# Blue Prism Labs

## Lab 2: Object Best Practices

Document Revision 1.0

# Trademarks and copyrights



Blue Prism Limited, 2 Cinnamon Park, Crab Lane, Warrington, WA2 0XP, United Kingdom
Registered in England: Reg. No. 4260035. Tel: +44 870 879 3000. Web: www.blueprism.com

# Contents

# Introduction

Every organization will develop some of their own best practices and naming conventions dependent on their organization and structure. The Blue Prism portal (https://portal.blueprism.com) has some initial suggestions as well as templates to make building quicker and easier.

One best practice we will focus on here includes following a format of “Verify”, “Do”, and “Confirm” in your object’s actions.

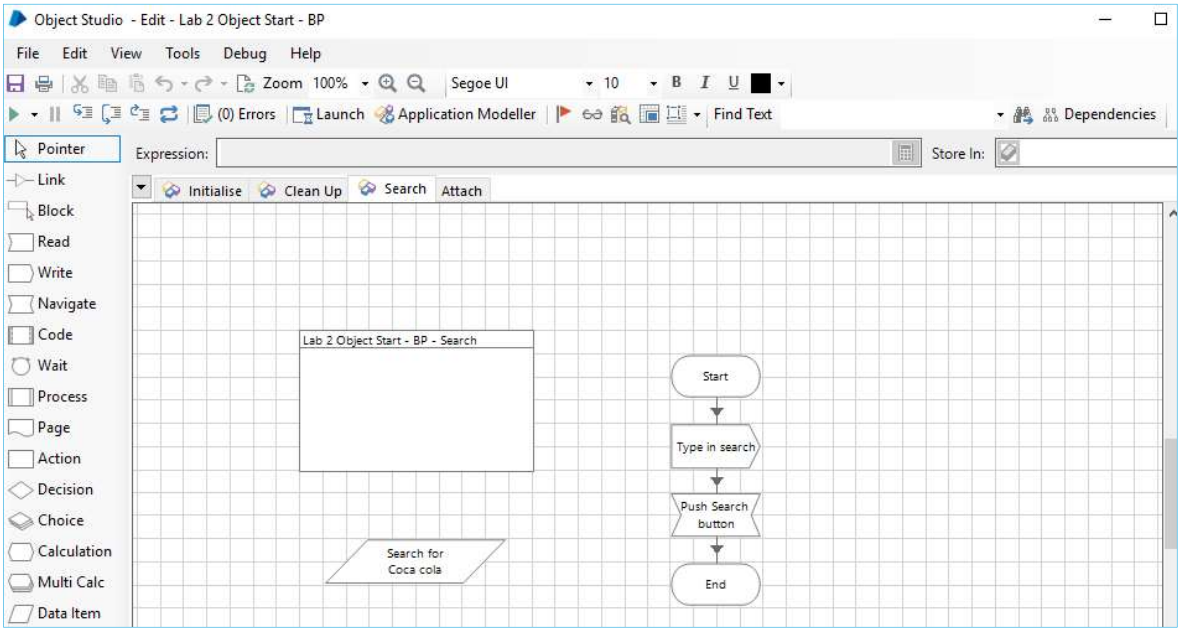
Prior to doing any work, a digital worker needs to ensure they are in the right place within an application – the “Verify” portion. Some applications and websites can take differing amounts of time to load causing latency. Blue Prism solves for this by using “Intelligent wait” stages that allow the digital worker to wait the exact amount of time needed for the page to load and be ready to accept actions. It also removes the need for setting a larger arbitrary number of seconds to wait to account for any longer latency.

Once the page or screen is verified, the action can be performed – the “Do” portion. Finally, it is best to confirm the application completed the actions before ending – the “Confirm” portion.

