Use Case: Pause

**Summary:** Pauses the game.

**Priority:** Low.

Extends:

Includes:

**Participators:** Player.

**Normal flow of events**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 1 | Player presses the ”Pause” button. |  |
| 2 |  | The timer stops. |
| 3 |  | The gameboard turns black. |

**Alternate flows  
Flow 2.1 when the game is already paused**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |  |
| --- | --- | --- | --- |
| 2.1.1 |  | | The timer starts. |
| 2.1.2 |  | The screen returns to normal. | |

Use Case : Gameover

**Summary:** Is run when a game is lost/won.

**Priority:** High

**Extends:** -

**Includes:** New game (classic)/(Campaign)

**Participators:** Player

**Normal flow of events**

Player plays a new game.

|  |  |  |
| --- | --- | --- |
|  | Actor | System |
| 1 |  | Dialog shows statistics over played game. Showing options: New game, quit. |
| 2 | Press New game button |  |
| 3 |  | If classic mode, UC New Game (Classic) is run, else UC New Game (Campaign) is run. |

**Alternate flows**

**1.1 Player quits game.**

|  |  |  |
| --- | --- | --- |
|  | Actors | System |
| 1.1.1 | Press quit button |  |
| 1.1.2 |  | Quit game, and return to game-select menu. |

Use Case: New Game (Classic)

**Summary:** This is how the player starts a new game.

**Priority:** High.

**Extends: -**

**Includes:** -

**Participators:** Player

**Normal flow of events**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 1 | Player press the ”Start” button. |  |
| 2 |  | If button pressed in “main menu”, update to play-view. |
| 3 |  | Reset board. |
| 4 |  | Place new gameboard. |
| 5 |  | Reset all stats. |

Use Case: New Game (Campaign)

**Summary:** This is how the player starts a new game.

**Priority:** Low.

**Extends:**

**Includes:** -

**Participators:** Player

**Normal flow of events**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 1 | Player press the ”Start” button. |  |
| 2 |  | If button pressed in “main menu”, update to play-view.  Set icons on right menu for power-ups. |
| 3 |  | Reset board. |
| 4 |  | Place new gameboard. |
| 5 |  | Reset all stats. |

Use case: Next stage

**Summary:** Displaying the next stage in campaign mode.

**Priority:** Low

**Extends:** -

**Includes:** -

**Participators:** Player

**Normal flow of events**

Player exceeds in game progress and displays a new level.

|  |  |  |
| --- | --- | --- |
|  | Actor | System |
| 1 |  | Show dialog with stats (time left, and button next stage) |
| 2 | Player press next stage. |  |
| 3 |  | Time from previous stage is added to the time of this stage. Reset Board and place new gameboard. |

Use Case: Choose square (Classic)

**Summary:** This is how the player select a button to reveal its content.

**Priority:** High

**Extends: -**

**Includes:** Game over

**Participators:** Player.

**Normal flow of events**A simple click with no consequences.

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 1 | Press an empty unclicked square. |  |
| 2 |  | If first click, start time counter. |
| 3 |  | Displays a number square.  If only mines are left, UC Game over is run. |

**Alternate flows  
Flow 2.1 Player clicks on an empty square**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 2.1.1 |  | Displays empty square. |
| 2.1.2 |  | Reveals more empty squares and numbers.  If only mines are left, UC Game over is run. |

**Flow 2.2 Player clicks on a mine square**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 2.2.1 |  | Displays a mine. Plays a exploding sound. |
| 2.2.2 |  | Reveal all mines. |
| 2.2.3 |  | The UC Game over runs. |

Use Case: Choose square (Campaign)

**Summary:** This is how the player select a button to reveal its content.

**Priority:** Low

**Extends: -**

**Includes:** Game over

**Participators:** Player.

**Normal flow of events**A simple click with no consequences.

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 1 | Press an empty unclicked square. |  |
| 2 |  | If first click, start timer countdown. |
| 3 |  | Displays a number square.  If only mines left, UC next stage is run. |

**Alternate flows  
Flow 2.1 Player clicks on an empty square**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 2.1.1 |  | Displays empty square. |
| 2.1.2 |  | Reveals more empty squares and numbers.  If only mines left, UC next stage is run. |

