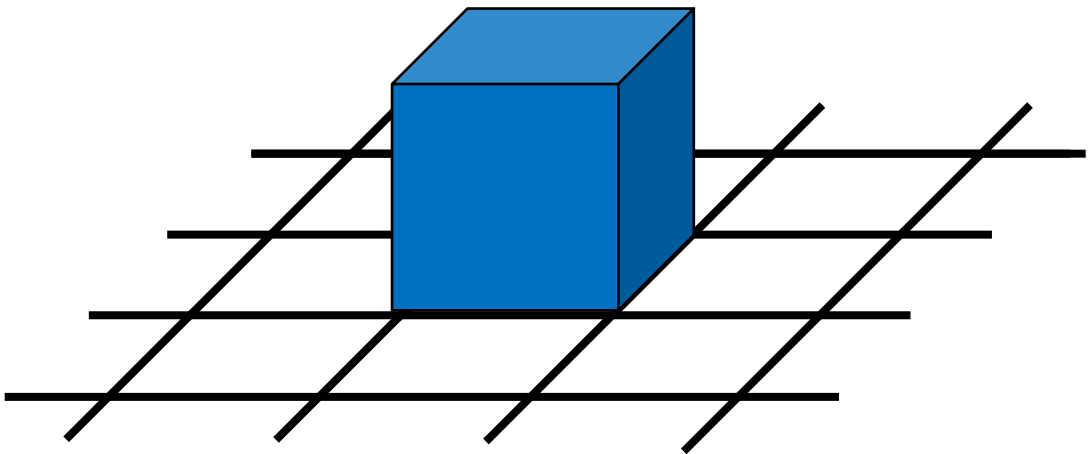


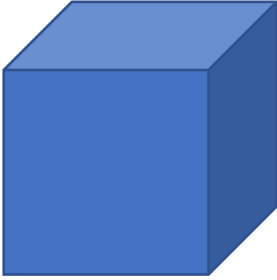
Sokoban GDD



Summary

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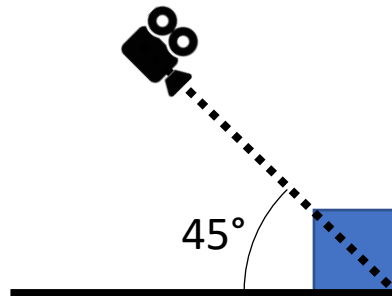
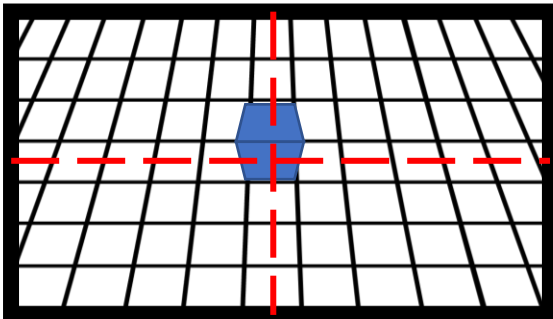
Player



- **Visual:** Cube
- **Colour:** Blue
- **Size:** 1m x 1m x 1m






Camera

- **View:** Centred on the Player
- **Angle:** 45° Top Down
- **Distance:** Enough to see minimum 2 cells around the player
- **Movement:** Follow player

