Word 2 Vec (skip-gram) [Predict surrounding words]

One hot

$\underline{\underline{W}}_2$

embedding size

$\underline{\underline{W}}_1$

onehot

num of distinct words = 6
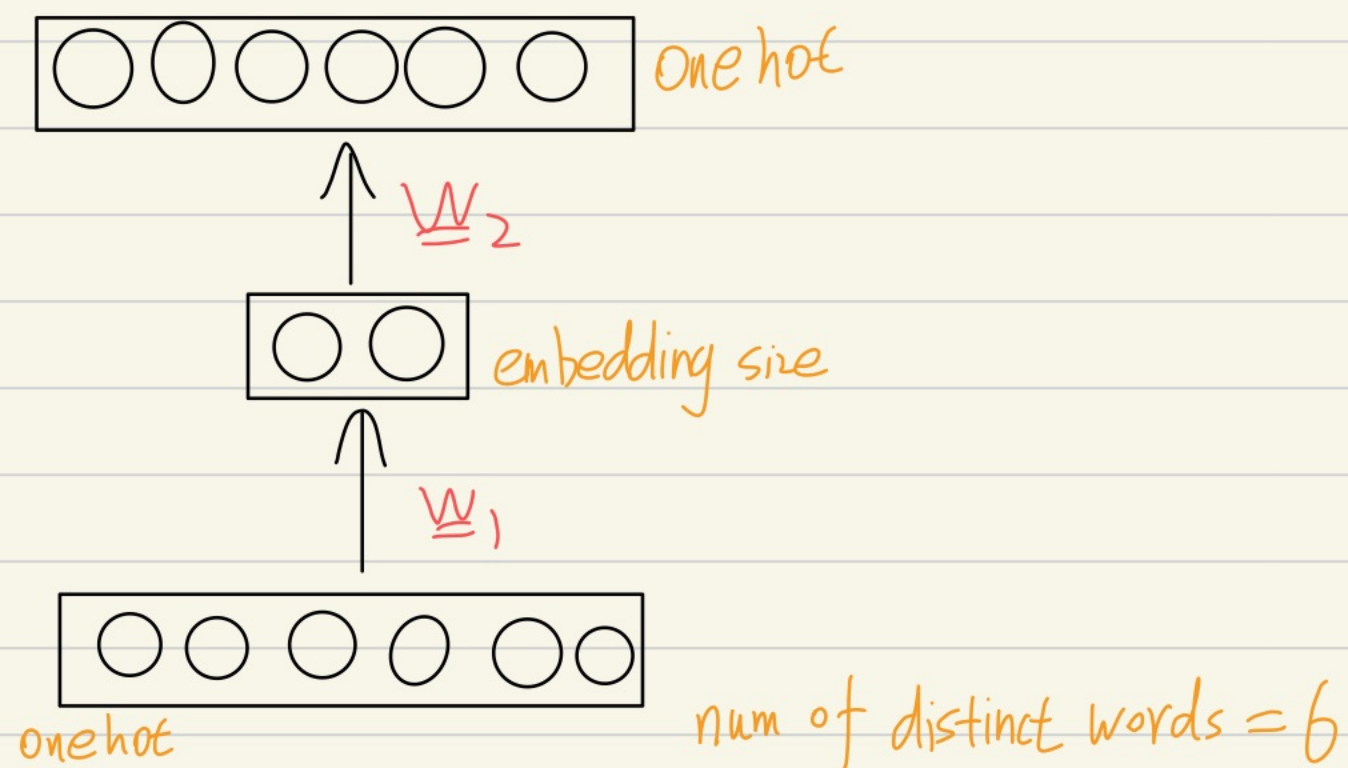
$\underline{\underline{W}}_1$ represents the embeddings of each words

$\underline{\underline{W}}_2$ represents the context embeddings

$$\text{Ex}: \quad \underline{\underline{W}}_1 = \begin{bmatrix} w_{11} & w_{12} \\ w_{21} & w_{22} \\ \vdots & \\ w_{61} & w_{62} \end{bmatrix}$$

embedding

1st word's $[w_{11} \; w_{12}]$

2nd word's $[w_{21} \; w_{22}]$

$\vdots$

6th word's $[w_{61} \; w_{62}]$