



Selectors

UiPath Module

The art of getting what you want when you want it

Selectors

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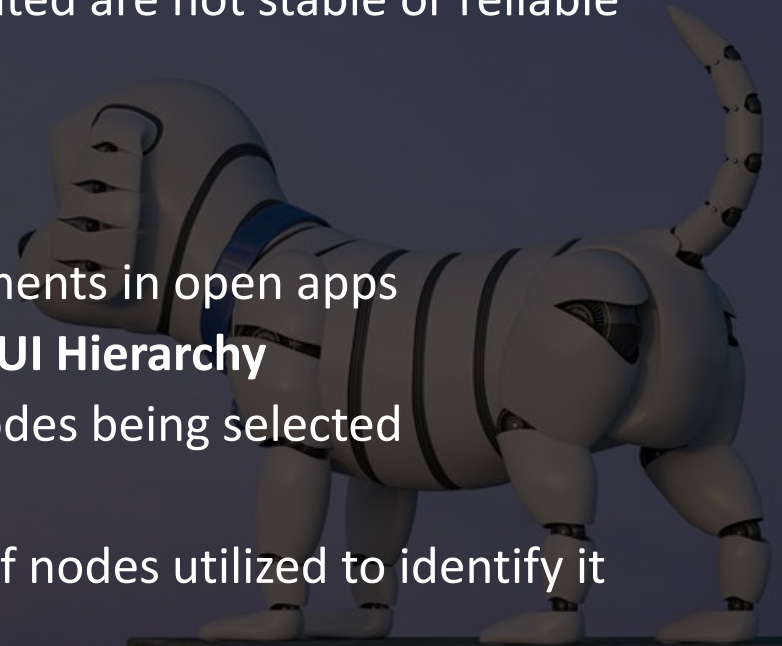
- a feature that enables the identification of a specific User Interface element through its address and attributes.
- These are stored as XML fragments.
- Made up of nodes. Each node is made up of:
 - Tags
 - Correspond to a visual element on the screen
 - Nodes in the selector XML fragment
 - Attributes
 - Key value pair that help identify an element

```
<webctrl parentid='slide-list-container' tag='A' aaname='Details' class='btn-dwnl' />
```


Ui Explorer

[UI Explorer](#)

- functionality in UiPath Studio that allows you to analyze and edit selector
- used whenever the selectors that were automatically generated are not stable or reliable enough
- Parts:
 - **Visual (UI) Tree**
 - Find UI elements in open apps
 - **Selector Editor/UI Hierarchy**
 - View the nodes being selected
 - **Edit Attributes**
 - Attributes of nodes utilized to identify it



