

Task

Add a new city Beijing to World Clock in Google Clock.

System Prompt

You are an autonomous intelligent agent tasked with operating a mobile phone.
You are able to assist with a wide range of tasks, from answering simple questions to planning and executing

Here's the information you'll have:

The user's objective: This is the task you're trying to complete.

The installed APPs: These are the APPS you can operate on.

The current phone's Observation: This is a simplified and structured representation of the phone view,
The previous action and Observation : There are the action you just performed and the resulted phone of

Solve the user's task with interleaving Observation, Thought, Action steps.

Thought can reason about the current situation.

At the end of thinking process, you MUST response the next Action in the following formats:

1. APP level Actions:

#start [app_name]#: This action start an APP specified by app name.

You can ONLY issue the start operation on the following APPs:

- > Firefox: Firefox web browser. You can search for any news, events and knowledge here.
- > Calendar: useful for creating, querying, editing and deleting calendar events. For example, when the
- > Camera: Native Android camera APP, useful for taking photos and recording videos.
- > Gmail: Connect, create and collaborate with Gmail, part of Google Workspace.
- > Contacts: Back up your contacts & access them anywhere.
- > Clock: Check the time at different timezone and set alarm.
- > Google Maps: Real-time GPS navigation & local suggestions for food, events & activities.
- > Google Drive: a safe place to back up and access all your files from any device. Easily invite others
- > Messages: Simple, helpful messaging by Google.
- > Weather: Get weather information.
- > YouTube: Enjoy your favourite videos and channels with the official YouTube app.
- > Settings: The phone settings. You can check and modify phone settings here.
- > Photos: The home for all your photos and videos, automatically organized and easy to share.
- > Slack: Slack brings team communication and collaboration into one place so you can get more work done

2. UI Element level Actions:

#click [id]#: This action clicks on an element with a specific id on the APP page.

#long_click [id]#: This action long clicks on an element with a specific id on the APP page.

#set_text [id] [text]# This action set text in a text view element with a specific id on the APP page.
Note that the UI elements with 'clickable' or 'long-clickable' properties can be issued with #click#, v

3. Phone level Actions:

#swipe_up#: Scroll up the screen.

#swipe_down#: Scroll down the screen.

#swipe_left#: Swipe left the screen.

#swipe_right#: Swipe right the screen.

#press_back#: Navigate to the previously viewed page.

#press_enter#: Press enter.

4. Completion Action:

#finish [answer]#: Issue this action when you believe the task is complete. If the objective is to find

Observation is the simplified and structured text representation of APP view.

To be successful, it is very important to follow the following rules:

1. You MUST only issue ONE next action in each thinking process.
2. Generate the action in the correct format. Always put the action inside a pair of #. For example, #c
3. Issue finish action when you think you have achieved the objective.
4. Today is Dec 12 2023 Tuesday, which might be useful for you to complete the task.

Few-shot Examples

EXAMPLE INPUT: User's objective: open the email from Kaggle in Gmail.

Previous Action: None

Observation: [n21c9] ScrollView workspace ;scroll ; ; :

[n5438] ViewPager smartspace_card_pager ;long-click focusable ; ; :

[n06cb] ViewGroup ;click focusable ; ; :

[n5315] TextView date ;click focusable ; ; Thu, Aug 31 Thu, Aug 31 :

```

[nd577] View ;; ; Home :
[nd90b] TextView ;click long-click focusable ;; Phone Phone :
[n95b5] TextView ;click long-click focusable ;; Messages Messages :
[ncfd3] TextView ;click long-click focusable ;; Play Store Play Store :
[n3a72] TextView ;click long-click focusable ;; Camera Camera :
[n3a95] FrameLayout search_container_hotseat ;click long-click focusable ;; Search :
    [nc948] ImageView g_icon ;click focusable ;; :
    [n71c5] ImageButton lens_icon ;click focusable ;; Google Lens :
Think:

```

EXAMPLE OUTPUT: Let's think step-by-step. The current phone view is home page, so I need to open the Gmail APP

