# Blue Prism Labs

## Lab 1: Application Modeller

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# Contents

# Introduction

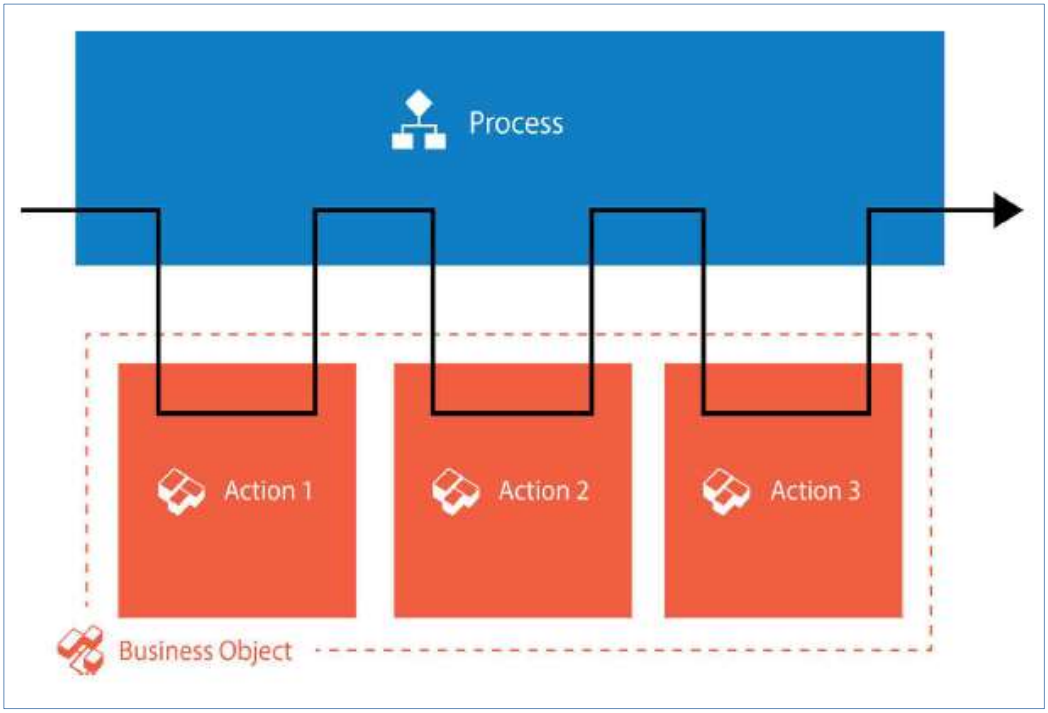
The Blue Prism Interactive Client (IC) is the primary interface to either manage or model out processes for the digital workforce to perform. The Studio tab is the part of the Blue Prism IC where modelling activities are accomplished. Before we can automate a process however, we need to be able to interact with the required applications. Blue Prism breaks up automations into building blocks called Processes and Objects.

A Process contains business logic, the actual order and logic required to complete a task. We'll discuss Processes in more detail in later labs.

An Object is the instrument that a process uses to control an application. The object layer is for application logic only and actions should be small, generic and re-useable. Business objects should not contain any business logic or process rules as these reside in the Process.

Ideally an object should offer a set of simple functions that a process can orchestrate into a complex sequence. By absolving the object of responsibility for business rules and decision making, the aim is to enable the objects to be reused by many different processes and for an object 'library' to be built up. And as the diversity of the object library increases, the effort to deliver an automated solution decreases since objects can be reused by many different processes.

For each application, we can create one or more Objects composed of reusable actions that can be called from a Process. The logical flow is shown below:




In this exercise, we will be looking at the primary way that a user identifies parts of an application for the automation.

