

UITest iOS 语法元素

XCUIApplication: 继承XCUIElement, 这个类掌管应用程序的生命周期, 里面包含两个主要方法

launch(): 启动程序

terminate(): 终止程序

XCUIElement: 继承NSObject, 实现协议XCUIElementAttributes

XCUIElementTypeQueryProvider 可以表示系统的各种UI元素

exist: 可以让你判断当前的UI元素是否存在, 如果对一个不存在的元素进行操作, 会导致测试组件抛出异常并中断测试

descendantsMatchingType(type:XCUIElementType)->XCUIElementQuery: 取某种类型的元素以及它的子类集合

childrenMatchingType(type:XCUIElementType)->XCUIElementQuery: 取某种类型的元素集合, 不包含它的子类

这两个方法的区别在于, 你仅使用系统的UIButton时, 用childrenMatchingType就可以了, 如果你还希望查询自己定义的子Button, 就要用descendantsMatchingType

另外UI元素的一些交互

tap(): 点击

doubleTap(): 双击

pressForDuration(duration: NSTimeInterval): 长按一段时间, 在你需要进行延时操作时, 这个就派上用场了

swipeUp(): 这个响应不了pan手势, 暂时没发现能用在什么地方, 也可能是beta版的bug, 先不解释

typeText(text: String): 用于textField和textView输入文本时使用, 使用前要确保文本框获得输入焦点, 可以使用tap()函数使其获得焦点

XCUIElementAttributes协议

里面包含了UIAccessibility中的部分属性

@property (readonly) NSString *identifier;

```
@property (readonly) CGRect frame;
@property (readonly, nullable) id value;
@property (readonly, copy) NSString *title;
@property (readonly, copy) NSString *label;
@property (readonly) XCUIElementType elementType;
@property (readonly, getter = isEnabled) BOOL enabled;
@property (readonly) XCUIUserInterfaceSizeClass horizontalSizeClass;
@property (readonly) XCUIUserInterfaceSizeClass verticalSizeClass;
@property (readonly, nullable) NSString *placeholderValue;
@property (readonly, getter = isSelected) BOOL selected;
@property (readonly) BOOL hasFocus;
```

XCUIElementTypeQueryProvider协议

里面包含了系统中大部分UI控件的类型，可通过读属性的方式取得某种类型的UI集合

```
@property (readonly, copy) XCUIElementQuery *groups;
@property (readonly, copy) XCUIElementQuery *windows;
@property (readonly, copy) XCUIElementQuery *sheets;
@property (readonly, copy) XCUIElementQuery *drawers;
@property (readonly, copy) XCUIElementQuery *alerts;
@property (readonly, copy) XCUIElementQuery *dialogs;
@property (readonly, copy) XCUIElementQuery *buttons;
@property (readonly, copy) XCUIElementQuery *radioButtons;
@property (readonly, copy) XCUIElementQuery *radioGroups;
@property (readonly, copy) XCUIElementQuery *checkboxes;
@property (readonly, copy) XCUIElementQuery *disclosureTriangles;
@property (readonly, copy) XCUIElementQuery *popUpButtons;
@property (readonly, copy) XCUIElementQuery *comboBoxes;
@property (readonly, copy) XCUIElementQuery *menuButtons;
@property (readonly, copy) XCUIElementQuery *toolbarButtons;
@property (readonly, copy) XCUIElementQuery *popovers;
@property (readonly, copy) XCUIElementQuery *keyboards;
@property (readonly, copy) XCUIElementQuery *keys;
@property (readonly, copy) XCUIElementQuery *navigationBars;
```

@property (readonly, copy) XCUIElementQuery *tabBars;
@property (readonly, copy) XCUIElementQuery *tabGroups;
@property (readonly, copy) XCUIElementQuery *toolbars;
@property (readonly, copy) XCUIElementQuery *statusBars;
@property (readonly, copy) XCUIElementQuery *tables;
@property (readonly, copy) XCUIElementQuery *tableRows;
@property (readonly, copy) XCUIElementQuery *tableColumns;
@property (readonly, copy) XCUIElementQuery *outlines;
@property (readonly, copy) XCUIElementQuery *outlineRows;
@property (readonly, copy) XCUIElementQuery *browsers;
@property (readonly, copy) XCUIElementQuery *collectionViews;
@property (readonly, copy) XCUIElementQuery *sliders;
@property (readonly, copy) XCUIElementQuery *pageIndicators;
@property (readonly, copy) XCUIElementQuery *progressIndicators;
@property (readonly, copy) XCUIElementQuery *activityIndicators;
@property (readonly, copy) XCUIElementQuery *segmentedControls;
@property (readonly, copy) XCUIElementQuery *pickers;
@property (readonly, copy) XCUIElementQuery *pickerWheels;
@property (readonly, copy) XCUIElementQuery *switches;
@property (readonly, copy) XCUIElementQuery *toggles;
@property (readonly, copy) XCUIElementQuery *links;
@property (readonly, copy) XCUIElementQuery *images;
@property (readonly, copy) XCUIElementQuery *icons;
@property (readonly, copy) XCUIElementQuery *searchFields;
@property (readonly, copy) XCUIElementQuery *scrollViews;
@property (readonly, copy) XCUIElementQuery *scrollBars;
@property (readonly, copy) XCUIElementQuery *staticTexts;
@property (readonly, copy) XCUIElementQuery *textFields;
@property (readonly, copy) XCUIElementQuery *secureTextFields;
@property (readonly, copy) XCUIElementQuery *datePickers;
@property (readonly, copy) XCUIElementQuery *textViews;
@property (readonly, copy) XCUIElementQuery *menus;
@property (readonly, copy) XCUIElementQuery *menuItems;
@property (readonly, copy) XCUIElementQuery *menuBars;

@property (readonly, copy) XCUIElementQuery *menuBarItems;
@property (readonly, copy) XCUIElementQuery *maps;
@property (readonly, copy) XCUIElementQuery *webViews;
@property (readonly, copy) XCUIElementQuery *steppers;
@property (readonly, copy) XCUIElementQuery *incrementArrows;
@property (readonly, copy) XCUIElementQuery *decrementArrows;
@property (readonly, copy) XCUIElementQuery *tabs;
@property (readonly, copy) XCUIElementQuery *timelines;
@property (readonly, copy) XCUIElementQuery *ratingIndicators;
@property (readonly, copy) XCUIElementQuery *valueIndicators;
@property (readonly, copy) XCUIElementQuery *splitGroups;
@property (readonly, copy) XCUIElementQuery *splitters;
@property (readonly, copy) XCUIElementQuery *relevanceIndicators;
@property (readonly, copy) XCUIElementQuery *colorWells;
@property (readonly, copy) XCUIElementQuery *helpTags;
@property (readonly, copy) XCUIElementQuery *mattes;
@property (readonly, copy) XCUIElementQuery *dockItems;
@property (readonly, copy) XCUIElementQuery *rulers;
@property (readonly, copy) XCUIElementQuery *rulerMarkers;
@property (readonly, copy) XCUIElementQuery *grids;
@property (readonly, copy) XCUIElementQuery *levelIndicators;
@property (readonly, copy) XCUIElementQuery *cells;
@property (readonly, copy) XCUIElementQuery *layoutAreas;
@property (readonly, copy) XCUIElementQuery *layoutItems;
@property (readonly, copy) XCUIElementQuery *handles;
@property (readonly, copy) XCUIElementQuery *otherElements;