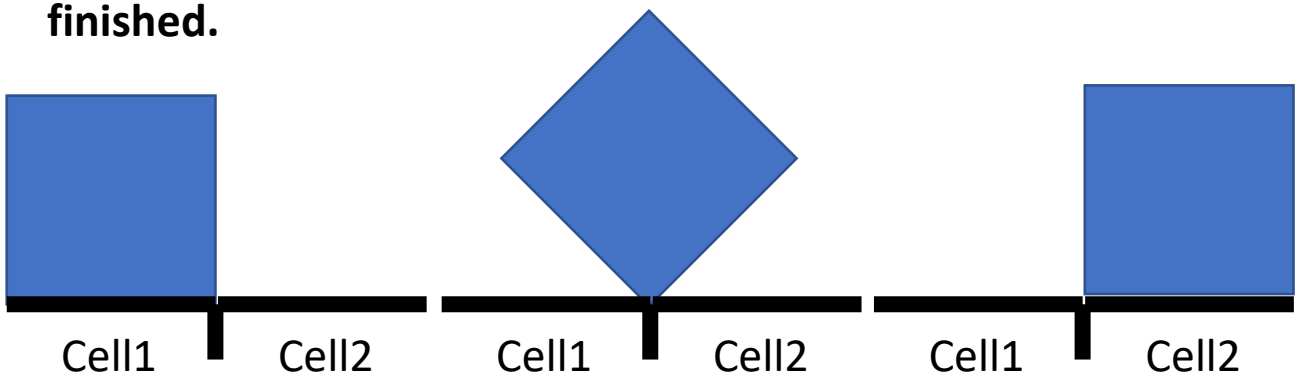


Movement

- **Type:** Rolling
- **Speed:** 0,33 s
- **Distance:** One cell
- **Keys:**

- Forward 
 - Backward 
 - Left 
 - Right 
- 
- An orange bracket groups the four directional arrow buttons, and an orange speaker icon is positioned to the right of the bracket.

A new movement should not start until the previous one is finished.

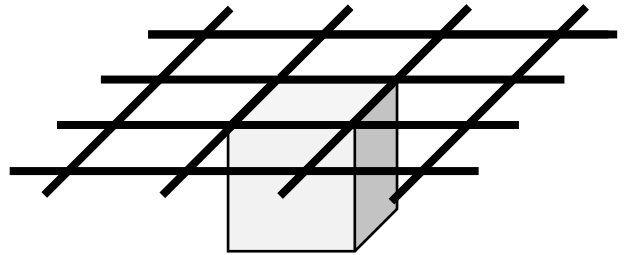


Entities

- There is different entities.
- Each entities is placed on or below a 1m x 1m cell.
- [Player](#) is considered as an entities

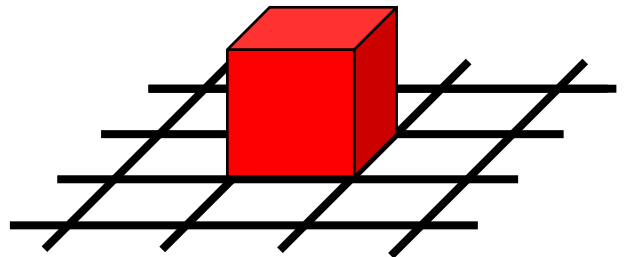
Ground

- **Visual:** Cube
- **Colour:** White
- **Position:** Below cell
- **Size:** 1m x 1m x 1m
- **Player can push it:** False



Crates

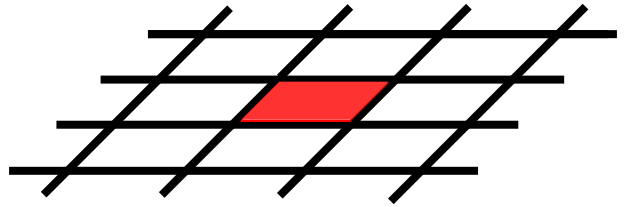
- **Visual:** Cube
- **Colour:** Any
- **Position:** On cell
- **Size:** 1m x 1m x 1m
- **Player can push it:** True
- **Movement:** Translation
- **Description:**
 - Can be pushed by the player but not by another crate.
 - The player can push a crate unless it's blocked by wall, then no one moves.
 - Can activate [targets](#) of their own color.



Targets

- **Visual:** Cube
- **Colour:** Any
- **Position:** On cell
- **Size:** 1m x 0,001m x 1m
- **Player can push it:** False
- **Description:**

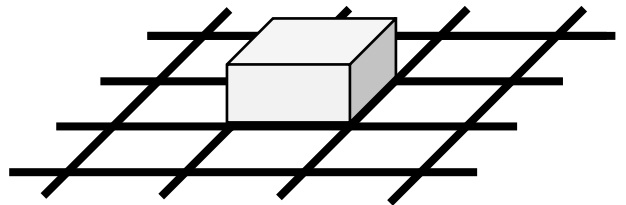
When a [crate](#) or a [player](#) with the same colour of the target is on it, the target is considered activated.



