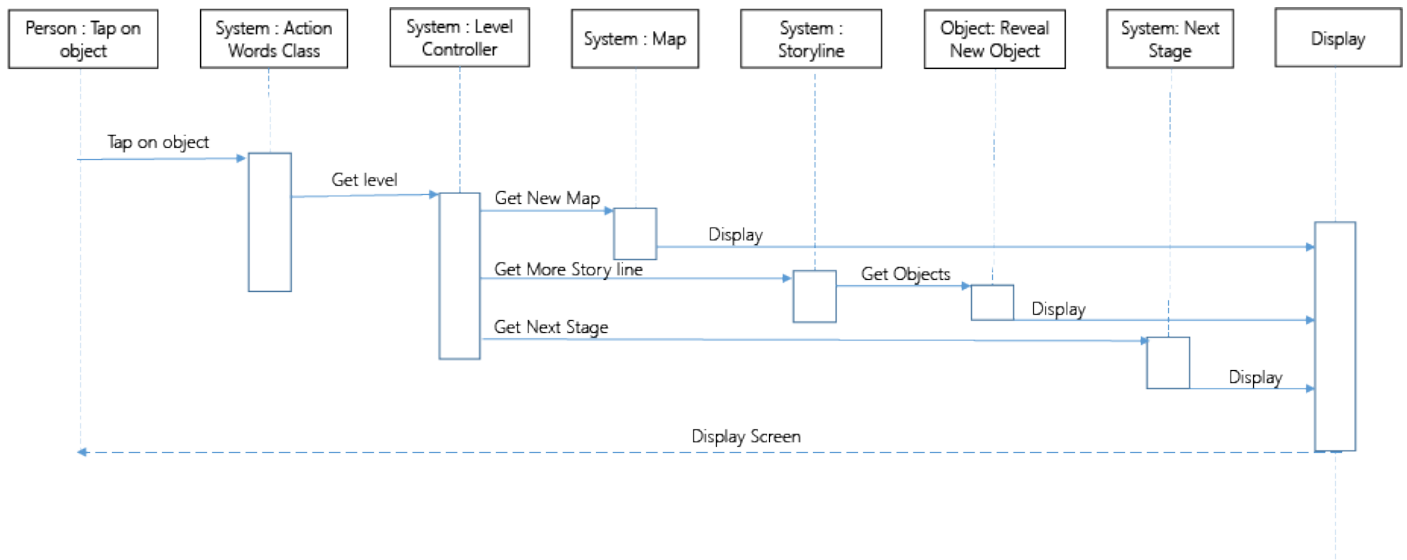
User Case 6: Ending of level block

Objective

- Allow user to progress to the next level/end the game

Pre-conditions

- Player have started the game
- Players have finished the main quest for each level

Post-conditions

- Players choose action words to set the next level
    - o Players advance to next level block

Actors

1-4 Players

Triggers

- Players finish main level quest

Normal flow

- Main level quest is completed
    - o Dialogue appears on each player's screen to notify them on quest completion and story progression
        - ▪ Direction prompt appears on players screens to prompt them to move to gathering point (denoted by some structure?)

- All players reach gathering point
- Action word selection for the next level is triggered
- Players advance to next level

Interacts with

- Interacting with objects
- Ending of level block
- Interacting with enemies

Open issues

- How to categorize and track story elements in the game? (to determine how next level is generated based on the chosen action word)

USE CASE 6 Ending of level block