

## Data Preparation

### Data Sources



Embodied videos



Screenshots



Navigation

### Frame extraction



Raw multiple pictures

Qwen2.5-VL-72B



### Filter with prompt



Multiple pictures in chronological order

Qwen2.5-VL-72B



### Text Description

#### <Positive text description>

(Text description matches the image sequence.)

These photos show the process of + (The correct action in image sequences)

#### <Negative text description>

(Text description didn't match the image sequence deliberately.)

These photos show the process of + (The incorrect action about image sequences)



Multiple pictures with text description

## Data Training



Qwen2.5-VL-7B-Instruct

### GRPO

Ordering Task

Next Frame Predict Task

Previous Frame Review Task



TPRU-7B



## Data Generation

Generation method: Shuffle the original order.



### Ordering Task

<Text Description> +  
<Ordering Question>

Generation method: Pick the 1st, 2nd, 4th image, Predict the 3rd picture that is mixed with other pictures.



### Next Frame Predict Task

<Text Description> +  
<Next Frame Predict Question>

Generation method: Pick the 2nd, 3rd, 4th image, Review the 1st picture that is mixed with other pictures.



### Previous Frame Review Task

<Text Description> +  
<Previous Frame Review Question>