

! " # \$ % " & \$ % ' " % \$ # \$ & " (8

&) * +: , +- ./0123.2 4 DOM. 567.8.- 9) : ;) <=0.

,) 9+: !"# \$%&' (' &\$"#(') *%*"'+') #' &, \$, -, (%! DOM (Document Object Model) (" &, . %/O'
%* (1\$21345 5 +1--\$, !\$, - 6% 4(+, \$1** / +1--171O1* (%+.

>?* 6@? 9+ =+* 6=9.<- + : 6A69+:

¥ [Shuffle Array](#)

¥ [CSS3 Transitions](#)

¥ [Create a CSS Flipping Animation](#)

¥ [84\(5& . , & , . %3](#)

¥ [9, . % %* \(1\\$21345](#)

¥ ; " \$5417< example

¥ [Drag and Drop Examples](#)

¥ [HTML Drag and Drop API](#)

5: +B9?C- + C+=9?- +

D+E7+- - 2 1 (5 A+1.E).

') 6AF.7- 6 =9E6: ?9? @: 0 Memory Pair Game.



Minimal functionality (1 A+1)

¥ 8% , - \$"! ' (' * "- % \$! 12 # " \$ (, # (- . / . (10 " (' # ") , \$, ! # 7 " . 1 * ' = 4 , \$,) # " O ' . , > , \$ ' .
¥ ? \$ " + 16 < + % # \$ ' + " @ & , . + % # " \$ (# ' ! " = % (# 7 % # & , # " \$ (6 %) .
¥ A # B , + % # \$ ' (% # " \$ (# ' 5 (+ , \$ C C (< & " \$ 5 (, . * " # , + % ! , - \$ " D 1 * * / " - , ! * ") 1 * * /) Ñ + , * ' ! " 7 ' E " C (< 4 / + % # \$ ' (' O ' * " & , 7 %
¥ A # B , 6 1 * 1 & " \$ " Ñ # " \$ (# ' & 1 \$ 1 + 1 \$ (" C (< 4 / * " ! " . .
¥ ? \$ " (\$ ' + " @ , . , # ' + 4 % & " \$ ' * 1 - 5 . 5 (< ! * " 3 . 1 * %
¥ F , . " (' # * , & # 5 " G 1 4 (" \$ (, B , - & ,) " (' > \$ 5 ! " * , + , .

Medium functionality (3 A+1?)

¥ F , . " (' - 7 , # " H " 7 " E (5 + " * * / > \$ ' " . 7 / + ' - , \$ 5 \$ % + * / 4 # 7 " . * , 4 (% (" * " 7 " E (5 + " * * / & " \$ " O 1 (\$ % + > \$ ' :
I J , D 7 ' + % 4 (< , - \$ " (' \$, ! O % \$ % \$, + , > , & , 7 / (# % 7 < # % 4 (< \$ / . # % + % 4 (, + & 6 % +) . J % * % O " 7 < * ' 3 \$, ! O % \$ % \$, + , > , & , 7 / 4 x 4 . 8 \$ " = 5 3 (1 , B , * 1 , - = % * , - 5 . 1 ! " > , (, + ' (' + % & , + % * 5 # % 7 < # % 4 (< # " \$ (' * , # .
I 8 ' - % \$ 4 # 7 " . * , 4 (% (easy , normal , hard) - & , + Õ ! " * ' 3 ! (" 3 O 1 \$, O ! + , \$, (* , > , + % 7 % # 5 (* " & \$ ' # 7 " . . easy - 3 = + , normal - 2 = + , hard - 1 = +) . G % + 1 * < . , . 12 , 7 (5 - easy .
¥ F , . " (' # * , & # 5 " K # ' * 5 (' * " 7 " E (5 + " * * / , B , - > \$ " + 16 < O % 4 # ' * 5 (' + 4 % & " \$ " O 1 (\$ ' * " 7 " E (5 + " * * < . , . 12 , 7 (* ' = .
¥ F , . " (' # * , & # 5 " G , ! & ,) " (' > \$ 5 " , B , - > \$ " + 16 < O % & ,) " (' > \$ 5 ! + % & , + % * ' O ' * " 7 " E (5 + " * * / O ' .
¥ 8 % , - \$ " ! ' (' (" 3 O 1 \$! + , \$, (* , > , + % 7 % # 5 , / # ' 3 & ,) ' * " @ + % 7 % # & % 4 7 / & ,) " (# 5 > \$ ' .
¥ 8 % , - \$ " ! ' (' # % 7 < # % 4 (< = , . % + (") " 4 , ! " / # 5 > \$ " + 6 C + . " 7 , 4 < ! " # % *) ' (' > \$ 5 .

