

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 and gameboard is disabled.

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 and gameboard is visible.

Use Case : Gameover

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

Priority: High

Extends: -

Includes:

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: Gameover, Pause, Choose Square(Classic), Unknown square, Quit game, Restart Game, Flagged square

Participants: Player

Normal flow of events

Player starts a new game (in the main menu)

	Actor	System
1	Player presses the “Classic Game” button in the Main Menu.	
2		Open the view for Classic game.
3		Place new gameboard.

Alternate flow

Flow 1.1 Player starts a new game (during an ongoing round of Classic)

	Actor	System
1.1.1	Player presses the “New Game” button in an ongoing round if Classic.	
1.1.2		A check is made on the three “Radio Buttons” above the “New Game” button.
1.1.3		The “Lätt” radio button was selected
1.1.4		Replace the current gameboard with a new one according to the “Lätt” setting.
1.1.5		Reset stats

Flow 1.1.3.1 The player had the “Medium” radio button selected

	Actor	System
1.1.3.1.1		The “Medium” radio button was selected
1.1.3.1.2		Replace the current gameboard with a new one according to the “Medium” setting.
1.1.3.1.3		Reset stats

Flow 1.1.3.1 The player had the “Svår” radio button selected

	Actor	System
1.1.3.1.1		The “Svår” radio button was selected
1.1.3.1.2		Replace the current gameboard with a new one according to the “Svår” setting.
1.1.3.1.3		Reset stats

Use Case: New Game (Campaign)

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

Priority: Medium.

Extends:

Includes: Pause, Game over, Choose square (Campaign), Unknown square, Quit game, Restart game, Flagged square, Next stage, Disable powerups, Powerup clear, Powerup random four, Powerup choose safely, Time out,

Participators: Player

Normal flow of events

Start a game from main menu

	Actor	System
1	Player press the “Campaign Game” in the main menu.	
2		Open Campaign view.
3		Place new gameboard.

Alternate flow

Flow 1.1 Player lost a game in Campaign

	Actor	System
1.1.1		The UC Game Over is run

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 that tells the level is complete.
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: -

Participators: Player.

Normal flow of events

A simple click with no consequences.

	Actor	System
1	Press an number unclicked square.	
2		Displays a number square.

Alternate flows

Flow 2.1 Player clicks on an empty square

	Actor	System
2.1.1		Displays empty square.
2.1.2		Reveals the squares around that are 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.
2.2.2		Reveal all mines.
2.2.3		The UC Game over is run.

Flow 1.1 First click

	Actor	System
1.1.1	Click on a square	
1.1.2		Timer starts

Use Case: Choose square (Campaign)

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

Priority: Medium

Extends: -

Includes: Game over

Participators: Player.

Normal flow of events

A simple click with no consequences.

	Actor	System
1	Press an number unclicked square.	
2		Displays a number square.

Alternate flows

Flow 1.1 First click

	Actor	System
1.1.1	Click on a square	
1.1.2		Timer starts

Flow 2.1 Player clicks on an empty square

	Actor	System
2.1.1		Displays empty square.
2.1.2		Reveals the squares around that are empty squares and numbers. If only mines are left, UC Game over is run.

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

	Actor	System
2.2.1	Player click on a square that is a mine	
2.2.2		Displays a mine. Remove one life.

Flow 2.2.1 Player has one life left.

	Actor	System
2.2.1.1	Player click on a square that is a mine	
2.2.1.2		Reveal all mines.
2.2.1.3		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: Powerup clear, powerup random four, powerup choose safely

Includes:-

Participators: None/Player

Normal flow of events

A powerup is disabled when not selected by player

	Actor	System
1		Time runs out and the powerup can't be afforded. The powerup button is disabled. Tooltip text says, "not enough time".

Alternate flows

Flow 1.1 Player has activate the powerup but want to disable it

	Actor	System
1.1.1	Presses the same powerup.	
1.1.2		The powerup is disable

Flow 1.2 Time runs out after player selected powerup

	Actor	System
1.2.1		The powerup is unactivated and disabled.