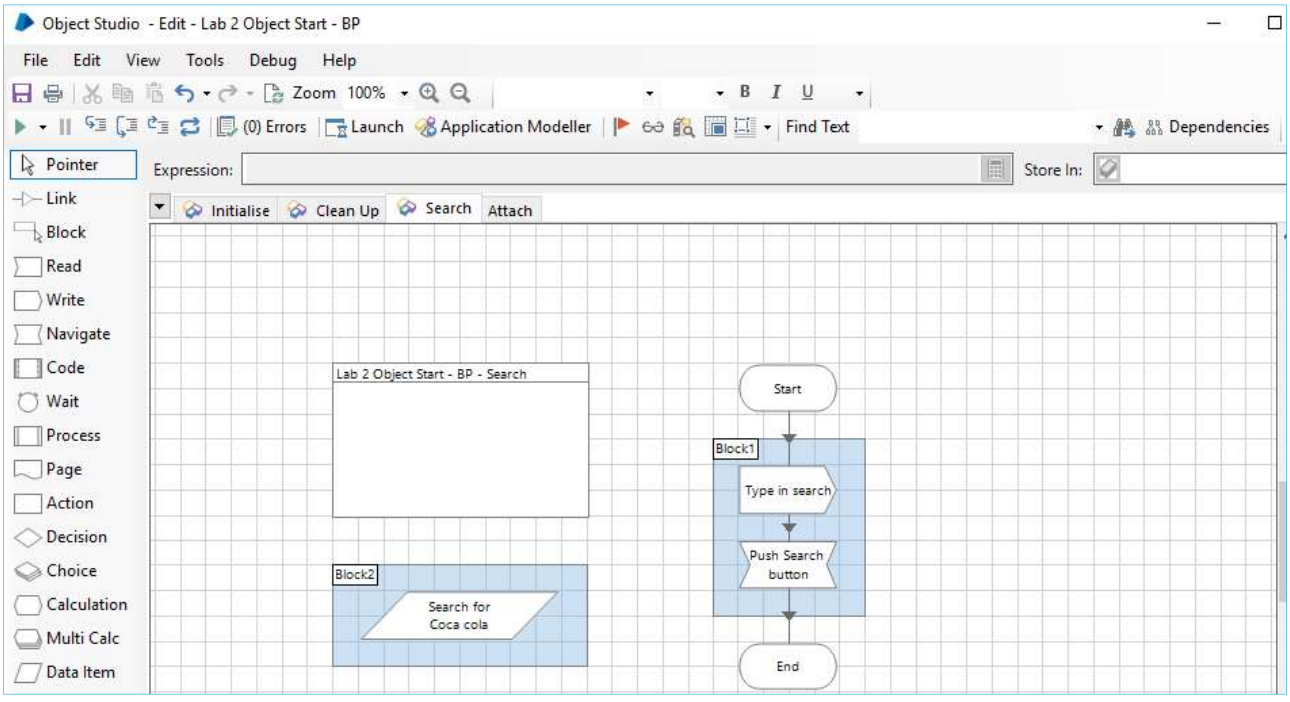
***“Verify”, “Do”, “Confirm” structure, provides resiliency and reliability for your digital workforce.***

# Lab 2: Object Best Practices

1) Open the Object called “Lab 2 Object Start - BP”. Navigate to the “Search” page.