**Please note that this lab builds on concepts presented in the Getting Started Guide. If you haven't read that yet, please do!**

# Lab 1: Application Modeller

1. Click the Studio tab in the Interactive Client.

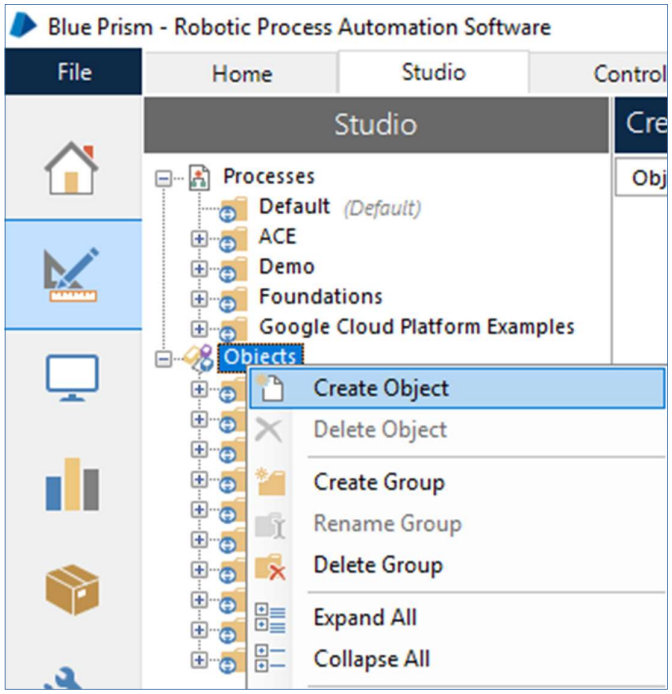
   *Note: The Studio tab is where you create and edit both Processes, which contain business logic, and Objects, which interact with applications.*

2. Right click on “Objects” and click “Create object”

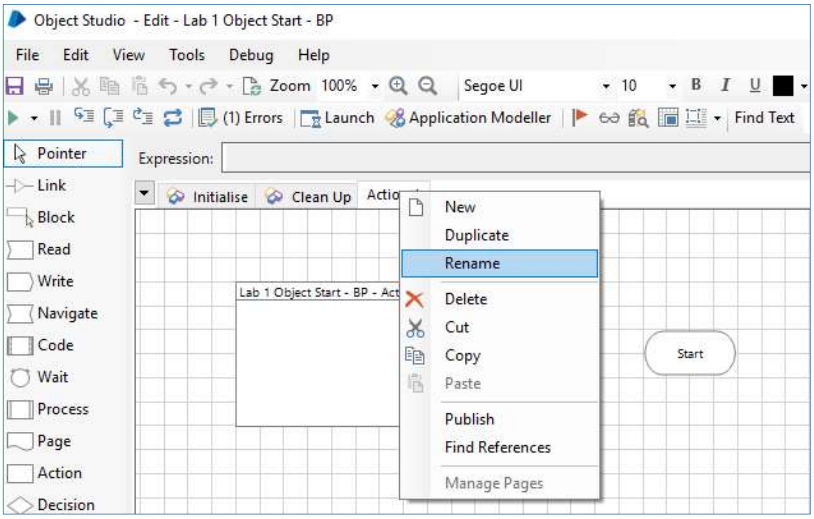
   Enter the name “Lab 1 Object Start - BP” and hit the “Next” button at the bottom right.

   Enter the description “Searches Blueprism.com resources” and hit the “Finish” button in the bottom right.

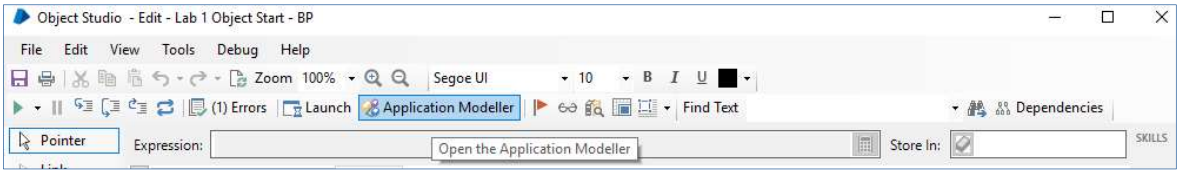
3. The Object you just created should be highlighted. Double click on it to open it in Object Studio. This is where you can create and edit the object.




4. Right click on “Action 1” and rename it to “Search”



5. Click on “Application Modeler”, located in the top center area of the window. The Application Modeler is how you identify elements of an application you would like to interact with to either read or write information.