Walls

- **Visual:** Rectangular block
- **Colour:** White
- **Position:** On cell
- **Size:** 1m x 0,5m x 1m
- **Player can push it:** False
- **Description:**

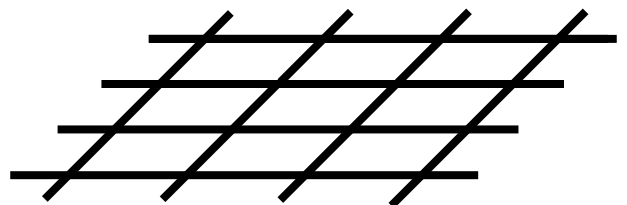
Used as an obstacle or to make the limit of the game zone.



Empty Cell

- **Visual:** None
- **Colour:** None
- **Position:** None
- **Size:** 1m x 0m x 1m
- **Player can push it:** False
- **Description:**

Used as an obstacle.



UI

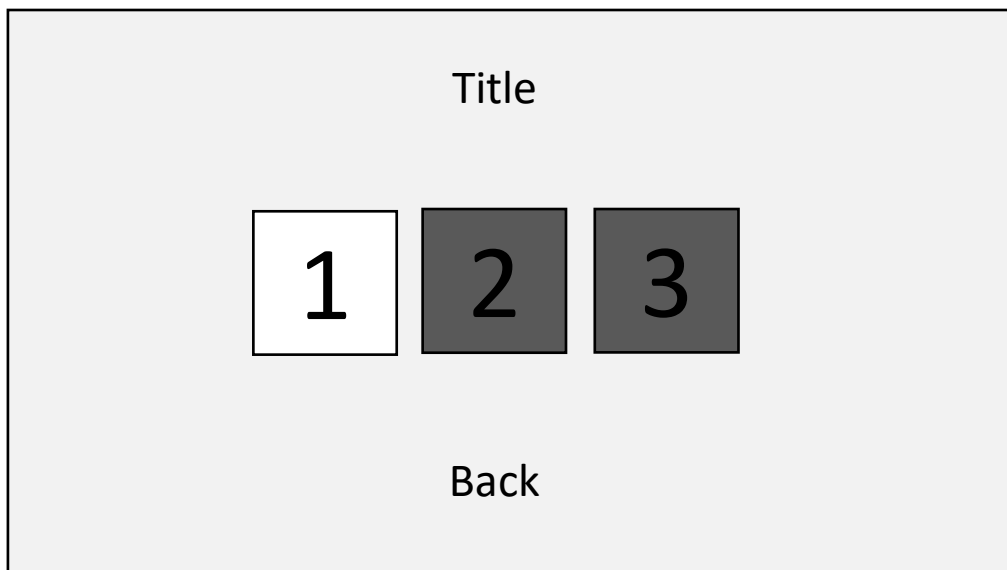
Main Menu

- **Title:** Text “Sokoban”
- **Buttons:**
 - **Sound:**
 - **Display:** Image sound on / sound off
 - **OnClick:** Turn sound on / Turn sound off
 - **Music:**
 - **Display:** Image music on / music off
 - **OnClick:** Turn music on / Turn music off
 - **Play:**
 - **Display:** Text “Play”
 - **OnClick:** Play last level unlocked
 - **Levels:**
 - **Display:** Text “Levels”
 - **OnClick:** Open [Level Menu](#)
 - **Quit:**
 - **Display:** Text “Quit”
 - **OnClick:** Quit the game