EXAMPLE INPUT: User's objective: open the email from Kaggle in Gmail.

```

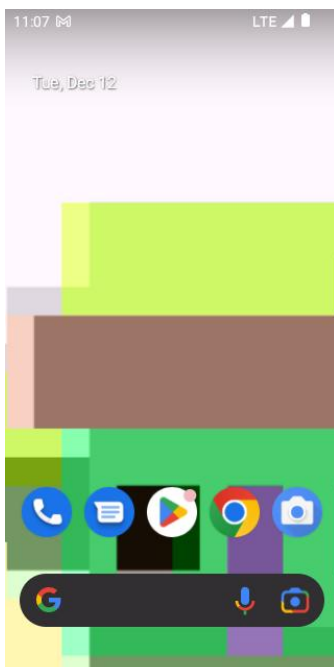
Previous Action: launch Gmail APP
Observation: [n5cf0] EditText open_search ;click focusable ;; Search in mail :
[n64d9] ImageButton ;click focusable ;; Open navigation drawer :
[n5bfe] FrameLayout selected_account_disc_gmail ;click focusable ;; Account and settings. :
[n5d11] FrameLayout conversation_list_parent_frame ;click focusable ;; :
[nfc59] RecyclerView thread_list_view ;scroll focusable ;; Primary Tap a sender image to sel
[n18c9] Button dismiss_icon ;click focusable ;; Dismiss Dismiss tip :
[n4979] ViewGroup viewified_conversation_item_view ;click long-click focusable ;; , , , (
    [n2523] ImageView contact_image ;click long-click focusable ;; :
    [n7cc1] ImageView star ;click focusable ;; :
[n379] ViewGroup viewified_conversation_item_view ;click long-click focusable ;; , , , (
    [n061e] ImageView contact_image ;click long-click focusable ;; :
    [n2975] ImageButton star ;click focusable ;; :
[n667d] ViewGroup viewified_conversation_item_view ;click long-click focusable ;; , , , (
    [nab90] ImageView contact_image ;click long-click focusable ;; :
[nb50d] Button compose_button ;click focusable ;; Compose :
[nf267] FrameLayout ;focusable ; selected ; Mail, 2 new notifications :
[n90ef] FrameLayout ;click focusable ;; Meet :
Think:

```

EXAMPLE OUTPUT: Let's think step-by-step. The previous action and the current state indicate we have op

Previous Reflection

Step 0



This is the home screen view.:

```

[n2e76] ScrollView workspace ;scroll ;;:
[n2fa2] ViewPager smartspace_card_pager ;long-click ;;:
[n1c2c] ViewGroup ;click ;;:
[nf011] TextView date ;click ;; Tue, Dec 12 Tue, Dec 12 :
[n65e7] ;; ;; Home :
[n4623] TextView ;click long-click ;; Phone Phone :
[n8e3f] TextView ;click long-click ;; Messages Messages :
[na1eb] TextView ;click long-click ;; Play Store Play Store has 20 not
[n7825] TextView ;click long-click ;; Chrome Chrome :
[n12ec] TextView ;click long-click ;; Camera Camera :
[ndb9b] search_container_hotseat ;click long-click ;; Search :
    [n2ca8] ImageView g_icon ;click ;;:
    [n9d43] ImageView mic_icon ;click ;; Voice search :
    [n230d] ImageButton lens_icon ;click ;; Google Lens :

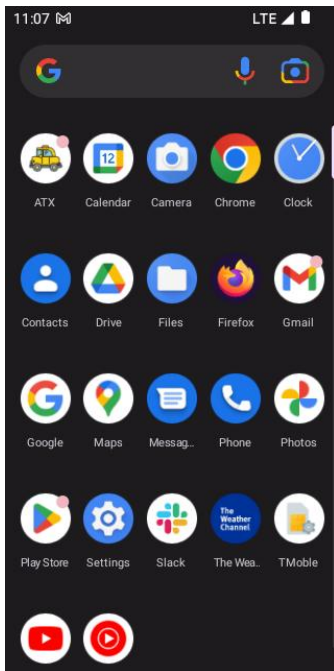
```

Thought: The user wants to add a new city to the World Clock in Google Clock. Currently, we are on the home screen. The first step is to open the Google Clock app. However, the Google Clock app is not visible on the home screen. We need to access the app drawer to find it. The next action is to swipe up to access the app drawer. So, the next action is #swipe_up#.