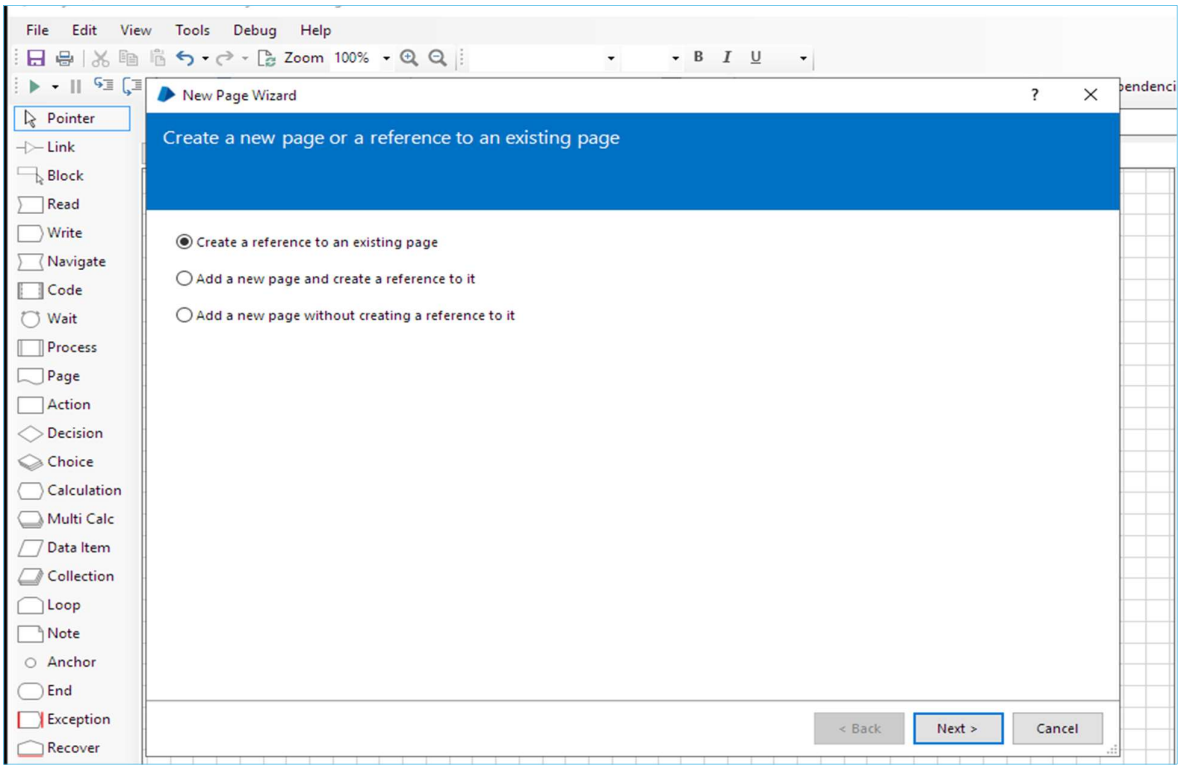



2) We want to make objects easy to read, so changes can be resolved quickly. To this end, put a block around the two stages. You’ll have to move the “Start” and “End” stages to make room. Put another block around “Search for”.

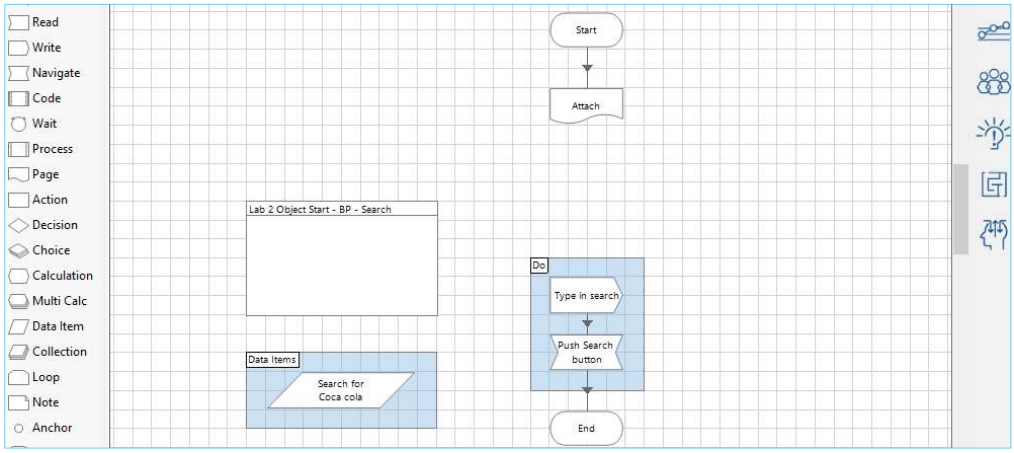


3) Double click the title of the block you just added, where it says “Block1”. Change the name to “Do” and press “OK”. Change the other block name to “Data Items”.

