Name: Shashwot Niraula Mark ______________________/50

1. Brief introduction __/3

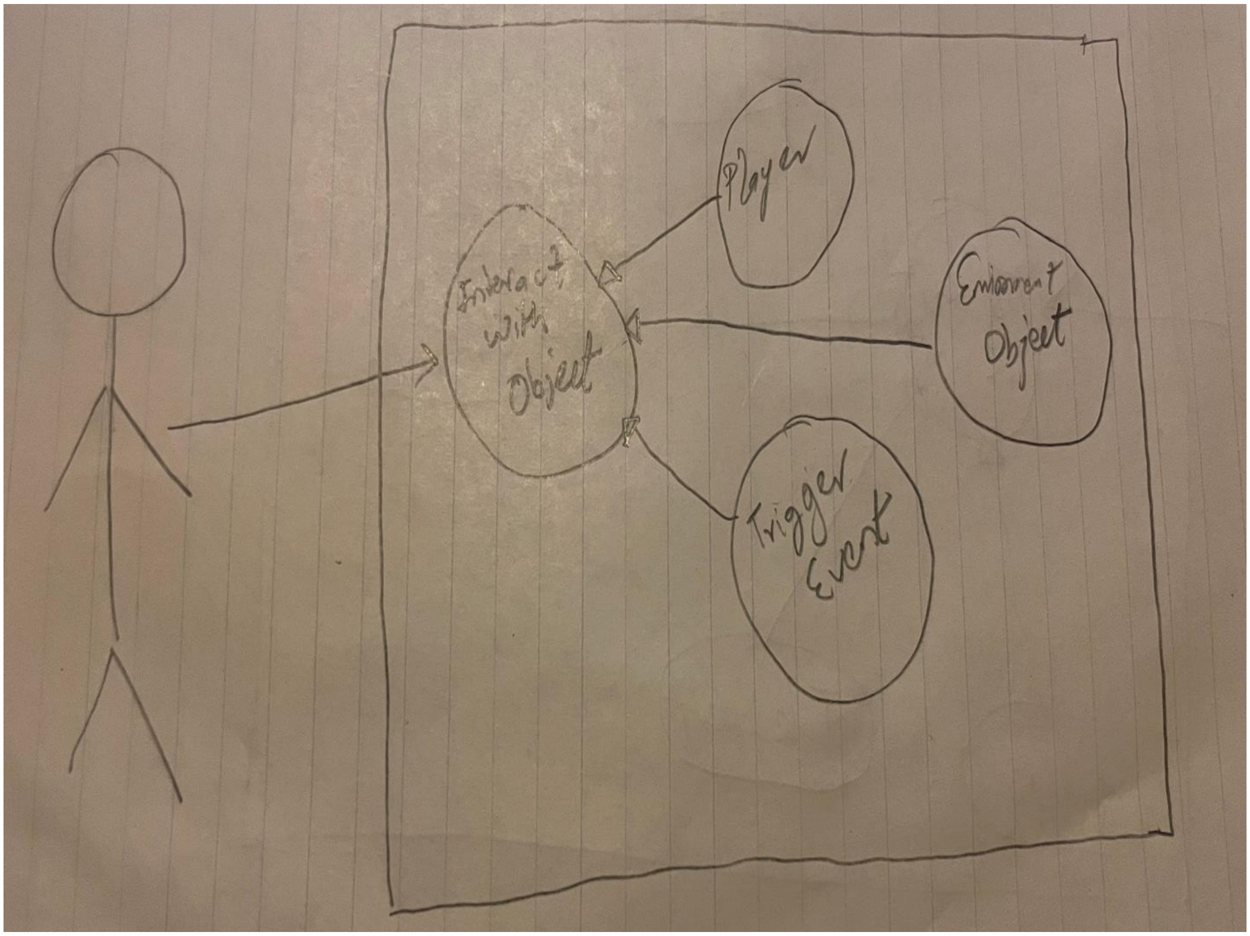
In my role as the developer responsible for the tile and tile event feature in our game, I play a crucial role in shaping the gameplay experience. Similar to the example you provided, my primary task revolves around creating and managing tiles and tile events that drive object interactions within the game world.