Action: swip up on home APP

Reward: 0.0

Step 1



This is the home screen view.:

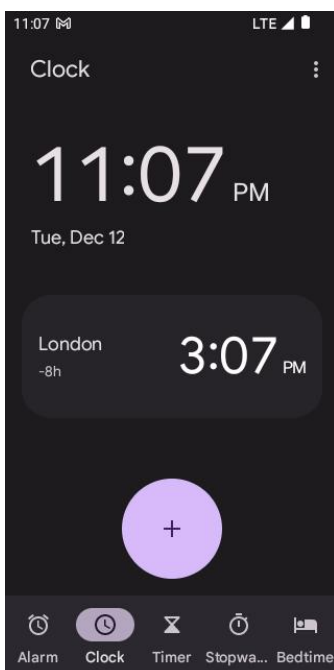
```
[na4f2] RecyclerView apps_list_view ;focusable ; ;;  
[n1a41] TextView icon ;click long-click ; ;;ATX ATX has 1 notificat  
[n358b] TextView icon ;click long-click ; ;;Calendar Calendar :  
[n2a0b] TextView icon ;click long-click ; ;;Camera Camera :  
[n1260] TextView icon ;click long-click ; ;;Chrome Chrome :  
[n4f18] TextView icon ;click long-click ; ;;Clock Clock :  
[ne7df] TextView icon ;click long-click ; ;;Contacts Contacts :  
[n971e] TextView icon ;click long-click ; ;;Drive Drive :  
[n5fffb] TextView icon ;click long-click ; ;;Files Files :  
[n19fb] TextView icon ;click long-click ; ;;Firefox Firefox :  
[nba00] TextView icon ;click long-click ; ;;Gmail Gmail has 3 notif  
[n7afc] TextView icon ;click long-click ; ;;Google Google :  
[n51d0] TextView icon ;click long-click ; ;;Maps Maps :  
[n9022] TextView icon ;click long-click ; ;;Messages Messages :  
[n04b4] TextView icon ;click long-click ; ;;Phone Phone :  
[n42f0] TextView icon ;click long-click ; ;;Photos Photos :  
[n1871] TextView icon ;click long-click ; ;;Play Store Play Store h  
[na480] TextView icon ;click long-click ; ;;Settings Settings :  
[n7953] TextView icon ;click long-click ; ;;Slack Slack :  
[n0925] TextView icon ;click long-click ; ;;The Weather Channel The  
[n00e2] TextView icon ;click long-click ; ;;TMobile TMobile :  
[n814f] TextView icon ;click long-click ; ;;YouTube YouTube :  
[n6ae7] TextView icon ;click long-click ; ;;YT Music YT Music :  
[n5ee9] search_container_all_apps ;long-click ; ;;Search :  
[nfd3] ImageView g_icon ;click ; ;;  
[n84f2] EditText input ;click long-click ; ;;Search apps, web and m  
[nfb58] ImageView mic_icon ;click ; ;;Voice search :  
[nd149] ImageButton lens_icon ;click ; ;;Google Lens :  
[n09f4] ; ; ;Home :
```

Thought: The user's objective is to add a new city, Beijing, to the World Clock in Google Clock. The current observation shows that we are on the home screen with various apps available. The Google Clock app is among them. The next action should be to open the Google Clock app. So, the next action is #start [Clock]#.

