AdaptBot: Supplementary Material

Contents
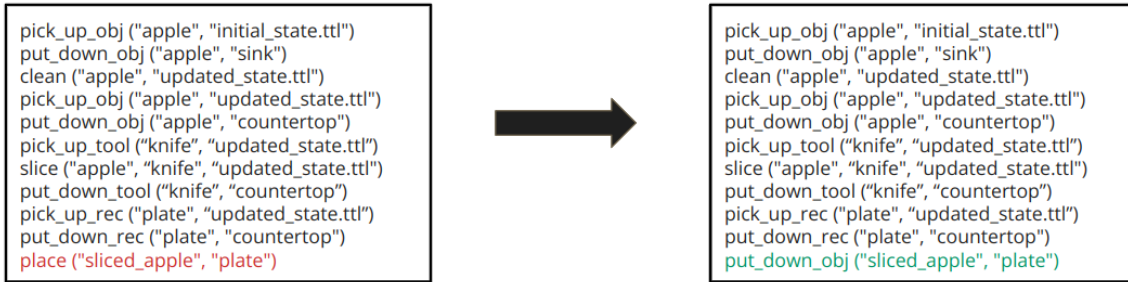
1 Question asked during Knowledge Expansion

1.1 Question asked for unknown action

Revising action name.

- **Robot:** I do not know how to execute action *'place'*, am I mistaking it for another action? Please answer in 'Yes' or 'No'.

- **Human:** Yes

- **Robot:** Please revise the action name

- **Human:** put_down_obj

```
pick_up_obj ("apple", "initial_state.ttl")
put_down_obj ("apple", "sink")
clean ("apple", "updated_state.ttl")
pick_up_obj ("apple", "updated_state.ttl")
put_down_obj ("apple", "countertop")
pick_up_tool ("knife", "updated_state.ttl")
slice ("apple", "knife", "updated_state.ttl")
put_down_tool ("knife", "countertop")
pick_up_rec ("plate", "updated_state.ttl")
put_down_rec ("plate", "countertop")
place ("sliced_apple", "plate")
```

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```
pick_up_obj ("apple", "initial_state.ttl")
put_down_obj ("apple", "sink")
clean ("apple", "updated_state.ttl")
pick_up_obj ("apple", "updated_state.ttl")
put_down_obj ("apple", "countertop")
pick_up_tool ("knife", "updated_state.ttl")
slice ("apple", "knife", "updated_state.ttl")
put_down_tool ("knife", "countertop")
pick_up_rec ("plate", "updated_state.ttl")
put_down_rec ("plate", "countertop")
put_down_obj ("sliced_apple", "plate")
```

Removing unexecutable action.

- **Robot:** I do not know how to execute action *'squeeze'*, am I mistaking it for another action? Please answer in 'Yes' or 'No'.

- **Human:** No

```
pick_up_rec ("glass", "initial_state.ttl")
put_down_rec ("glass", "countertop")
pick_up_object ("water", "updated_state.ttl")
put_down_object ("water", "glass")
pick_up_object ("lemon", "updated_state.ttl")
squeeze ("lemon", "glass")
```

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```
pick_up_rec ("glass", "initial_state.ttl")
put_down_rec ("glass", "countertop")
pick_up_object ("water", "updated_state.ttl")
put_down_object ("water", "glass")
pick_up_object ("lemon", "updated_state.ttl")
```

1.2 Question asked for unknown item

Adding an item to G_s and G_k.

Example 1

- **Robot:** Item *'mango'* is not present in my knowledge base. Is it present in the environment? Please answer in 'Yes' or 'No'. If I am mistaking it for another item, please enter 'correct_item'.

- **Human:** Yes.

- **Robot:** What kind of item is *'mango'*? Choose from: 'edible_object', 'receptacle', 'tool'.

- **Human:** edible_object

- **Robot:** What is the location of the object?

- **Human:** Fridge

- **Robot:** Is it sliceable? Please answer in 'True' or 'False.

- **Human:** True

- **Robot:** Is it boilable? Please answer in 'True' or 'False'.

- **Human:** False

- **Robot:** Is it fryable? Please answer in 'True' or 'False'.

- **Human:** False

- **Robot:** Does this object needs cleaning? Please answer in 'True' or 'False'.

- **Human:** True

Example 2

- **Robot:** Item *'bowl'* is not present in my knowledge base. Is it present in the environment? Please answer in 'Yes' or 'No'. If I am mistaking it for another item, please enter 'correct_item'.

- **Human:** Yes.

- **Robot:** What kind of item is *'bowl'*? Choose from: 'edible_object', 'receptacle', 'tool'.

- **Human:** receptacle

- **Robot:** What is the location of the object?

- **Human:** Cabinet

- **Robot:** Is receptacle sensitive? Please answer in 'True' or 'False.

- **Human:** True

- **Robot:** Can this receptacle be used for slicing on? Please answer in 'True' or 'False'.

- **Human:** False

- **Robot:** Does this receptacle needs cleaning? Please answer in 'True' or 'False'.

- **Human:** True

Example 3

- **Robot:** Item *'fork'* is not present in my knowledge base. Is it present in the environment? Please answer in 'Yes' or 'No'. If I am mistaking it for another item, please enter 'correct_item'.

- **Human:** Yes.

- **Robot:** What kind of item is *'fork'*? Choose from: 'edible_object', 'receptacle', 'tool'.

- **Human:** tool

- **Robot:** What is the location of the object?

- **Human:** rack

- **Robot:** Is it a slicing tool? Please answer in 'True' or 'False.

- **Human:** False

- **Robot:** Does this tool needs cleaning? Please answer in 'True' or 'False'.

- **Human:** True

Revising the item name.

- **Robot:** Item *'sauce'* is not present in my knowledge base. Is it present in the environment? Please answer in 'Yes' or 'No'. If I am mistaking it for another item, please enter 'correct_item'.

- **Human:** correct_item.

- **Robot:** Please revise the object name.

- **Human:** ketchup

Item isn't present in the environment.

- **Robot:** Item *'grapes'* is not present in my knowledge base. Is it present in the environment? Please answer in 'Yes' or 'No'. If I am mistaking it for another item, please enter 'correct_item'.

- **Human:** No.

```
pick_up_rec ("plate", "initial_state.ttl")
put_down_rec ("plate", "countertop")
pick_up_obj ("apple", "updated_state.ttl")
put_down_obj ("apple", "plate")
pick_up_obj ("banana", "updated_state.ttl")
put_down_obj ("banana", "plate")
pick_up_obj ("grapes", "updated_state.ttl")
put_down_obj ("grapes", "plate")
```

→

```
pick_up_rec ("plate", "initial_state.ttl")
put_down_rec ("plate", "countertop")
pick_up_obj ("apple", "updated_state.ttl")
put_down_obj ("apple", "plate")
pick_up_obj ("banana", "updated_state.ttl")
put_down_obj ("banana", "plate")
```

2 Results for other LLMs

will update very soon..