In our game, tiles serve as the foundation upon which the game world is constructed. Each tile represents a distinct element or terrain, be it a grassy field, a rocky path, or a mystical forest. These tiles are not just static visuals; they are interactive components that influence gameplay. I design and implement various types of tiles, each with unique attributes and behaviors.

Tile events are the driving force behind these interactions. These events can be triggered when a player character steps onto or interacts with a specific type of tile. My role involves defining and managing these events, ensuring they enhance the gameplay experience.

2. Use case diagram with scenario __14

Use Case Diagrams



Scenario 1

In this diagram:

- **Game World**: Represents the overall game environment where tiles and tile events are used.
- **Player Character**: Represents the in-game character that interacts with the tiles and triggers tile events.
- **Tiles**: The developer's primary responsibility includes creating and managing various tile types, each with unique attributes and behaviors.
- **Tile Events**: The developer also defines and manages tile events, which are triggered when a player character interacts with specific types of tiles.

The use cases associated with this feature are:

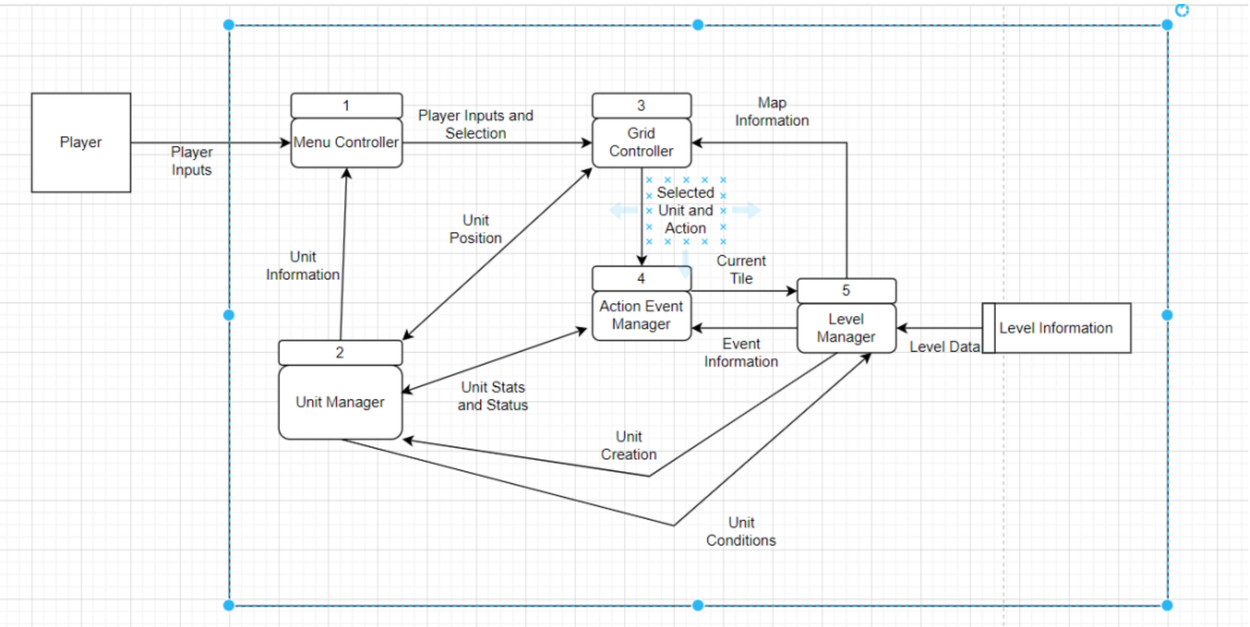
1. **Create Tile Types**: The developer creates different types of tiles with unique attributes and behaviors, such as forest tiles or rocky path tiles.
2. **Define Tile Attributes and Behaviors**: The developer defines the characteristics and interactive behaviors of each tile type.
3. **Manage Tile Events**: The developer is responsible for creating and managing tile events that enhance gameplay.
4. **Link Tile Events to Specific Tile Types**: This use case involves connecting tile events to specific tile types, ensuring that the right events are triggered when a player interacts with tiles.
5. **Design Object Interactions**: The developer defines how objects and characters interact with tiles and tile events.
6. **Create Object-Tile Interaction Rules**: This use case involves specifying the rules governing how objects and characters interact with specific types of tiles and tile events.
7. **Scale Complexity of Tiles and Tile Events as Game Progresses**: The developer ensures that the complexity of tiles and tile events increases as the game progresses, providing a sense of challenge and progression for the players.