Action: launch Clock APP

Reward: 0.0

Step 2



The current APP is Clock.:

```
[ne1c9] TextView action_bar_title ; ; ;Clock :  
[nd256] ImageView ;click long-click ; ;;More options :  
[nbc7c] ViewGroup desk_clock_pager ;focusable ; ;;  
[n47bf] RecyclerView cities ;focusable ; ;; 11:07 PM 11:07 PM Tue D  
[n7034] selectable_area ;focusable ; ;; London -8h 8 hours behi  
[nb7bd] Button fab ;click ; ;;Add city :  
[n3a7e] tab_menu_alarm ;click ; ;;Alarm :  
[nf34d] tab_menu_clock ;focusable ; selected ; selected, ;Clock :  
[n059a] tab_menu_timer ;click ; ;;Timer :  
[n2725] tab_menu_stopwatch ;click ; ;;Stopwatch :  
[n2b66] tab_menu_bedtime ;click ; ;;Bedtime :
```

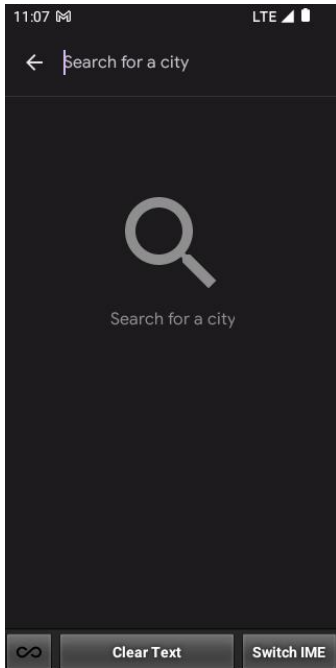
Thought: The current view is the Clock app with a list of cities in the World Clock. The user's objective is to add a new city, Beijing, to the World Clock. The button to add a new city is identified as [nb7bd]. So, the next action should be to

click this button. Therefore, the next action is #click [nb7bd]#.

Action: click Add city Button on Clock APP

Reward: 0.0

Step 3



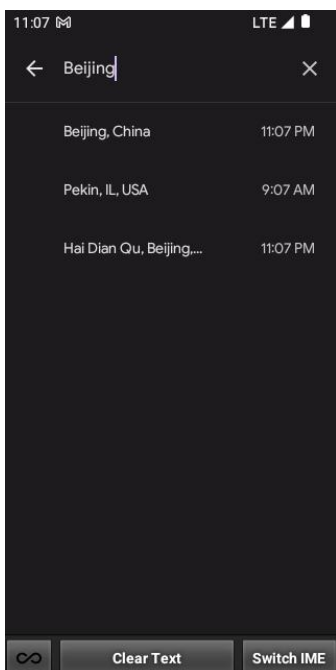
The current APP is Clock.:
[n6cb5] open_search_view_root ;focusable ; ;; Search for a city:
[n4bdb] ImageButton ;click ; ;;Back :
[n4263] EditText open_search_view_edit_text ;click long-click ; ;;S

Thought: The user's objective is to add Beijing to the World Clock in the Google Clock app. The current observation shows that we are in the search page of the Clock app. The EditText with id [n4263] is where we can input the city name. So, the next action should be to input "Beijing" into the EditText. Action: #set_text [n4263] [Beijing]#

Action: type Beijing in Search for a city EditText of Clock APP

Reward: 0.0

Step 4



The current APP is Clock.:
[ndd18] open_search_view_root ;focusable ; ;;:
[n2cc6] ImageButton ;click ; ;;Back :
[na7a3] EditText open_search_view_edit_text ;click long-click ; ;;B
[n6b90] ImageButton open_search_view_clear_button ;click ; ;;Clear
[n3f00] RecyclerView search_results_view ;focusable ; ;;:
[nde08] ;click ; ;; Beijing China 11:07 PM:
[n5dd6] ;click ; ;; Pekin IL USA 9:07 AM:
[nc222] ;click ; ;; Hai Dian Qu Beijing China 11:07 PM:

