


 $V_t$ 

Panoramic Features

**Instruction:** Walk between the the kitchen counter and the couch and down the hall. Stop near the mirror that is hanging on the left side of the hallway.

Navigation

Word embedding

 $X$ 

Navigation module

 $a_t^{nv}$ 
 $h_t^{nv}$ 

Exploration module

 $h_1^{ep}$ 
 $h_1^{kw}$ 
 $a_1^{ep}$ 

Exploration module

 $h_{s-1}^{ep}$ 
 $h_{s-1}^{kw}$ 
 $a_{s-1}^{ep}$ 

Exploration module

 $W^o h_s^{kw}$ 
 $a_s^{ep}$ 

is STOP

 $\tilde{V}_t$ 
 $s=1$ 

Yes

No

Explorations

 $Y_{t,k,1}$ 

 $Y_{t,k,s}$ 
