# Use Cases

# 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 |

**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 highest number ex. "Player 4" 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 moev faster. |
| | If the players character and some other players character moves to the same place, the player with the highest number ex. "Player 4" 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 | |
| | The game plays a "empty magasin" sound. |

**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 players time-score get locked. |
| | 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. |
| | All players time-score get locked. |
| | 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 a set amount of time. Increases score a set amount. |

**Alternate flow**:

| Actor | System |
|---|---|
| Player picks up an item in witch corresponding attribute he has full of.. | |
| | 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 if destroyable by that players 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 if destroyable by that players bomb, the wall is removed from the field. |

**Exeptional 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 is alive on the field. | |
| | The actual player gets rewarded with a set amount of score for each game-update. |

**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). and starts all players score-timer. |

**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: *Match End/Buy 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):** Extends: Turn 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 highscore screen. |
| Presses the "Main menu"-button. |  |

| | The main menu-screen is shown. |
| --- | --- |

**Alternate flow**: Player qualifies to the highscore-board.

| Actor | System |
| --- | --- |
| | The last match ends. |
| | Shows the highscore screen with input prompt for the player(s) that qualified to the highscore-board. |
| Player types his/her name next to his/her score and presses enter. | |
| Presses the "Main menu"-button. | |
| | The main menu-screen is shown. |

**Exeptional flow:** No exception.