This use case diagram outlines the major interactions and responsibilities related to the tile and tile event feature in the game.

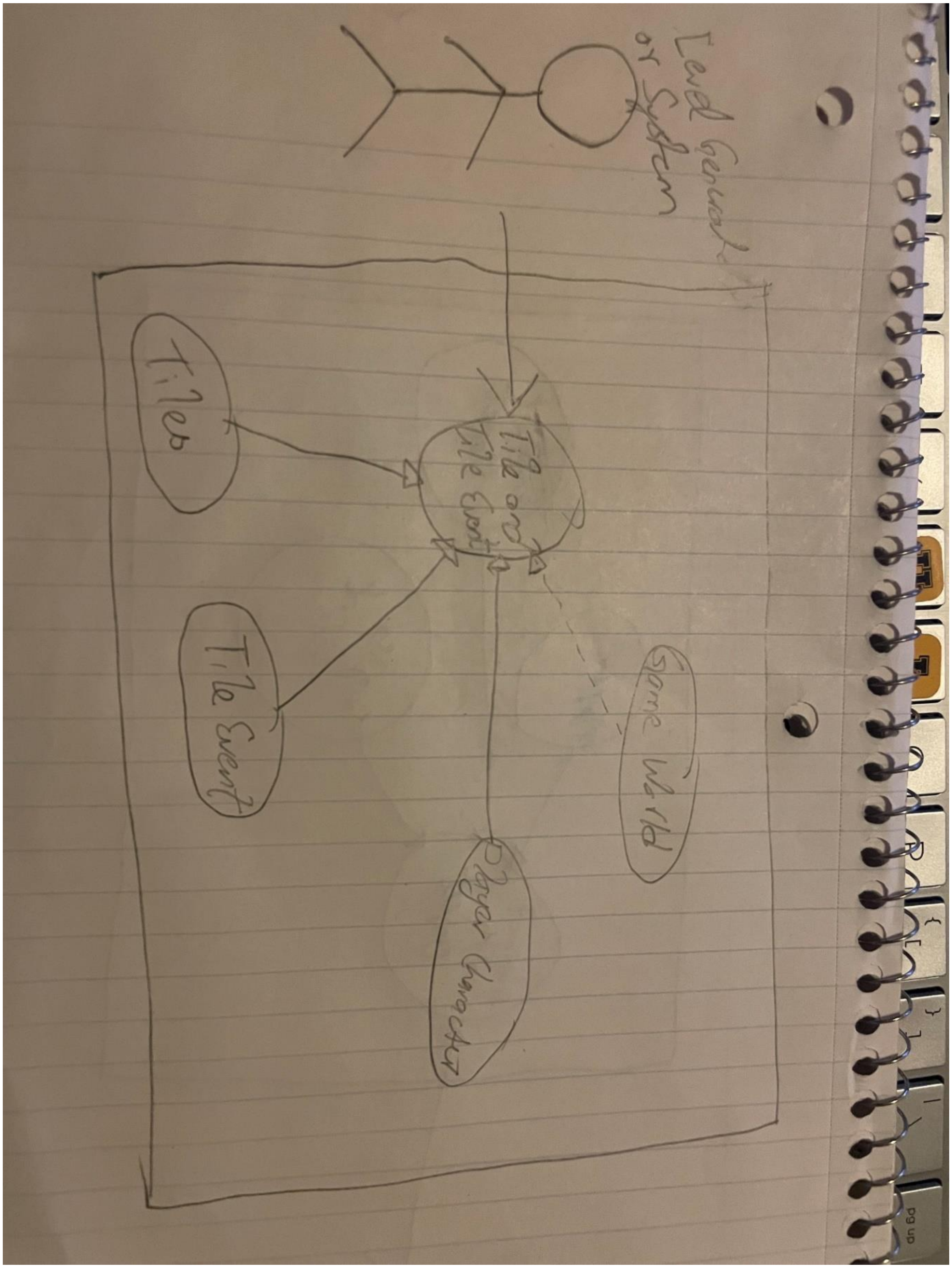
3. Data Flow diagram(s) from Level 0 to process description for your feature ______14

Example:

Data Flow Diagrams



Process Descriptions



In this use case diagram:

- **Player**: Represents the actor who interacts with the math object.
- **Environment Object**: Represents the object in the game environment responsible for checking the input and triggering an event.