Advanced functionality (5 A+1.E)

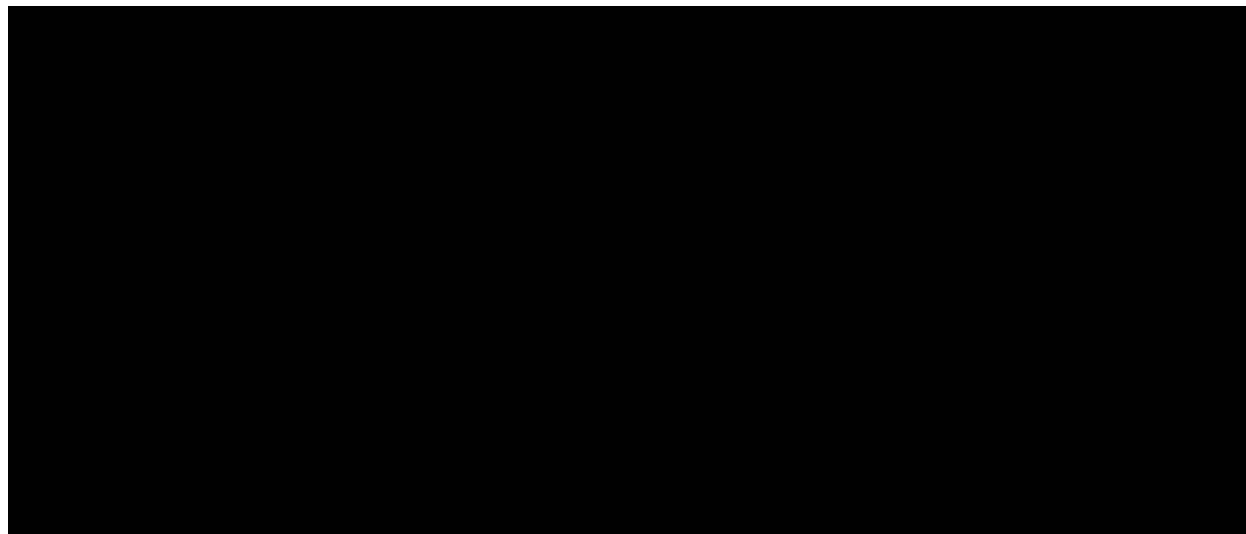
¥ F , . " (' O , D 7 ' + % 4 (< , - ' \$ " (' " - , > \$ " @ 1 > \$ " + 16 < " - , 2 > \$ " + 6 %
¥ F 7 / # , D * , > , > \$ " + 6 / O , D * " ! " . " (' % Õ Õ .
¥ L * " 7 " E (5 + " * * / = . , . " (' # % 7 < # % 4 (< \$ " 5 * . % + (& , . 12 , 7 (5 1) .
¥ 9 % 4 7 / n - \$ " 5 * . % + + ' + , . ' (' % Õ Õ & 1 \$ 1 O , D 6 / ! % 4 (" (' 4 (' # , C (# % 7 < # % 4 (< = , . % + (") " 4) & , # , D * , O 5 \$ " 5 * . 5 .

> ? * 6 @ ? 7 6 4 + E 7 + - - 2 1 :

¥ 8 ' # , \$ ' 4 (, + 5 3 (1 2 5 * # 6 % * " 7 < * ' 3 4 (' 7 < & \$, > \$ " O 5 + " * * / .
¥ 8 ' # , \$ ' 4 (, + 5 3 (1 (% 7 < # ' pure functions.
¥ M & 5 - 7 % # 5 3 (1 > \$ 5 * " [GitHub Pages](#)

D+E7+- - 2 2 (1 A+1).

K(+, \$' (' +1-17101*(47"3. 1\$ (#"\$5417<), /# ' 3 ., !+, 7/@ C!1\$5 &\$, #5) 5+"(' #, *(1*((!, -\$"D1**/, (1#4(' , +% 1, (, B,) >, \$' !, * ("7<*, !" ., &, O, >, C #*, &, #, 4(\$%7, #.