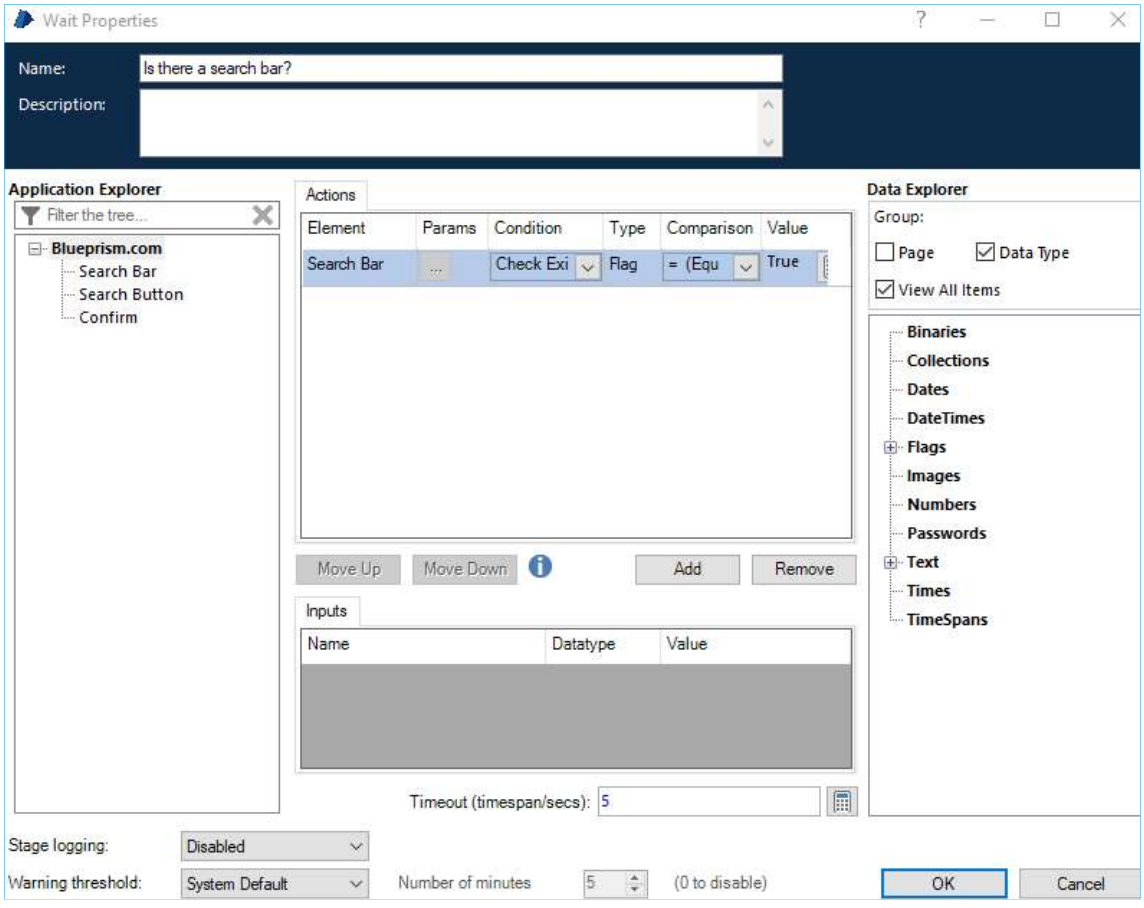
4) Before we get to the “Do” stage in an action, we want to confirm that we are where we expect to be in the application. The first part of this making sure that Blue Prism is attached to the correct application. This is very helpful when you have automations using multiple applications at the same time, as you’ll want to make sure you’re interacting with the right one! Add a “Page” shape to the object. When the New Page Wizard comes up, confirm that “Create a reference to an existing page” is selected and click “Next”, located in the bottom right.



