

# Use Cases

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## Use Case: *Bomb Explode*

**Short description:** When a placed bomb explodes

**Priority (high, mid, low) :** High

**Extends or Includes (other use case):** Includes "Hit Player", "Destroy Block"

**Participating actors:** The current placed bomb, All players, Blocks

**Normal flow of events**

Actor	System
Bomb exploded	
	The bomb explodes in four directions(East,West,North,South). Its range in the four directions is based on the player's picked up items.
	Increases the player who placed the bomb's bombstack.
If one or a combination of the Actors is in the range of the explosion. UC:("Player hit", "Destroy Block")	

**Alternate flow - No actor is in the range of the bomb**

Actor	System
	The bomb only explodes

**Alternate flow - Area bomb**

Actor	System
Areabomb explode	
	The bomb explode in a area with a size decided by the items the player got.
	Increase the player who placed the bomb's bombstack.
If one or a combination of the Actors is in the range of the explosion. UC:("Player hit", "Destroy Block")	

**Exeptional flow**  
*None*

## Use Case: *Move*

**Short description:** How user moves his character

**Priority (high, mid, low) :** High

**Extends or Includes (other use case):** Includes "Pick up item" and "Hit Player".

**Participating actors:** The actual player

**Normal flow of events**

Actor	System
Presses any direction key	
	The players character moves pixelwise the same direction as the key pressed.
	If the players character and some other players character moves to the same place, the player with the first player index ex. "Player 1" will be showed on top of the other.

**Alternate flow: Speed-boost**

Actor	System
Presses any direction key	
	The players character moves pixelwise the same direction as the key pressed. Depending of how many "Speed-boosts" the player picked up the player will move faster.
	If the players character and some other players character moves to the same place, the player with the first player index ex. "Player 1" will be showed on top of the other.

**Alternate flow: Get hit**

Actor	System
Presses any direction key	
	The players character moves pixelwise the same direction as the key pressed.
	If the player moves his character into an exploding bomb, the character will get hit. See "UC: Hit Player"

## Use Case: *Place bomb*

**Short description:** How a player places a bomb.

**Priority (high, mid, low) :** High.

**Extends or Includes (other use case):** Includes "Bomb explode".

**Participating actors:** The actual player.

**Normal flow of events:**

Actor	System
Presses corresponding key for placing a bomb	
	The game shows a bomb placed on an exact position on the fields grid and plays a "bomb placed" sound. One bomb is temporary removed from the players bombstack, witch has a numerical representation in the GUI.

**Alternate flow (bombstack is empty):**

Actor	System
Presses corresponding key for placing a bomb	
	No bomb is placed.

**Exeptional flow:** No exception.

## Use Case: *Hit player*

**Short description:** When a player gets hitted by a bomb

**Priority (high, mid, low) :** High.

**Extends or Includes (other use case):** Includes "Kill Player".

**Participating actors:** Any player.

### Normal flow of events:

Actor	System
Player with more then one hit point left gets hit by running or standing into any fire from any bomb.	
	Reduces the players hit points by one.

**Alternate flow:** Player dies (only one hit point left when getting hit by bomb)

Actor	System
Player gets hit in the same way as above with only one hit point left.	
	See UC: Kill player

**Exeptional flow:** No exception.

## Use Case: *Pick Up Item*

**Short description:** When a player enters a tile that contains a power up item

**Priority (high, mid, low) :** Medium

**Extends or Includes (other use case):** Boost Player

**Participating actors:** Any player.

**Normal flow of events:**

Actor	System
Moves into a tile that contains a powerup item	
	Adds a powerup to the current player se UC:Boost Player

**Alternate flow:** Player moves into an tile without powerup

**Exeptional flow:** No exception.

## Use Case: Kill player

**Short description:** When a player get killed by a bomb

**Priority (high, mid, low) :** High.

**Extends or Includes (other use case):** Extends Hit player. Includes End Turn, End Match.

**Participating actors:** Any player.

### Normal flow of events:

Actor	System
Any player with only one hit point left gets hit by any bomb .	
	The struck player gets killed, loses one life and disappears from the game plane.
	The struck player loses one life.

### Alternate flow: Round ends

Actor	System
The second to last player with only one hit point left gets hit by any bomb.	
	The struck player gets killed, loses one life and disappears from the game plane.
	The round ends and the only survivor is awarded with extra points. See UC: Score & Turn End.

**Exeptional flow:** The two last players gets killed at the same time.



## Use Case: *Boost Player*

**Short description:** When a player enters a tile that contains a power up item

**Priority (high, mid, low) :** Medium

**Extends or Includes (other use case):** Pick up item.

**Participating actors:** Any player.

### Normal flow of events:

Actor	System
Player picks up an item.	
	Increases players attributes corresponding to the picked up item. Increases score a set amount.

**Exeptional flow:** No exception.

## Use Case: *Destroy Block*

**Short description:** When a block or wall is destroyed.

**Priority (high, mid, low) :** medium

**Extends or Includes (other use case):** Extends “Bomb Explode”.

**Participating actors:** Any Block tile.

### Normal flow of events:

Actor	System
A block containing an item gets hit by an explosion.	
	If the block is destroyable by that player's bomb, the wall is removed from the field. Its item is then put in place of the block on the field.

### Alternate flow:

Actor	System
A block containing no item gets hit by an explosion.	
	If the block is destroyable by that player's bomb, the wall is removed from the field.

