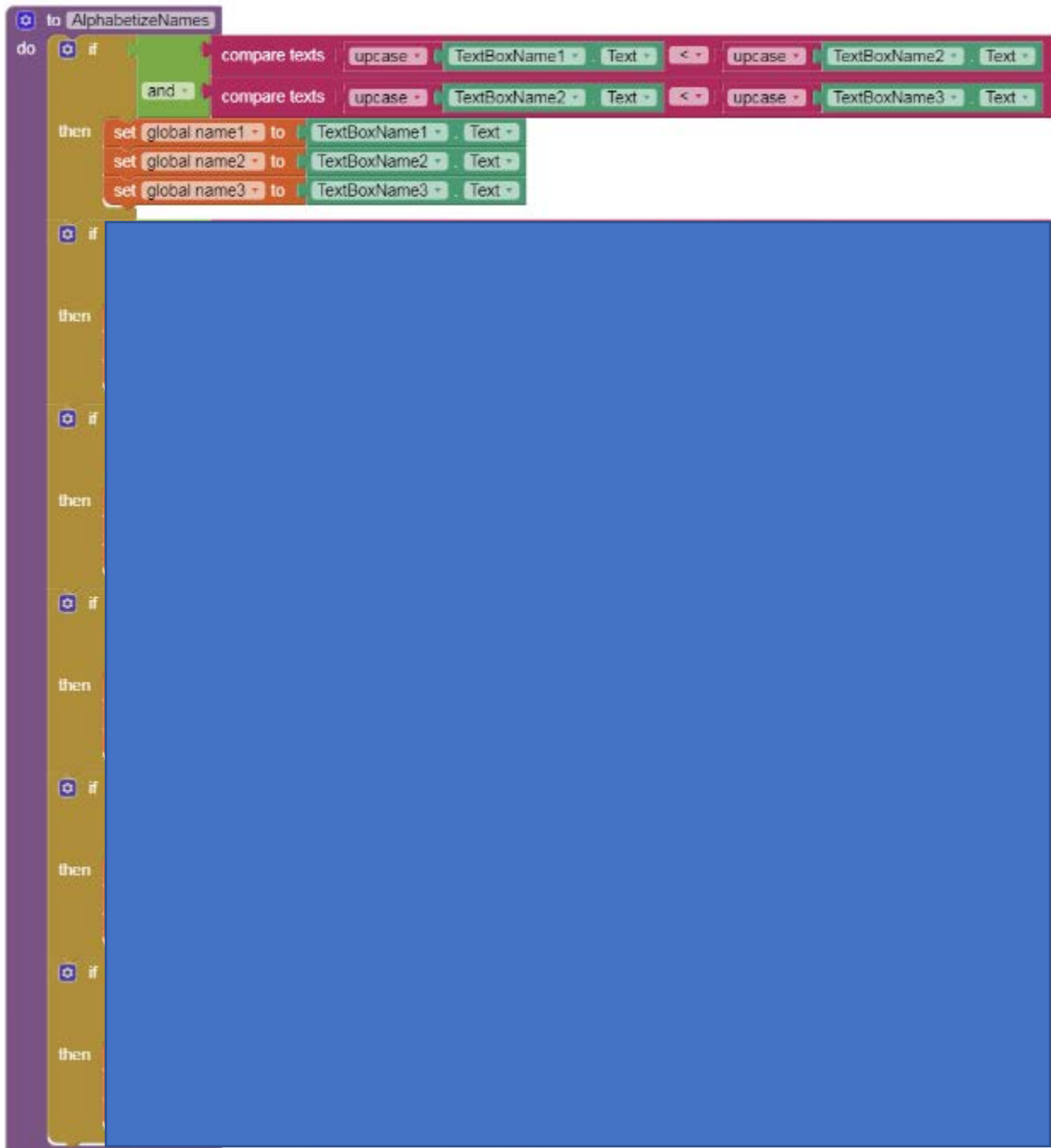


Chapter 10 Projects

1. Alphabetize Names

Write an application that will take three names as input. Provide a Button for the user to submit their entries. Return the strings to the screen in alphabetical order.

TIP: Convert the strings to upper case before alphabetizing, but return them to the screen in mixed-case (first letter capital).



The image shows a Scratch script for a function named 'AlphabetizeNames'. The script is as follows:

```
to AlphabetizeNames
do
  if
    compare texts [upcase] [TextBoxName1] . Text < [upcase] [TextBoxName2] . Text
    and
    compare texts [upcase] [TextBoxName2] . Text < [upcase] [TextBoxName3] . Text
  then
    set global name1 to [TextBoxName1] . Text
    set global name2 to [TextBoxName2] . Text
    set global name3 to [TextBoxName3] . Text
  if
  then
  if
  then
  if
  then
  if
  then
```

The script begins with a 'do' block containing an 'if' block. The 'if' block has two 'compare texts' blocks connected by an 'and' block. Each 'compare texts' block compares the uppercase version of a name from a text box (TextBoxName1, TextBoxName2, or TextBoxName3) with the uppercase version of the next name. If both conditions are true, a 'then' block contains three 'set' blocks that store the original names from the text boxes into global variables named 'name1', 'name2', and 'name3'. Below the 'if' block, there are four more 'if' blocks, each followed by a 'then' block, but they are currently empty.

```
to MakeMixedCase
do
  set global name3 to join
  [upcase - segment text get global name3 -
   start 1
   length 1
  ]
  [downcase - segment text get global name3 -
   start 2
   length length get global name3 - 1
  ]
end
```

```
when ButtonAlphabetize .Click
do
  call
  call
  call
end
```

```
to DisplayNames
do
  set LabelOutput .Text to join
  [get global name1 -
   .
  ]
end
```