

TCE Selection and Move State Machine

Input: x, y, e Values for „e“: BUTTON_DOWN (D), SHIFT_BUTTON_DOWN (SD), MOUSE_MOVE (MM), BUTTON_UP (U)

Functions:

$E(x,y)$

$\text{tcg_GetElementOverPosition}(\text{tcg}, x, y)$

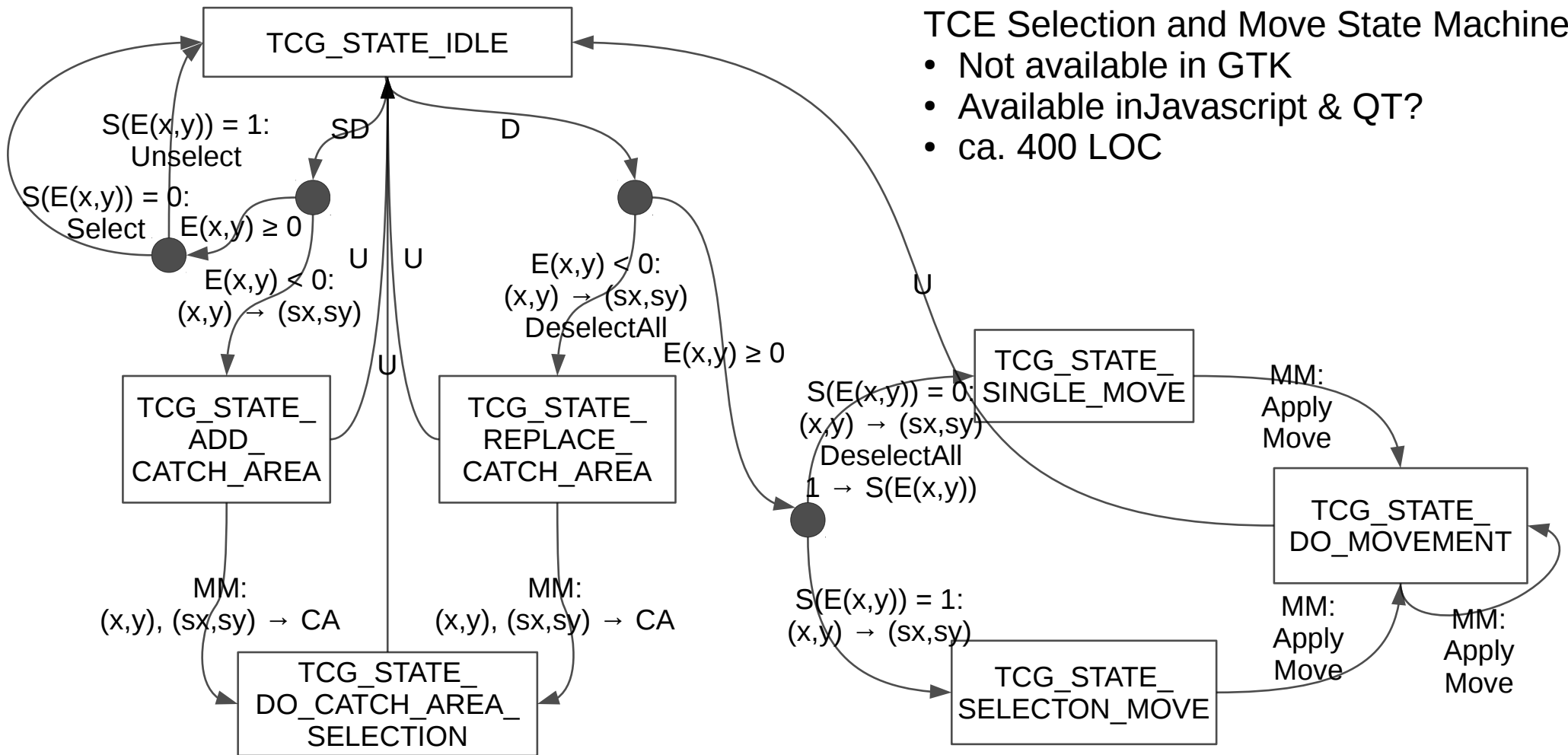
Element-Index, if (x,y) is above an element