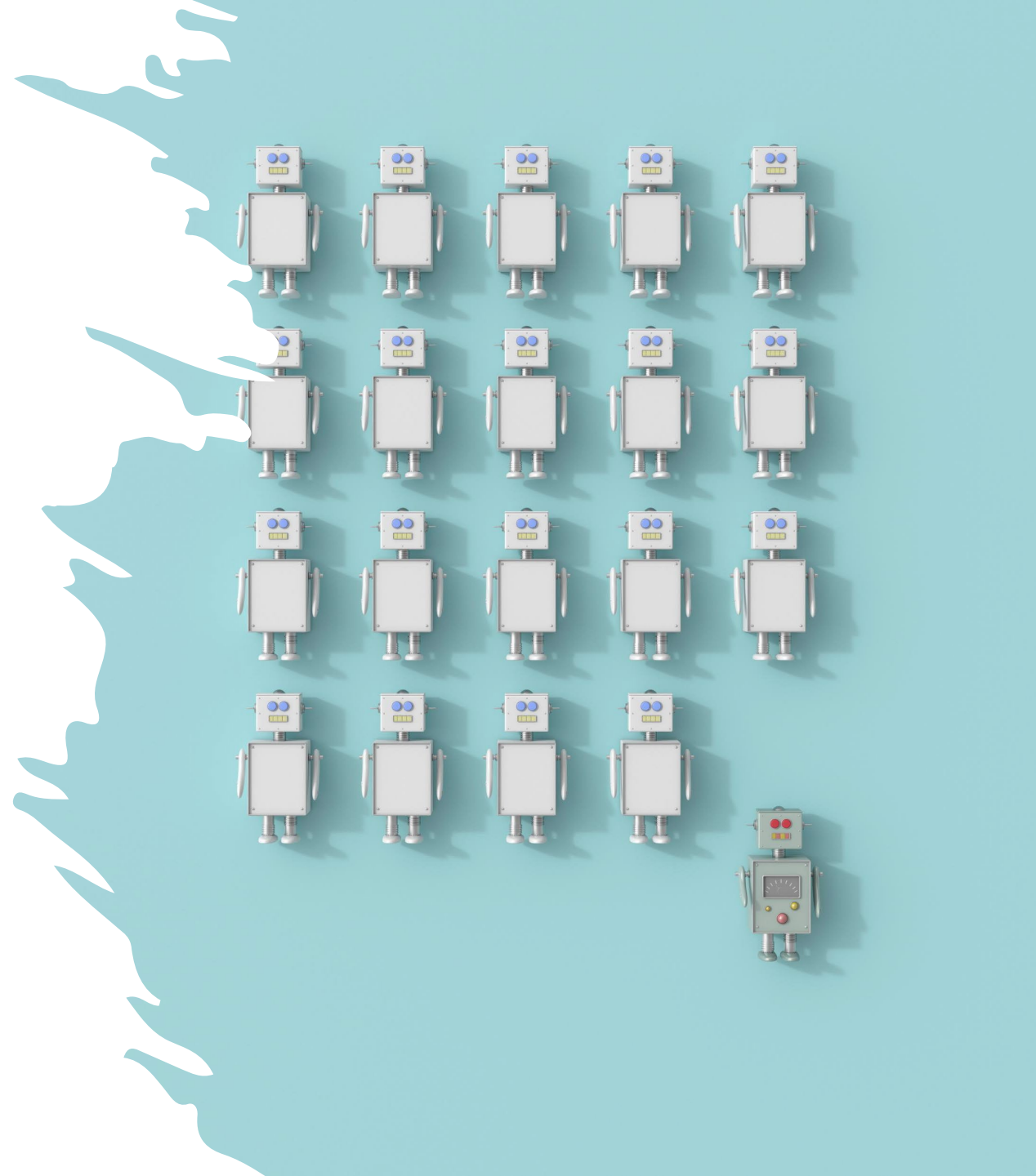
UI Frameworks

- Changes the way selecting an element is approached
- **Default**
 - Works fine with all types of user interfaces
- **Active Accessibility**
 - For legacy applications if the default framework doesn't work
- **UI Automation**
 - For newer applications when the default method doesn't work

Types of Selectors

Full Selectors vs Partial Selectors

- **Full Selectors**
 - Contain all the tags and attributes needed to identify an element
 - Best suited when the actions performed require switching between multiple windows
 - Similar to an absolute file path
- **Partial Selectors**
 - Doesn't contain the tags and attributes of the top-level window
 - Must be in a container
 - Best for performing multiple actions in the same window
 - Similar to a relative file path