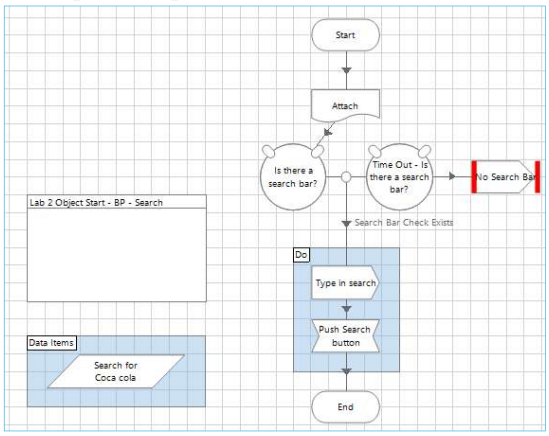
5) Select the "Attach" page and click finish. Delete the link connecting "Start" to "Type in search" by selecting it and pressing the "Delete" key. Add a new link connecting "Start" to "attach".



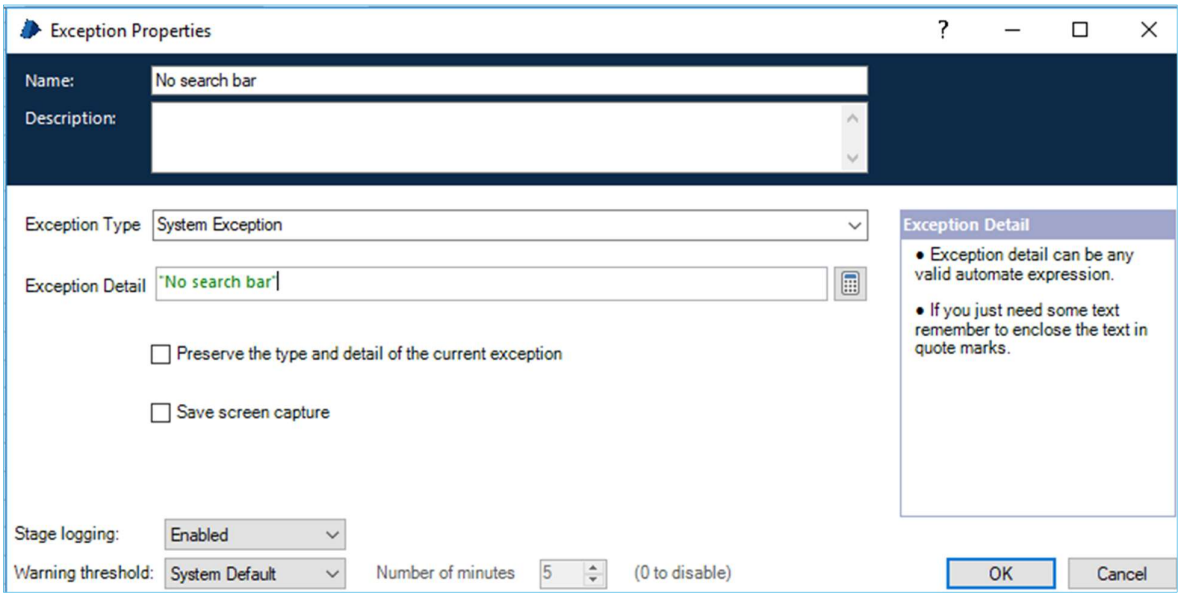

6) Now that we are sure the application is attached; we need to verify that we are where we think we are in the application. In this case, we want to make sure the page contains the search bar. Add a "Wait" stage. Double click on it. Change the name to "Is there a search bar?". On the left-hand side, click on "Search Bar" and drag it to the blank spot under where it says "Element". Next, from the drop-down menu under where it says "Condition" choose "Check Exist". Click "OK".