6. Type “Blueprism.com” for the Application name and click Next.

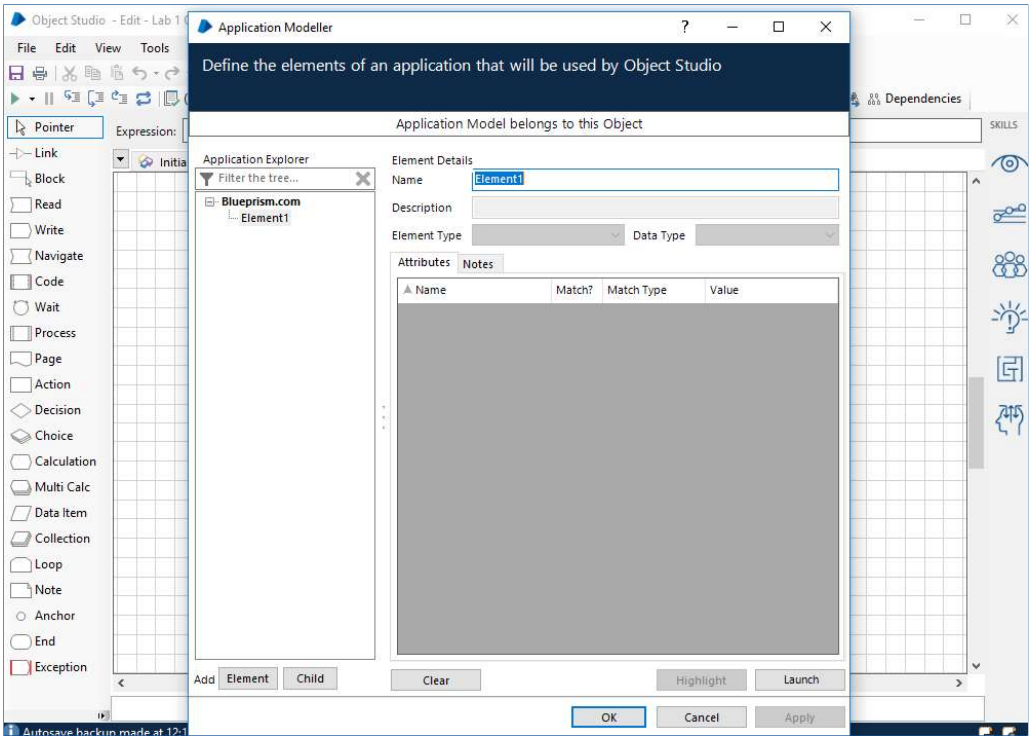
7. Select “Browser-based Application (Internet Explorer)” and click Next.

8. Select “A browser that is launched from an executable file” and click Next.

9. Confirm the path (C:\Program Files\Internet Explorer\iexplore.exe) and click Next.

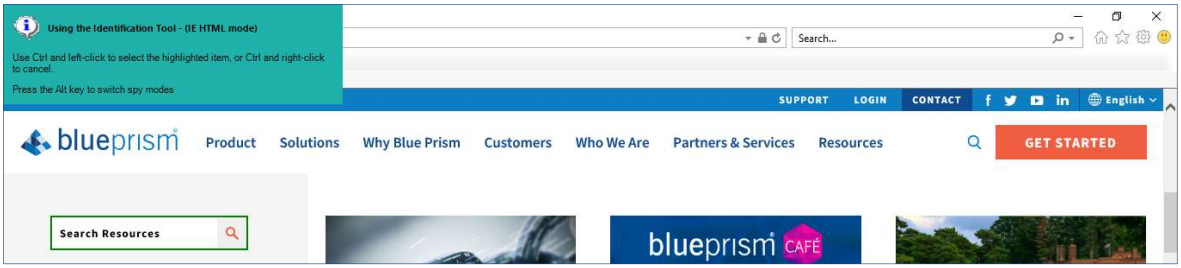
10. Enter https://www.blueprism.com/resources for the URL and click Next. Continue to click Next until you click “Finish”. (accept default entries)

11. Click “Launch”, located in the bottom right. A browser should launch to Blueprism.com/resources.



12. Change “Element1” to “Search Bar”. Now it’s time to “spy” the search bar in the Application Modeller. Click the “Identify” button, located in the bottom right of the Application Modeller, to enter “Spy Mode”. Start to move your mouse over the browser window. Notice how different elements are highlighted. Position your mouse so that the search bar is highlighted, as shown below. You might have to scroll down to find it. Click while holding Ctrl.