Level Menu

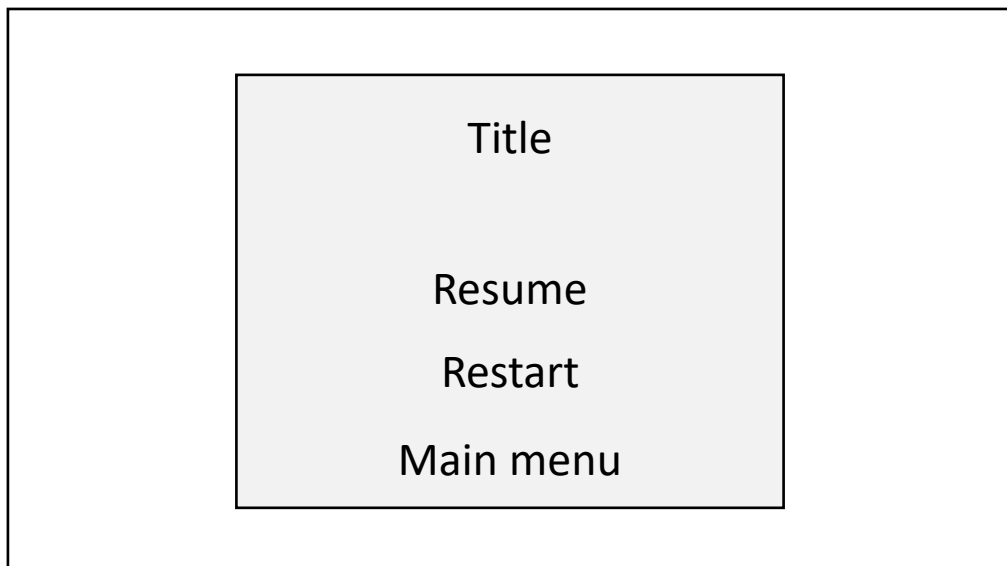
- **Title:** Text “Levels”
- **Buttons Grid:**
 - **Levels Button:**
 - **Display:** Level Image with level number on it
 - **OnClick:** Play Level
 - **If locked:**
 - Cover with locked image
 - OnClick disabled
 - **Button back:**
 - **Display:** Text “Back”
 - **OnClick:** Open [Main menu](#)



Pause Page

When the player presses “escape” key while playing a level, it opens the pause page and disables player movement.

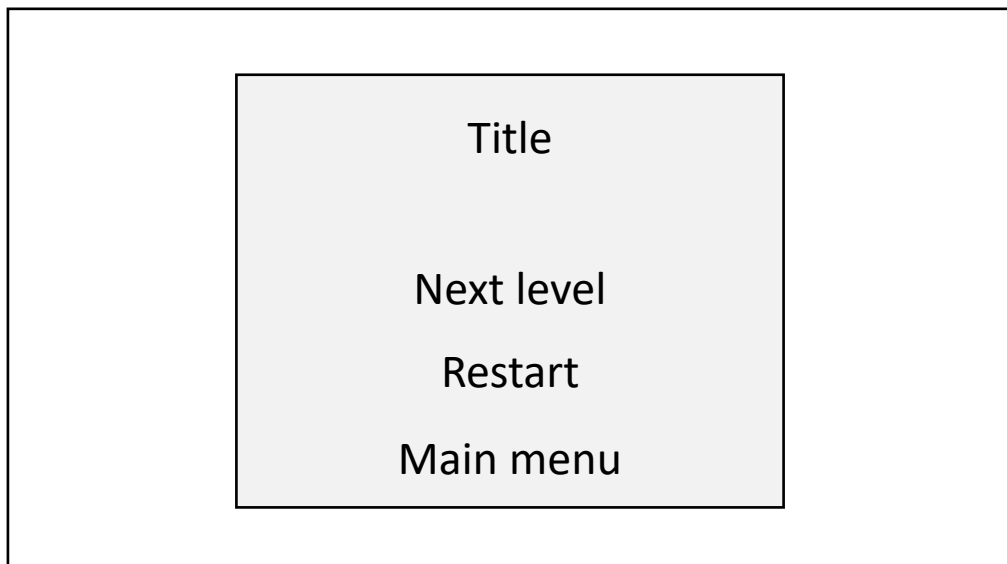
- **Title:** Text “Pause”
- **Buttons:**
 - **Resume:**
 - **Display:** Text “Resume”
 - **OnClick:**
 - Close Pause page
 - Player movements enabled
 - **Restart:**
 - **Display:** Text “Restart”
 - **OnClick:** Restart current level
 - **Main menu:**
 - **Display:** Text “Main menu”
 - **OnClick:** Open [main menu](#)



Win Page

When the player finishes a level, it opens the win page with a confetti animation in the background.