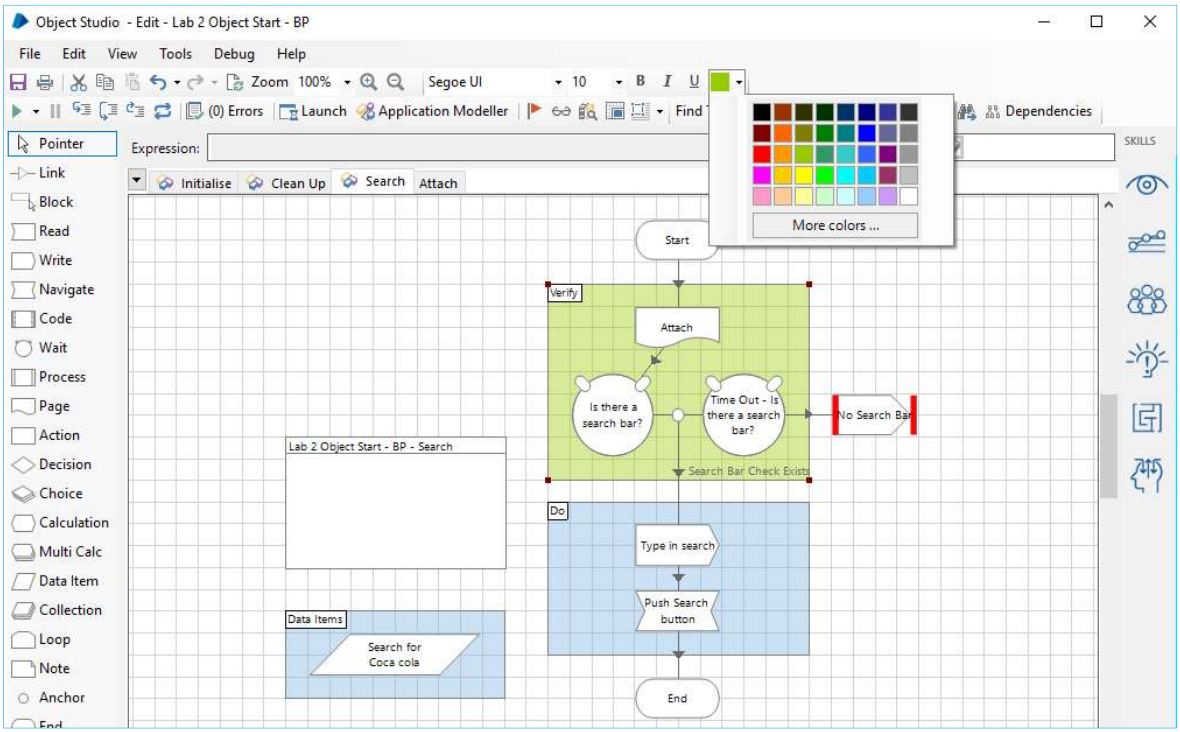
7) Add an “Exception” stage and link up the shapes as shown below:




8) Double click on the “Exception” stage you just added. Change the name to “No search bar” and the Exception type to “System Exception”. Next, add “ “No search bar” ” as the Exception Detail. Make sure to include the quotation marks. The action will now wait up to 5 seconds for a search bar to appear. As soon as it does appear, the object will move on, but if it doesn’t appear an exception will be thrown. Since websites (and other applications) don’t always take the same time to load, this “intelligent wait” stage is very important. When the page loads quickly, the flow will move on without wasting time. When the page loads slower, the flow will wait and be resilient.



9) Next, add another block around the attach and wait stages. Change the name to “Verify”. Finally, use the “Color” button, located in the top middle, to change the color to lime.




10) The final piece we need a way to confirm that the action did what we wanted it to do. In this case, we want to confirm that the search completed. If you look in the application modeler, you’ll notice that “Confirm” has already been spied. Add a wait stage between “Push search button” and “End” that waits for “Confirm” to exist.

11) Add an exception for if the wait times out before the page loads.

12) Add a block around the wait stage. Change its name to “Confirm” and change the color to orange. The completed action should look like the answer key! (Object titled “Lab 2 Object End”

13) Give yourself a big pat on the back and smile! Feel free to close both the Object and the Browser.

*Note: While blocks are designed for the exception purposes, (more detail in a later lab and in the exception guide on the portal), realize you also just standardized this Object to what all objects should do. Attach, Verify (wait stage), then Do. With some actions you may also Confirm after the actions are performed.*