**Exceptional flow:** No exception.

## Use Case: Scoring

**Short description:** When a player score.

**Priority (high, mid, low) :** medium

**Extends or Includes (other use case):** Extends "Pick up item", "Destroy block", "Hit player", "Kill player".

**Participating actors:** The actual player.

### Normal flow of events:

Actor	System
The actual player puts a bomb on the field.	
	The actual player gets rewarded with a set amount of score when it explodes.

### Alternate flow: Picks up an item

Actor	System
The actual player picks up any item.	
	The actual player gets rewarded with a set amount of score depending to what item the player picked up.

### Alternate flow: Destroys a block

Actor	System
The actual player destroys a block.	
	The actual player gets rewarded with a set amount of score.

### Alternate flow: Hit player

Actor	System
The actual player hits a player with a bomb.	
	The actual player gets rewarded with a set amount of score.

**Alternate flow:** Kill player

Actor	System
The actual player kills another player with a bomb.	
	The actual player gets rewarded with a set amount of score.

**Alternate flow:** Win turn

Actor	System
The actual player kills the second to last player.	
	The actual player gets rewarded with a set amount of score.

**Alternate flow:** Win game

Actor	System
The actual player kills the second to last player.	
	The actual player gets rewarded with a set amount of score.

## Use Case: *Turn End*

**Short description:** When only one player remains on the field, the turn ends.

**Priority (high, mid, low) :** Medium

**Extends or Includes (other use case):** Extends: Kill player.

**Participating actors:** Any player.

### Normal flow of events:

Actor	System
A player is the last standing on the field while all other players has at least one life left.	
	That player scores by winning the turn.
	Puts all the players on their spawn-points with full health(hp).

### Alternate flow:

Actor	System
A player is the last standing on the field while at least one player has zero life left.	
	That player scores by winning the turn.
	The match ends. see UC: Match End.

### Exeptional flow:

## Use Case: *Buy Item*

**Short description:** When the game enters the shop and the players can upgrade their attributes

**Priority (high, mid, low) :** Medium

**Extends or Includes (other use case):** Extends: Match End

**Participating actors:** Any/all players.

**Normal flow of events:**

Actor	System
	Shows the upgrade-screen. All players life, hp and bombstack is restored. Players gains an amount of score corresponding to how much score they got in the recent match.
Players chooses their upgrades.	
	Corresponding amount of gold is removed from any players that chooses upgrades.
Player press "Ready for next match"-button.	
	When all players are ready, shows the battle screen and puts them on their spawn-points.

**Alternate flow:** Save gold for later.

Actor	System
	Shows the upgrade-screen. All players life, hp and bombstack is restored. Players gains an amount of score corresponding to how much score they got in the recent match.
Player does not choose any upgrade.	
	No gold is removed from that player.
Player press "Ready for next match"-button.	
	When all players are ready, shows the battle screen and puts them on their spawn-points.

**Exeptional flow:** No exception.

## Use Case: *Game End*

**Short description:** When the last match ends.

**Priority (high, mid, low) :** low

**Extends or Includes (other use case):** Extends: Match End.

**Participating actors:** Any/all players.

### Normal flow of events:

Actor	System
	The last match ends.
	Shows the winning screen.
Presses the “Main menu”-button.	

	The main menu-screen is shown.
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**Alternate flow:** Player qualifies to the highscore-board.

Actor	System
	The last match ends.
	Shows the game over screen with score etc.
	Shows the main menu screen.

**Exeptional flow:** No exception.



## Use Case: *Match End*

**Short description:** When a player has won his third turn.

**Priority (high, mid, low) :** Medium

**Extends or Includes (other use case):** Extends: Game Running

**Participating actors:** Any/all players.

### Normal flow of events:

Actor	System
A player wins his third turn.	
	The turn ends and the game switch to the upgrade state.
	The winning player get extra points.

### Alternate flow:

Actor	System
A player wins his third turn in the third match.	
	See UC: Game End

## Use Case: *Highscore*

**Short description:** When a player enters the Highscore section.

**Priority (high, mid, low) :** Medium

**Extends or Includes (other use case):** Extends: Pyromaniac

**Participating actors:** Any/all players.

### Normal flow of events:

Actor	System
A player selects "Highscore" in the main menu and press the proceed button.	
	Game switches to the Highscore state.

### Alternate flow

Actor	System
A player wins his third turn in the third game.	
	See UC: Game End
	Game switches to score screen state.
	Game switches to highscore state.

## Use Case: *Exit*

**Short description:** When a player enters the Highscore section.

**Priority (high, mid, low) :** Medium

**Extends or Includes (other use case):** Extends: Pyromaniac

**Participating actors:** Any/all players.

### Normal flow of events:

Actor	System
A player selects "Exit" in the main menu and press the proceed button.	
	Game exits.

## Use Case: *Set Up Game*

**Short description:** The section where the players must set up their game.

**Priority (high, mid, low):** High

**Extends or Includes (other use case):** Extends: Pyromaniac

**Participating actors:** Any/all players.

### Normal flow of events:

Actor	System
A player selects "Start Game" in the main menu and press the proceed button.	
	The game switches to the state where to select the number of players.
A player selects how many players to play and then press the proceed button.	
	The game switches to the name picking state.
All the player enter their name and press the proceed button after each player that entered his name.	
	The game switches to the control picking state.
All the player press their own action buttons when their name appears.	
	The game starts.