Fine-tuning Selectors

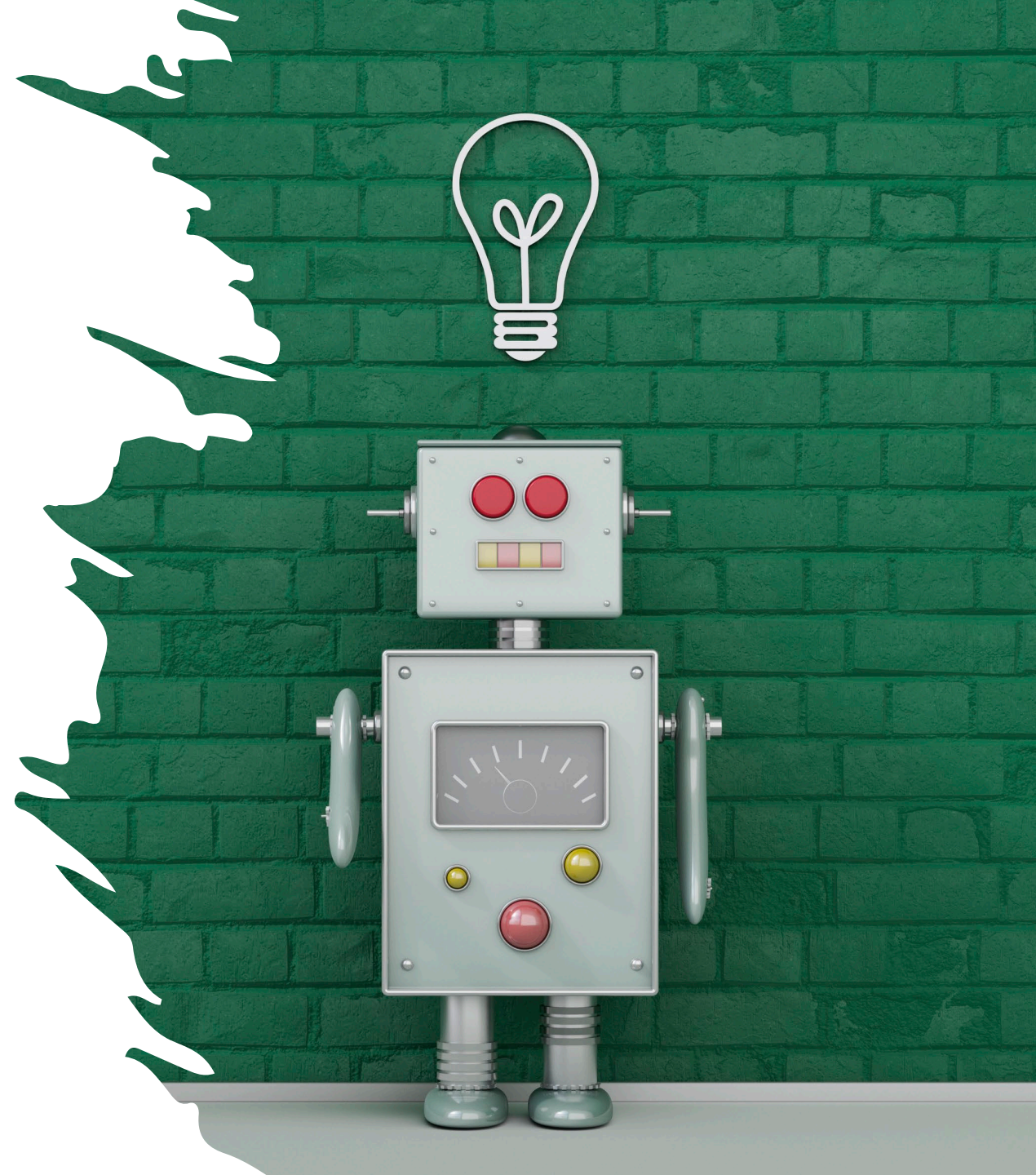
Selectors with Wildcards |
Dynamic Selectors

- Using wildcards
 - Enable you to replace zero or more characters in a string
 - Asterisk (*) – replaces zero or more characters
 - Question mark (?) – replaces a single character
- Using variables

When fine tuning isn't enough

[Find Children](#) | [Anchor Base](#)

- **Anchor Base**
 - Find the element based on its relationship with an easily identifiable element (i.e and easier target. Pun intended)
- **Relative Selector**
 - incorporate the information about the anchor's selector in the selector of the target UI element
- **Visual Tree Hierarchy**
 - The hierarchy in the Visual Tree can improve the reliability of a selector by including the tags and attributes of the element that is above in the hierarchy
- **Find Children**
 - identify all the children of an element that is more stable.





Questions?

Comments? Concerns? Violent Reactions?



Discussion Questions

- What are selectors?
- What is the UI Explorer?
- Why change the UI frameworks?
- Different types of selectors?
- How to make dynamic selectors?
- What are wildcards?
- When selectors are difficult to fine tune what other options are available?