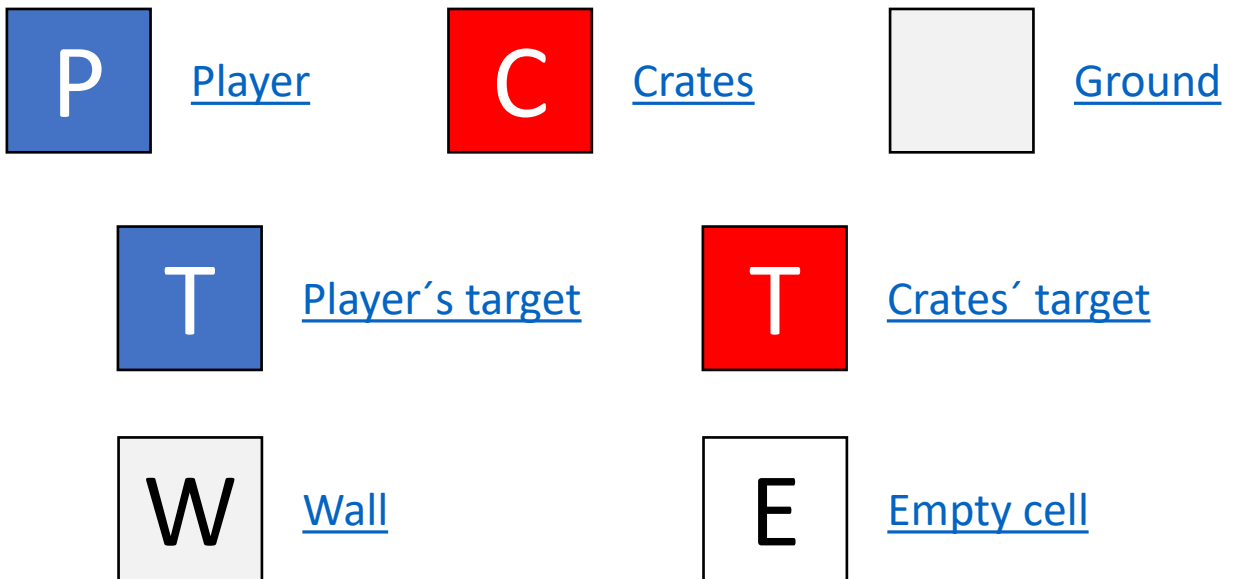
- **Title:** Text “You win!”
- **Buttons:**
 - **Next level:**
 - **Display:** Text “Next Level”
 - **OnClick:** Play next Level
 - **Restart:**
 - **Display:** Text “Restart”
 - **OnClick:** Restart current level
 - **Main menu:**
 - **Display:** Text “Main menu”
 - **OnClick:** Open [main menu](#)



Level Design

- The game zone is a grid multiple 1mx1m square cells.
- The number of column and row of the grid can vary for each level.
- Each cell can have one ore more entities on it.
- The game zone is surrounded by rectangular blocks of random size.
- **Winning condition:**
All targets must have a cube of their color on their cell.
When condition is met, a win page is displayed.

- **Entities Legend:**



The player, crates and target are placed on ground cell

Level 1

W	W	W	W	W	W	W	W	W
W	P		C					E
W	W	W	W		W	W	W	W
W		T			W			
W	W	W	W	W	W			

Level 2

					T	T
			E		C	
E	E		E		E	E
E	E	C	E	P	E	E
E	E				E	E

Level 3

E	E	E	E	W	W	W	E	E
E	W	W	W	W			W	E
W		P		C		C	T	W
W		T	E	E	T		E	W
E	E						E	W
E	E	E	E	E	E	E	W	E

Level 4

E	E	T	E	E	E
E	E			E	E
E		C		C	T
T		C	P		E
E			C	E	E
E	E	E	T	E	E

Level 5

W	W	W	W	W	W	W	W	W
			E			E	E	E
	E		E	C	T	E	E	E
				C	T	E	E	E
	E		E	C	T	E	E	E
			E			E	E	E
E	E	E	E	P		E	E	E