*Note: If you notice the highlight squares don’t seem to match up with any elements on the page, make sure your browser is set to 100% zoom. While different zoom levels will not affect Blue Prism while running automated processes, it can make spying elements challenging!*




*Note: While Spying, there are multiple Spy Modes to choose from, some of which will be better than others for different applications. For example, IE HTML mode will likely be the best for spying internet explorer, and as such will be the default. Pressing the Alt key will switch between Spy Modes. Feel free to experiment!*

13. Confirm that you have spied the correct element by clicking on “Highlight”, located in the bottom right of the Application Modeller next to “Identify”. The search bar should be highlighted.

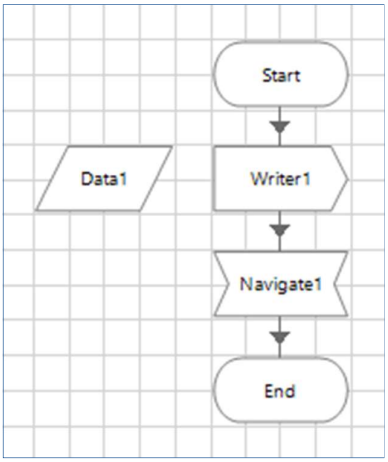
14. Click the “Add Element” button, located on the bottom left of the Application Modeller.

15. Repeat steps 12 and 13 to spy the search button (the magnifying glass). Call this element “Search Button” and remember to click “Highlight” when you’re done to confirm that it is spied correctly.

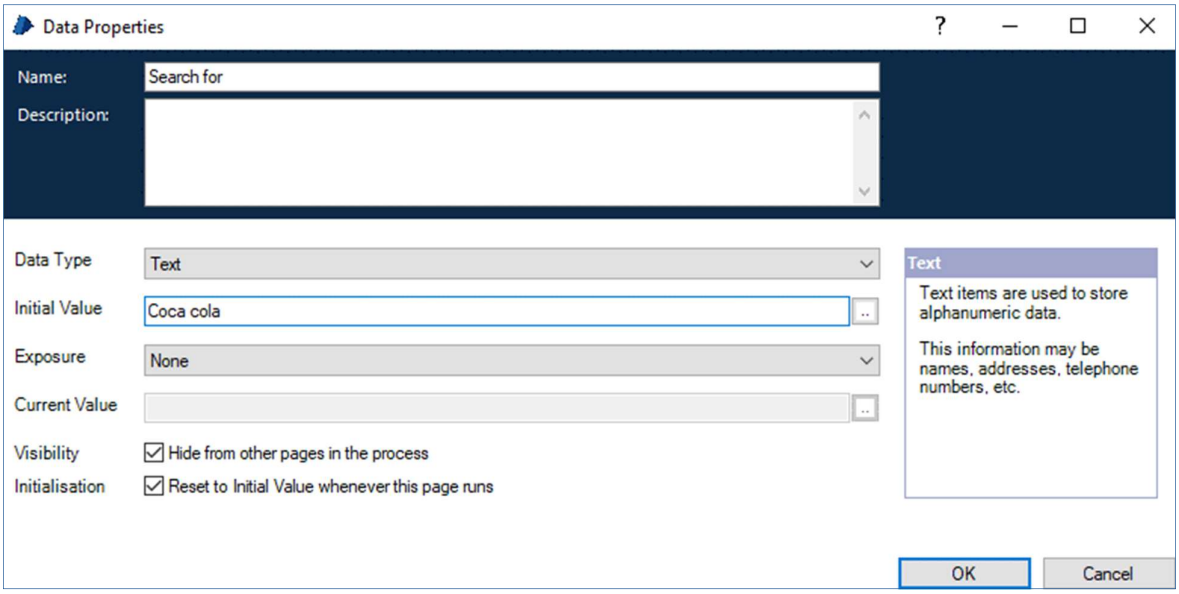
*Note: Notice that many “attributes” are identified for each element you Spy. This is how the Blue Prism identifies each element. We’ll go into more detail on these attributes in later labs, but for now it is important to know that Blue Prism is not simply screen scraping. By interacting with the underlying attributes, you end up with a much more resilient solution.*

16. Click “OK”, located in the bottom right of the Application Modeller, and return to the Object Studio. Leave the internet explorer browser open. Now that we have two basic elements identified, let’s use them!