**Flow 2.2 Player clicks on a mine square with more than 1 life left.**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 2.2.1 |  | Displays a mine. Plays a exploding sound. Remove one life. |

**Flow 2.2.1 Player has one life left.**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |
| 2.2.1.1 |  | Reveal all mines. |
| 2.2.1.2 |  | The UC Game over is run. |

Use case : Disable powerup

**Summary:** This is how the powerups reacts when the player tries to buy a powerup which is too expensive.

**Priority:** Low

**Extends:-**

**Includes:-**

**Participators:** None/Player

**Normal flow of events**

A powerup is disabled when not selected by player

|  |  |  |
| --- | --- | --- |
|  | Player | System |
| 1 |  | Time runs out and the powerup can’t be afforded.  A red frame appears around the icon of this powerup. Tooltip text says, ”not enough time”. |
| 2 |  |  |

**Alternate flows**

**Flow 1.1 Player presses on the disabled powerup-icon**

|  |  |  |
| --- | --- | --- |
|  | Player | System |
| 1.1.1 | Presses disabled powerup-button. |  |
| 1.1.2 |  | Error sound is played. Red error message is visible for 3-5 seconds. |

**Flow 1.2 Time runs out after player selected powerup**

|  |  |  |
| --- | --- | --- |
|  | Player | System |
| 1.2.1 |  | Error sound is played. Red error message is visible for 3-5 seconds.  Cursor is set to normal state. |

Use Case: Powerup clear

**Summary:** The players shows an area to reveal all squares.

**Priority:** Low

**Extends: -**

**Includes:** Disable powerup

**Participators:** Player.

**Normal flow of events**A simple click with no consequences.

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 1 | The player press the powerup ”Clear” button |  |
| 2 |  | The mouse changes to a predefined square area. |
| 3 | Players choose a ”group” of squares to clear. |  |
| 4 |  | Lose time. |
| 5 |  | All empty- and number- squares in the area are shown. |
| 6 |  | All mine-squares in the area gets flagged. |

**Alternative flow**

**Flow 1.1 Player can’t afford the powerup.**

|  |  |  |
| --- | --- | --- |
|  | **Actor** | **System** |
| **1.1.1** |  | **The UC Disable powerup is run.** |

Flow 2.1 Player waits until the powerup can’t be afforded (time runs out).

|  |  |  |
| --- | --- | --- |
|  | Actor | System |
| 2.1.1 |  | The UC Disable powerup is run. |

Use Case: Powerup show

**Summary:** A powerup that lets the player see all the mines in a short period of time.

**Priority:** Low

**Extends: -**

**Includes:** Disable powerup

**Participators:** Player.

**Normal flow of events**A simple click with no consequences.

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 1 | The player presses the power-up ”Show” button |  |
| 2 |  | Lose time. |
| 3 |  | Reveal all the mines for a short period of time. |
| 4 |  | Hide all the mines that was shown. |

**Alternate flows**

**Flow 1.1 Player can’t afford the powerup**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |
| 1.1.1 |  | The UC Disable powerup is run. |

Use Case: Powerup choose safely

**Summary:** Let the player choose a square safely without the risk of losing a life.

**Priority:** Low

**Extends: -**

**Includes:** Disable powerup

**Participators:** Player.

**Normal flow of events**A simple click with no consequences.

|  |  |  |
| --- | --- | --- |
|  | Actor | System |

|  |  |  |
| --- | --- | --- |
| 1 | The player presses the power-up ”Choose safely” button |  |
| 2 |  | The cursor icon changes. |
| 3 | The player presses a square. |  |
| 4 |  | Lose time. |
| 5 |  | Reveal hidden item, if mine, flag is set. |

**Alternate flows**

**Flow 1.1 Player can’t afford the powerup**

|  |  |  |
| --- | --- | --- |
|  | Actor | System |
| 1.1.1 |  | The UC Disable powerup is run. |

Flow 2.1 Player waits until the powerup can’t be afforded (time runs out).

|  |  |  |
| --- | --- | --- |
|  | Actor | System |
| 2.1.1 |  | The UC Disable powerup is run. |

* Start
* Back to main menu
* Settings (Ljud,ljus,etc.)
* Options (Antal minor, spelplan)
* Exit program
* Classic
* Restart game
* Quit game
* Mark square
  + Flagga
  + Frågetecken
  + Tom
* Timeout