⓪

input field

cursor

↗ cursor

① ✓ aria, shadow text/placeholder

al pple

candidate
selection
box

apple	← default, 1st item selected
alice	
...	

#of items skipped

↓

↑ 2
Aoife
Bell ////
Cauchy
Dedekind
Euler
↓ ...

↖ mouse selection

keyboard selection

Data Model = { candidates: List String }

View Model = { keyboardSelection : Maybe Int
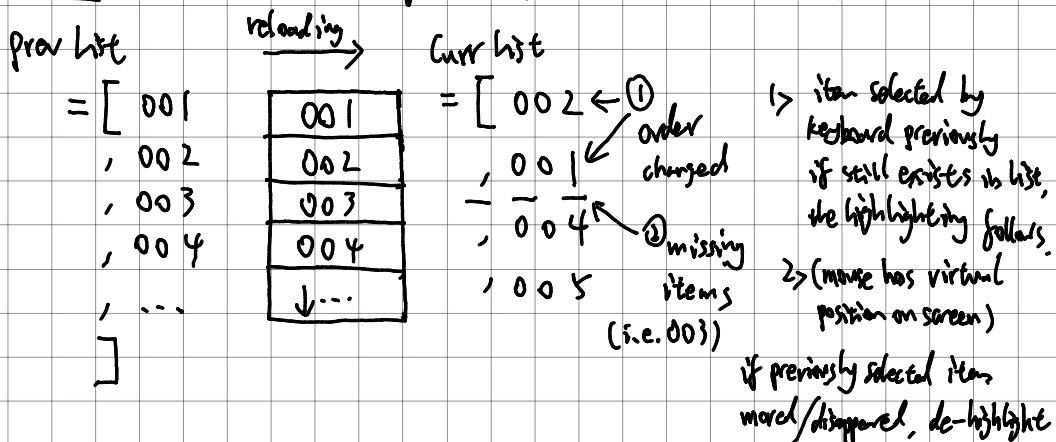, mouseSelection : Maybe Int
}

⤷ List Index
in view

Assume i) no reloading during selection

ii) may fetch more items when keyboard selector is
at the lower boundary and ↓ key is pressed.

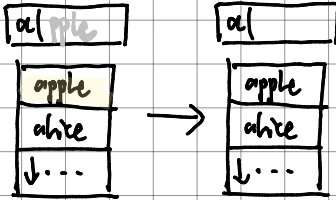$\underline{If}$ introduce real-time reloading (for time-sensitive scenario),

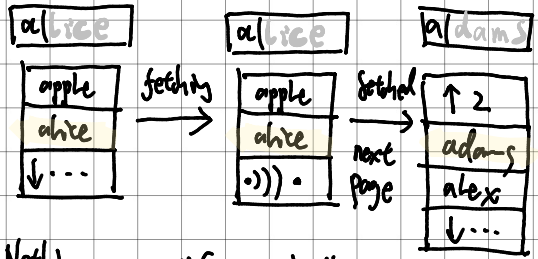Assume each item has a unique identifier (at database level)

Prev List
$$= [\ 001$$
$$,\ 002$$
$$,\ 003$$
$$,\ 004$$
$$,\ ...$$
$$]$$

reloading
→

001
002
003
004
↓ ...

Curr List
$$= [\ 002 ← ①$$
order
changed
$$,\ 001 ↙$$
$$-\ \tilde{0}\ \tilde{0}\ \tilde{4} ←$$
② missing
$$,\ 005 \quad items$$
$$(i.e.\ 003)$$

1> item selected by
keyboard previously
if still exists in list,
the highlighting follows.

2> (mouse has virtual
position on screen)

if previously selected item
moved/disappeared, de-highlight

Edge cases for keyboard

mouse position out of selection box

1. upper boundary ∧ press ↑ ⟨=⟩

2. lower boundary ∧ press ↓
⟨=⟩ mouse click on loading tab

al**pple**
apple
alice
↓ · · ·

→

al(
apple
alice
↓ · · ·

al**ice**
apple
alice
↓ · · ·

fetching →

al**ice**
apple
alice
•))) •

settled
next page →

a**dams**
↑ 2
adams
alex
↓ · · ·

{ key selection : Jose 1 , ... }

{ key selection : Nothing , ... }

3. press Enter

al**pple**
apple
alice
↓ · · ·

apple|

→
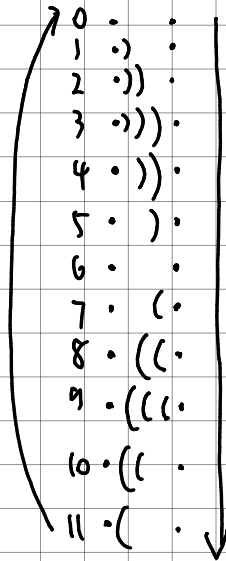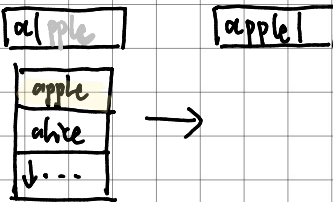
4. manually complete the whole word

sag**a**
Saga
sage
↓ · · ·

a →

sag a|

12 frame animation

0	•	•
1	:)	•
2	:))	•
3	•)))	•
4	•))	•
5	•)	•
6	•	•
7	•	(•
8	•	((•
9	•	(((•
10	•((	•
11	•(	•
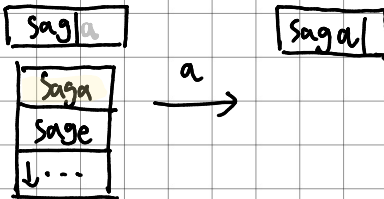
✱ users can provide
their implementation
in Config or
stay with the
default.