The use cases associated with this scenario are:

1. **Check Input Against Math String**: The environment object checks the input provided by the player against the math string.
2. **Trigger Event**: If the input is correct, the environment object triggers an event.

The basic sequence involves the player interacting with the math object, and the environment object checking the input and potentially triggering an event if the input is correct.

Exceptions:

1. **Wrong Input Presented**: If the input is incorrect, the environment object handles this exception.
2. **No Object Event Triggered**: If the input is rejected, meaning it's incorrect, the environment object handles this exception, but no event is triggered

4. Acceptance Tests _______9

Example:

1. **Basic Tile Interaction**:
   - Input: Player character steps onto a grassy field tile.
   - Expected Output: No tile event triggered. The player character moves normally on the grassy field tile.
2. **Tile Event Trigger**:
   - Input: Player character steps onto a mystical forest tile.
   - Expected Output: A tile event is triggered. The player character encounters wildlife or finds hidden treasures, leading to a gameplay event.
3. **Incorrect Tile Interaction**:
   - Input: Player character steps onto a rocky path tile.
   - Expected Output: No tile event triggered, but the player character experiences reduced movement speed. The player's movement is hindered as expected.
4. **Complex Tile Event Interaction**:
   - Input: Player character steps onto a swamp tile.

- Expected Output: A tile event is triggered. The character's movement is significantly hindered, and they need to solve a mini-game. If they fail, they encounter an obstacle or enemy.

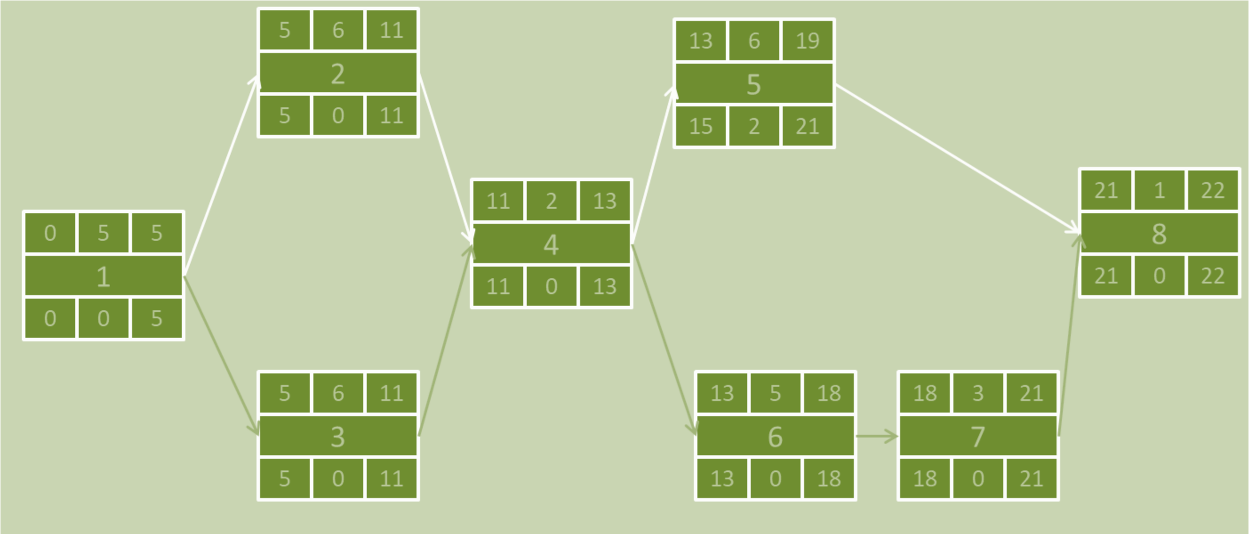
5. **Object-Tile Interaction**:
   - Input: Player character equipped with a grappling hook interacts with a climbable tile.
   - Expected Output: A tile event is triggered, and the character ascends to a hidden platform, revealing a secret reward.
6. **Progression and Challenge**:
   - Input: As the game progresses, the player character steps onto a unique tile.
   - Expected Output: The tile event becomes more complex, involving intricate puzzles, deadly traps, or rare, rewarding encounters.
7. **Narrative and Mechanics Integration**:
   - Input: Player character interacts with a specific tile type relevant to the game's narrative.
   - Expected Output: The tile event is intricately tied to the game's narrative, providing depth and immersion.
8. **Frequency and Impact Balancing**:
   - Input: Player character explores various tiles.
   - Expected Output: The frequency and impact of tile events are balanced to maintain an enjoyable level of challenge and excitement throughout the game.
9. **Multiplayer Interaction** (if applicable):
   - Input: Multiple player characters interact with the same tile.
   - Expected Output: Tile events account for multiplayer interactions, ensuring fair and engaging experiences for all players.
10. **Save and Load Compatibility**:
    - Input: Save the game in the middle of a tile event.
    - Expected Output: When loading the saved game, the tile event resumes from where it was paused, maintaining gameplay continuity.