$S(\text{Element-Index})$

$\text{tcg_IsSelected}(\text{tcg}, \text{idx})$

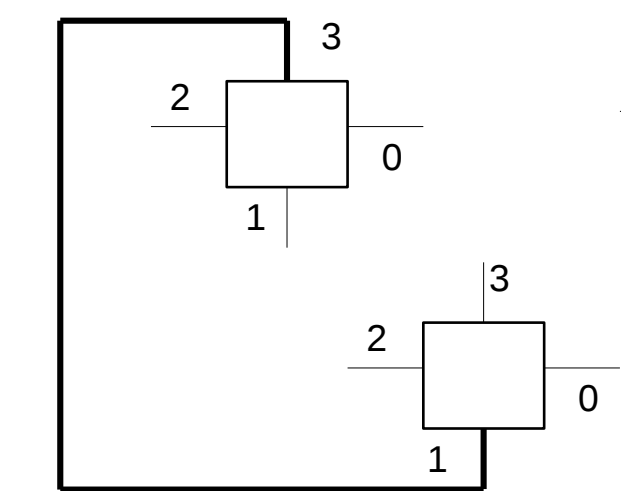
True, if the element is selected

Internal: Start position: sx, sy ($\text{tcg} \rightarrow \text{start_x}, \text{tcg} \rightarrow \text{start_y}$). Catch Area: CA ($\text{tcg} \rightarrow \text{catch_area}$)

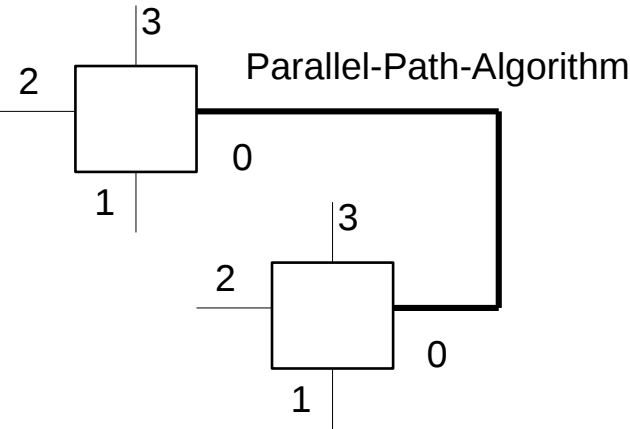


TCE Automatic Path Draw Algorithm

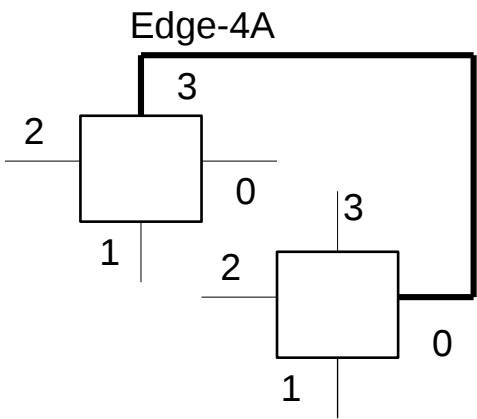
dir_src	dir_dest	Path-Algorithm
0	0	Parallel
0	1	Edge-X
0	2	Anti-Parallel
0	3	Edge-X
1	0	Edge-X
1	1	Parallel
1	2	Edge-X
1	3	Anti-Parallel
2	0	Anti-Parallel
2	1	Edge-X
2	2	Parallel
2	3	Edge-X
3	0	Edge-X
3	1	Anti-Parallel
3	2	Edge-X
3	3	Parallel



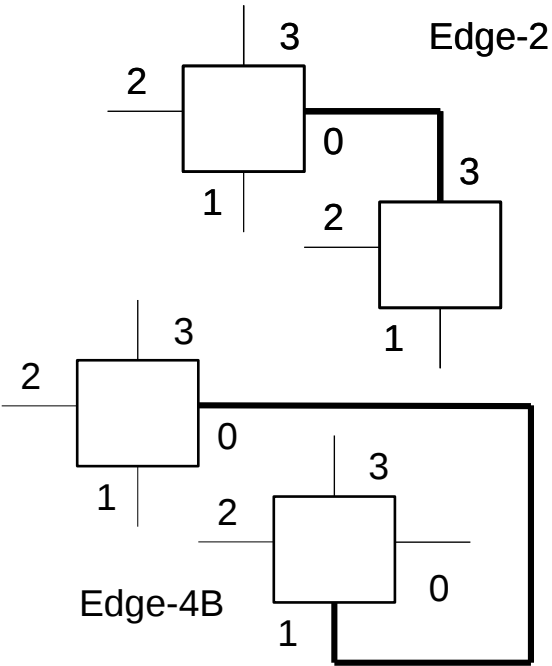
Anti-Parallel-Path-Algorithm



Condition	Path-Algorithm
$dir_src == dir_dest$	Parallel
$dir_src + dir_dest == 4$	Anti-Parallel
All other	Edge-X



Edge-4A



Edge-2

Edge-4B