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UI Recorder Enhancement

Results

Original XPath Code from UI Recorder

Longer XPath

```
/Pane[@ClassName="#32769"][@Name="桌面 1"]/Window[@ClassName="Window"]
[@Name="Chroma ATS IDE - [TI
Editor]"]/Custom[@AutomationId="Container"]/Pane[@ClassName="ScrollViewer"]/Custom
[@ClassName="MainControl"]/Group[@Name="dockManager"]
[@AutomationId="dockManager"]/Group[@Name="dockItem4"][starts-
with(@AutomationId, "dockItem")]/Group[@Name="dockItem1"][starts-
with(@AutomationId, "dockItem")]/Group[@Name="dockItem2"][starts-
with(@AutomationId, "dockItem")]/Group[@Name="dockItem3"][starts-
with(@AutomationId, "dockItem")]/Group[@Name="TIContextPanel"]
[@AutomationId="TIContextPanel"]/Custom[@ClassName="PGGridAeraView"]/DataGrid[@Aut
omationId="PGGrid"]/Pane[@Name="DataPanel"]
[@AutomationId="dataPresenter"]/DataItem[starts-
with(@Name, "Chroma.TestItemEditor.ComposedElement.Default.PGGridRowViewModel")]/Cu
stom[starts-with(@Name, "ReadAC_Current, Item:
Chroma.TestItemEditor.ComposedElement.Defa")][@AutomationId="CommandName"]
```

Shorter XPath

```
/DataItem[starts-
with(@Name,"Chroma.TestItemEditor.ComposedElement.Default.PGGridRowViewModel")]/Cu
stom[starts-with(@Name,", Item:
Chroma.TestItemEditor.ComposedElement.Default.PGGridRowV")]
[@AutomationId="CommandName"]
```

Modified Code with Specific String Formats

Record Single Left Click

```
PP5IDEWindow.PerformClick("/ById[searchText]", ClickType.LeftClick);
```

Record Multiple Left Clicks

```
PP5IDEWindow.PerformClick("/ById[searchText]", ClickType.LeftClick);
PP5IDEWindow.PerformClick(, ClickType.LeftClick); // failed, no identifiers
```

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```
recorded
PP5IDEWindow.PerformClick("/ById[btnYes]", ClickType.LeftClick);
PP5IDEWindow.PerformClick("/ById[Close]", ClickType.LeftClick);
```

Modified Code with Specific String Formats

```
// 0924, modified code:
PP5IDEWindow.PerformClick("/ByClass[PGGridAeraView]/ById[PGGrid,dataPresenter]",
ClickType.LeftClick);
PP5IDEWindow.PerformClick("/ById[PGGrid,dataPresenter,CommandName]",
ClickType.LeftClick);
PP5IDEWindow.PerformClick("/ById[editParamAreaView,ParameterGrid,dataPresenter]",
ClickType.LeftClick);
PP5IDEWindow.PerformClick("/ById[editParamAreaView]/ByClass[ScrollViewer,TextBox]",
ClickType.LeftClick);
```

Functions

- 1. Can record the actions and format as the **specified string formats** section.
- 2. Skip XPath parts that start with: starts-with, contains.
- 3. Currently supported actions: LeftClick, RightClick, LeftDoubleClick.

TODOs

1. Comment support from UI Recorder:

```
// from UI recorder: locate By identifiers// from UI recorder: locate By control extension methods// from UI recorder: locate By normal methods
```

- 2. Add support for formatting:
 - By control extension methods: MenuSelect("Functions", "TI Editor"),

```
ToolBarSelect(), ...
```

- By normal methods: (/Window[...]/Text[...])
- By DataGrid related methods: (/Window[...]/Text[...])
- By complex actions of an extension method:
 - Test Command related: AddCommand, GetCommand, ...
 - Parameters related: CreateNewVariable1(params), CreateNewVariable2(params)
- 3. Add support for action **InputType formatting style**:
 - 1. Normal send keys: "sendContent"
 - 2. Special actions:
 - Ctrl + A: Select All
 - Ctrl + C: Copy
 - Ctrl + D: Paste
 - ...

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Specific String Formats

Record Click Action

```
PP5IDEWindow.PerformClick({LocatorPath}, {ClickTypes})
```

- LocatorPath: see "PerformGetElement" section.
- **ClickTypes:** ClickType.LeftClick, InputType.Send, ...

Example:

```
PP5IDEWindow.PerformClick("/ById[TCListPanel]/ById[PreviosBtn]",
ClickType.LeftClick);
PP5IDEWindow.PerformClick("/ByCell@PGGrid[1,@Skip]", ClickType.TickCheckBox);
```

Record Input Action

```
PP5IDEWindow.PerformInput({LocatorPath}, {InputTypes}, {textToInput})
```

- LocatorPath: see "PerformGetElement" section.
- InputTypes: InputType.SelectAllContent, InputType.SendContent, ...
- textToInput: null or "AnyText".

Example:

```
PP5IDEWindow.PerformInput("/ByCell@PGGrid[2,@TestCommand]",
InputType.SelectAllContent, null);
PP5IDEWindow.PerformInput("/ById[TCListPanel]/ById[SearchBox]",
InputType.SendContent, "ReadAC_Current");
```

Record Inspect Action

```
PP5IDEWindow.PerformGetElement({LocatorPath})
```

• LocatorPath Examples:

```
"/Window[Search Result]/ById[txtBlockMsg]"
o "/ById[TCListPanel]/ById[searchText]"
```

- o "/ByCell@PGGrid[1,@Description]"

LocatorPath Types:

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- 1. "/Byxxx[Locator1,Locator2,Locator3,...]" (Single By identifier with multiple element identifiers)
- 2. "/Byxxx[Locator1]/Byyy[Locator2]" (Multiple By identifiers with Single/multiple element identifiers)
- 3. "/Window[Locator1]/Button[Locator2]" (ControlType as identifier)
- 4. "/Window[Locator1]/Byxxx[Locator2]/Byyy[Locator1,Locator2,Locator3,...]" (Mixed of above 1~3)

Example:

IElement ele = PP5IDEWindow.PerformInput("/ById[TCListPanel]/ById[searchText]",
"/ByCell@PGGrid[1,@Description]");