5. Timeline _______/10

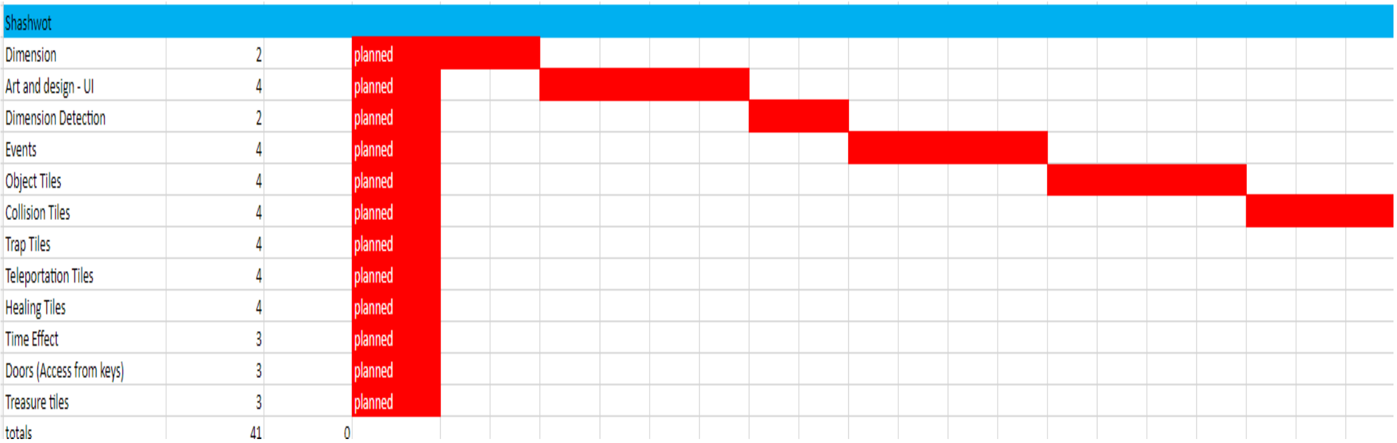
Work items

Task	Duration (PWks)	Predecessor Task(s)
Dimension	2	1
Art and design - UI	4	1
Dimension Detection	2	1
Events	4	3
Object Tiles	4	4
Collision Tiles	4	4
Trap Tiles	4	8
Teleportation Tiles	4	7
Healing Tiles	4	4
Time Effect	3	4
Doors (Access from keys)	3	3
Treasure tiles	3	8

Pert diagram



Gantt timeline



Shashwot																						
Dimension	2		planned	🟥	🟥																	
Art and design - UI	4		planned			🟥	🟥	🟥	🟥													
Dimension Detection	2		planned							🟥	🟥											
Events	4		planned									🟥	🟥	🟥	🟥							
Object Tiles	4		planned													🟥	🟥	🟥	🟥			
Collision Tiles	4		planned																	🟥	🟥	🟥
Trap Tiles	4		planned																			
Teleportation Tiles	4		planned																			
Healing Tiles	4		planned																			
Time Effect	3		planned																			
Doors (Access from keys)	3		planned																			
Treasure tiles	3		planned																			
totals	41	0																				