Base functionality:

¥ 9\$, #5(\$" #, *(1*(5 ! "%O"6%2C (&1\$10%B1**/ #, *(1*(5 +&1\$1. "-, *"!"). A#B, C!1\$.%3E, +. ., , 4("**<, >, 47"3. 5, &1\$10%4(' (' !*, +5 * " &1\$E' 3 (continuous loop mode).

¥ H"+% "6%3%" 17101*(' : #*, &# ' 5 +' >7/. % 4(\$%7, # (slider-arrows), 17101*(' #1\$5+"**/ (pagination, slider-dots), /#%. , !+, 7/C(< #, \$' 4(5+") "O &1\$10%B " (' 4/ O%D 47"3. "O' . NO% " &, (,) *, >, 17101* (" !" ., &, O, >, C #7"+%E O (" P (keyboard events).

¥ Q*"O"6%: "%O"6%3%"121#(' . 7/ &7"+*, >, !O%B1**/ #, *(1*(5.

¥ G1"7%5+"(' O, D7' +%4(< %"%6%'7%6% 47"3. 1\$5 ! &"\$"O1(\$"O' #, *2%-5\$"6%: O"4' + #"\$(' *, #, E+' . #4(< "%O"6% (duration of transition between slides (in ms)), "+(, O"(') *1 &\$, #5) 5+"**/ (autoplay), +% , -\$"D1**/ slider-arrows, +% , -\$"D1**/ pagination, slider-dots. 91\$1. -")' (' . 12, 7(*%" - , *1, -, +õ!#, +%&"\$"O1(\$' .

¥ A#B, ++%O#*1*, "+(, O"(') *1 &\$, #5) 5+"**/ (autoplay) % #5\$4, \$ O' E% !*" =, . ' (<4/ * " 47"3. % (, !5&' */(' "+(, O"(') *1 &\$, #5) 5+"**/, ., (' ., #' C!1\$ *1!"-1\$1 #5\$4, \$ O' E%

¥ Q. "&(' +%4(<.

D+E7+- - 2 3 (1 A+1).

K(+, \$' (' +1-4(, \$%*#5 . 7/ 5&\$"+7%**/ !" +. "%*/O' 5 2, \$O"(% Kanban Board. K"O%!"+. "%*/ O, D*" !\$, -' (' 4("(') *' O' . ?, 7, +*1 \$1"7%5+"(' &1\$10%B1**/ !" +. "%< ! +' #, \$' 4("**/O HTML Drag and Drop API. F' !"3* * " +"E \$, !45. .

G6- 9: 61H- . 4+/?9+- - 2:

1. R , ("#1 & , . % - \$"5!1\$" %/#1 := &\$' !*") 1**/?
2. R , ("#1 "-57<- "E #, +' 3 O1="*%O" 5 #, * (1#4(%& , . %3 - \$"5!1\$"? A# +%* &\$"6C@?
3. A# +' #, \$' 4(, +5@(<4/ . 171>5+"** / & , . %3 . 7/ 121#(' +* , : , - \$, - #' & , . %3 + - \$"5!1\$%
4. A#%(' & , +% . % - \$"5!1\$" O, D*" 4& , 4(1\$%" (' &\$' +!"@O, . % ! +1-4(, \$%* #, C?
5. A# O, D*" !" &54(' (' #, \$' 4(5+"6<#5 & , . %C + - \$"5!1\$%
6. R , ("#1 & , . % O' E%(" /#%@ (' & , +%&\$' #7". ' + ' #, \$' 4("**/?
7. 8) , O5 & , 7/>"@ \$%* ' 6/ O%D & , . %/O' mouseover/out (" mouseenter/leave?
8. A# +% - 5+"@(<4/ +!"@O, . %/ ! & , . %/O' O' E%&\$' + ' #, \$' 4("**%DragñDrop?
9. A#%& , . % +#" !%+* ' #" . , 4(5&*%+ - \$"5!1\$% F7/) , > , + , *' + ' #, \$' 4(, +5C(<4/?
10. R , ("#1 & , . % #7"+%(5\$' keydown (" keyup %/# + , *' +% \$%* /C(<4/?
11. A# +% - 5+"@(<4/ , - \$, - #" & , . %3 &\$, #5(#' 4(, \$%* #' 5 - \$"5!1\$%