17. Add a Write Stage, a Navigate Stage, and a Data Item and link them together as shown below.

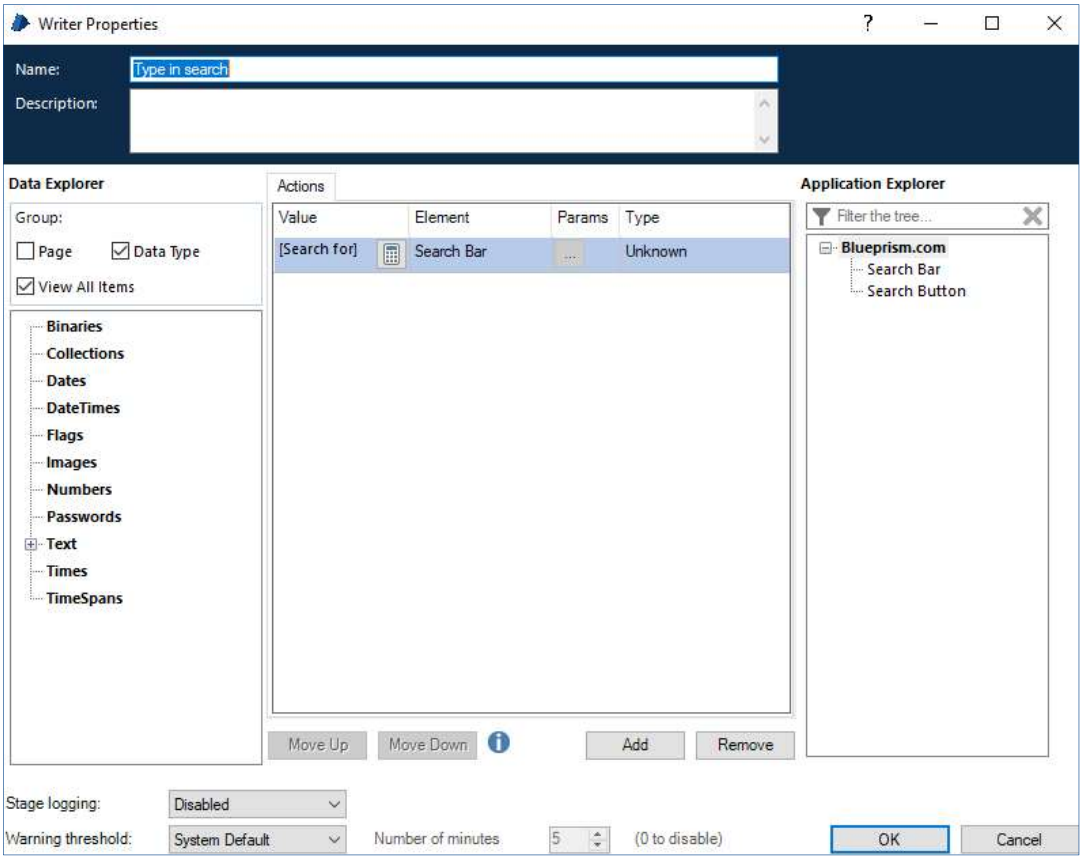



18. Double click on the Data Item. Change the name to “Search For”, set the Data Type to “Text” and enter “Coca Cola” for the initial value. Click “OK”.



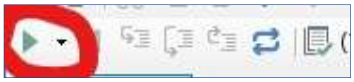

19. Double click on the Navigate Stage. Change the name to “Push Search Button”. On the left-hand side, click on “Search Button” and drag it to the blank spot under where it says “Element”. Next, from the drop-down menu under where it says “Action” choose “Click Centre”. Click “OK”.

20. Double click on the Write Stage. Change the name to “Enter Search”. On the left-hand side, expand “Text” to reveal “Search For”. Click on “Search For” and drag it to the blank spot under where it says “Value”. Next, on the right-hand side, click on “Search Bar” and drag it to the blank spot under where it says “Element”. Click “OK”.




21. Click the “Reset” button in the upper left:

22. Click the “Go” button in the upper left:



23. Watch in the internet explorer browser as “Coca Cola” is entered the search bar and the search button is pressed.

*Note: This is your first building block that will be used in your process. Save and provide some explanation of what you just created so that others will be able to reuse it in the future! Having Objects separated from Processes means that when an application updates, you must only update the single Object and every Process using said application will still work!*