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 powerup clear is activated.
3	Player 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 random four

Summary: A powerup that reveal four random squares.

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 “Random four” button.	
2		Lose time.
3		Show all number and empty squares that are choosed. Flagg the mines that ar choosed

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.

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 powerup choose safely activates
3	The player presses a square.	
4		Lose time.
5		Reveal hidden items, 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.

Use Case: Unknown square

Summary: If a player wants to mark a square as unknown, he rightclick on a flagged square.

Priority: Medium

Extends: -

Includes: -

Participators: Player

Normal flow of events

A simple mark with no consequences

	Actor	System
1	Rightclick on a flagged square	
2		The flagged square turns into an unknown square
3		The flagcounter decrease by one

Alternate flows

Flow 1.1 Player want to unknown an unclicked square

	Actor	System
1.1.1	Rightclick on an unclicked square	
1.1.2		The unclicked square turns into a flagged square
1.1.3	Rightclick on the flagged square	
1.1.4		The flagged square turns into an unknown square

Use Case: Quit Game

Summary: The player presses the “Quit Game” button and a pop-up is displayed giving the user the options “Yes, “No” or Cancel

Priority: High

Extends: -

Includes: -

Participants: Player

Normal flow of events

A simple mark with no consequences

	Actor	System
1	The player presses the “Quit Game” button.	
2		A pop-up appears, asking if the player really wants to quit the ongoing game, and return to the main menu.
3	Player presses “Yes”	
4		The system remove the game-board with the current game, and displays the “Main Menu”.

Alternate Flow

“No” or “Cancel” was pressed in the displayed pop-up.

	Actor	System
1.4		The pop-up disappears and the ongoing game is started again.

Use Case: Restart game (classic)

Summary: If the player want to restart the game he is in (in classic mode) with the mines at the same place.

Priority: Medium

Extends: -

Includes: -

Participators: Player

Normal flow of events

The player wants to restart the game.

	Actor	System
1	Click on the restart-button	
2		A pop-up window asking if the player are sure to restart the game while also pausing the game.
3	Player presses yes	
4		The gameboard updates so all the squares become unclicked squares and all stats are reset

Alternate flow

The player presses “No” on the pop-up

	Actor	System
1.4		The pop-up disappears and the ongoing game is started again.

Use Case: Flagged square

Summary: If the player know it's a mine he can put a flag on it.

Priority: High

Extends: -

Includes: -

Participators: Player

Normal flow of events

A simple mark with no consequences

	Actor	System
1	Rightclick on an unclicked square	
2		The unclicked square turns into an flagged square
3		The flagcounter increase by one

Alternate flows

Flow 1.1 Player want to flag an unknown square

	Actor	System
1.1.1	Rightclick on an unknown square	
1.1.2		The unknown square turns into an unclicked square
1.1.3	Rightclick on the unclicked square	
1.1.4		The unclicked square turns into a flagged square

Use Case: Start

Summary: Change the view to choose between classic and campaign

Priority: High

Extends: -

Includes: New game(campaign), New game (classic)

Participants: Player

Normal flow of events

1	Player press the start button	
2		The view change to a new view with the choice between Classic, Campaign and "Back to main menu".

Use Case: Exit Program

Summary: Closes the program

Priority: High

Extends: -

Includes: -

Participators: Player

Normal flow of events

Player close the program

1	The player press the “Exit Program” button.	
2		The Program terminates without saving anything.

Use Case: Time out (Campaign)

Summary: What will happen when the time runs out.

Priority: High

Extends: -

Includes: -

Participators: None

Normal flow of events

Time runs out during a Campaign stage.

	Actor	System
1		The timer reaches zero.
2		A pop-up appears telling the player this and giving him/her the option to press only one button ("Ok")
3		UC Gameover is run