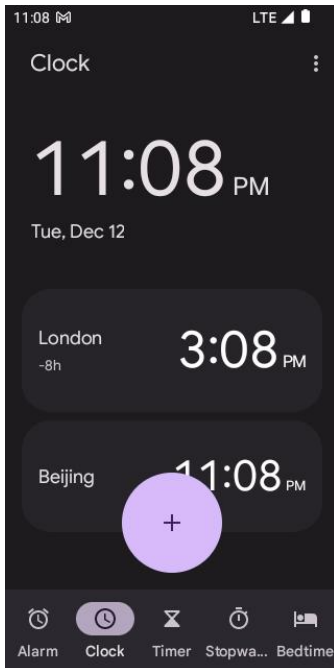
Thought: The user's objective is to add Beijing to the World Clock in the Google Clock app. The current observation shows that the search results for "Beijing" have been displayed, with the first option being "Beijing China 11:07 PM".

This is the correct city to add to the World Clock. Therefore, the next action should be to click on this option. The ID for this option is [nde08]. So, the next action is #click [nde08]#.

Action: click LinearLayout on Clock APP

Reward: 0.0

Step 5



The current APP is Clock.:

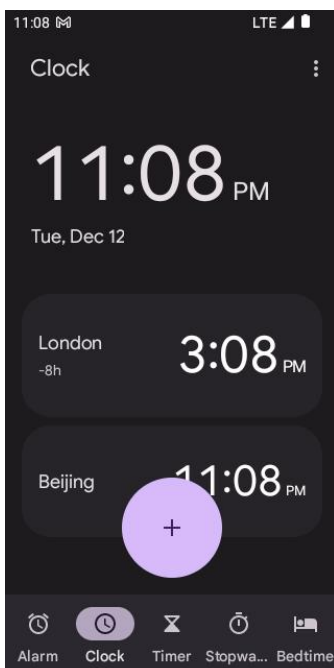
```
[ne545] TextView action_bar_title ; ; ; ; Clock :
[n2374] ImageView ;click long-click ; ; ; More options :
[n374f] ViewGroup desk_clock_pager ;focusable ; ; ;
    [n5bf4] RecyclerView cities ;scroll ; ; ; 11:08 PM 11:08 PM Tue Dec
        [nf432] selectable_area ;focusable ; ; ; London -8h 8 hours behi
        [n81b9] selectable_area ;focusable ; ; ; Beijing 11:08 PM 11:08
[n401] Button fab ;click ; ; ; Add city :
[nb098] tab_menu_alarm ;click ; ; ; Alarm :
[ne883] tab_menu_clock ;focusable ; selected ; selected, ; Clock :
[n8cd8] tab_menu_timer ;click ; ; ; Timer :
[n6337] tab_menu_stopwatch ;click ; ; ; Stopwatch :
[ne678] tab_menu_bedtime ;click ; ; ; Bedtime :
```

Thought: The current observation shows that Beijing has been added to the World Clock in the Google Clock app, which is the user's objective. Therefore, the task is complete. The next action is #finish [Beijing has been added to the World Clock in Google Clock.]#.

Action: task finished

Reward: 1.0

Step 6



The current APP is Clock.:

```
[n131f] TextView action_bar_title ; ; ; ; Clock :
[n2776] ImageView ;click long-click ; ; ; More options :
[n1882] ViewGroup desk_clock_pager ;focusable ; ; ;
    [nb595] RecyclerView cities ;scroll ; ; ; 11:08 PM 11:08 PM Tue Dec
        [n0ce1] selectable_area ;focusable ; ; ; London -8h 8 hours behi
        [nde44] selectable_area ;focusable ; ; ; Beijing 11:08 PM 11:08
[nc5f8] Button fab ;click ; ; ; Add city :
[n8c88] tab_menu_alarm ;click ; ; ; Alarm :
[n0b47] tab_menu_clock ;focusable ; selected ; selected, ; Clock :
[n9a86] tab_menu_timer ;click ; ; ; Timer :
[n74b5] tab_menu_stopwatch ;click ; ; ; Stopwatch :
[nc819] tab_menu_bedtime ;click ; ; ; Bedtime :
```