

ChetBot Automation API Reference

Version 0.7.0

The ChetBot API provides a simple JavaScript interface to interact with your Android app. It makes use of lazily-evaluated view selectors to allow you to efficiently navigate your UI.

The API uses [Rhino](#) under the hood so you can access any Android or Java libraries available in your app.

View selectors

"Selectors" can be a view, list of views, a string which corresponds to the text shown by a view or an JavaScript object that matches a number of views.

An object selector can specify one or more attributes:

- `text` - The text displayed on the `TextView`.
- `id` - The Android ID of the view. Can be specified in its short form (e.g. `"password"`) or its fully namespaced form. (e.g. `com.domain.myapp:id/password`)
- `type` - The class

Some examples of selectors passed to `tap`:

- `tap('username')`
- `tap({text: 'username'})` - Equivalent to above
- `tap(view('username'))` - Equivalent to above
- `tap(view({text: 'username'}))` - Equivalent to above
- `tap(topmost('username'))`
- `tap({id: 'password', type: 'EditText', text: ''})` - Finds an empty text field with an id matching `*:id/password`.
- `tap({id: 'com.domain.myapp:id/password', type: 'EditText', text: ''})` - Finds an empty text field with an id matching `com.domain.myapp:id/password`.

topmost(view_selector)

Find the view that's the closest to the top, matching `view_selector`.

bottommost(view_selector)

Find the view that's the closest to the bottom, matching `view_selector`.

leftmost(view_selector)

Find the view that's the closest to the left, matching `view_selector` .

rightmost(view_selector)

Find the view that's the closest to the right, matching `view_selector` .

centermost(view_selector)

Find the view that's the closest to the center, matching `view_selector` .

outermost(view_selector)

Find the view that's the furthest from the center, matching `view_selector` .

location(view_selector)

Returns a `[x, y]` pair of the location of the first selected view on the screen.

[...].closest_to(label)

Find the view closest to the first view in the view selector given. e.g.

```
views('delete').closest_to('bananas')
```

[...].furthest_from(label)

Find the view furthest from the first view in the view selector given.

view(view_selector)

Select the first view matching `view_selector` .

views(view_selector)

Select all views matching `view_selector` .

Activity

activity()

Get the current activity.

content_view()

Get the topmost content view visible on the application. This is usually the application view itself, but may be a popup window if one is visible.

run_on_ui_thread(fn)

Runs the function `fn` on the UI thread.

Interaction

home()

Simulate a press of the device's "Home" key

press(key)

Press a key or button on the device. `key` can be:

- `'enter'`
- `'back'`
- `'backspace'`

tap(view_selector)

Tap the center of the selected view.

open_drawer(side)

Opens the slide-out drawer on the side given. `side` defaults to `'start'`.

`side` may be one of:

- `'start'` (The left side in a left-to-right environment)
- `'end'`

close_drawer(side)

Closes the slide-out drawer on the side given. `side` defaults to `'start'`.

`side` may be one of:

- `'start'` (The left side in a left-to-right environment)
- `'end'`

`visible(view_selector)`

Returns `true` if `view_selector` represents any visible views, `false` otherwise.

`count(view_selector)`

Returns the number of views represented by `view_selector`.

`text(view_selector)`

Returns the text displayed on the first selected view.

`type(view_selector)`

Returns the class of the first selected view.

`id(view_selector)`

Returns the fully namespace ID of the first selected view. (e.g. `'com.domain.myapp:id/password'`)

`size(view_selector)`

Returns a `[width, height]` array of the size of first the selected view in pixels.

wait

`wait(duration)`

Wait for the given number of seconds.

`wait_for(view_selector, options = {timeout: 60})`

Wait until `exists(view_selector)` is `true`. Throws an error after `options.timeout` seconds.

`wait_until_idle()`

Wait until the the view hierarchy is completely idle. Throws an error if not idle after ten seconds.

Assertions

```
assert_true(value)
```

Throw an error if `value` is not truthy.

```
assert_false(value)
```

Throw an error if `value` is truthy.

```
assert_equal(a, b)
```

Throw an error if `a` is not equivalent (`!=`) to `b` .

```
assert_visible(view_selector)
```

Equivalent to `assert_true(visible(view_selector))` .

Keyboard

```
hide_keyboard()
```

Dismiss the soft keyboard if it is showing

```
type_text(text)
```

Simulate typing the characters of `text` on a connected keyboard.

Utilities

```
toast(text)
```

Show a "Toast" on the screen for a few seconds, showing the text given.

```
screenshot()
```

Take a screenshot and show it in the test report.