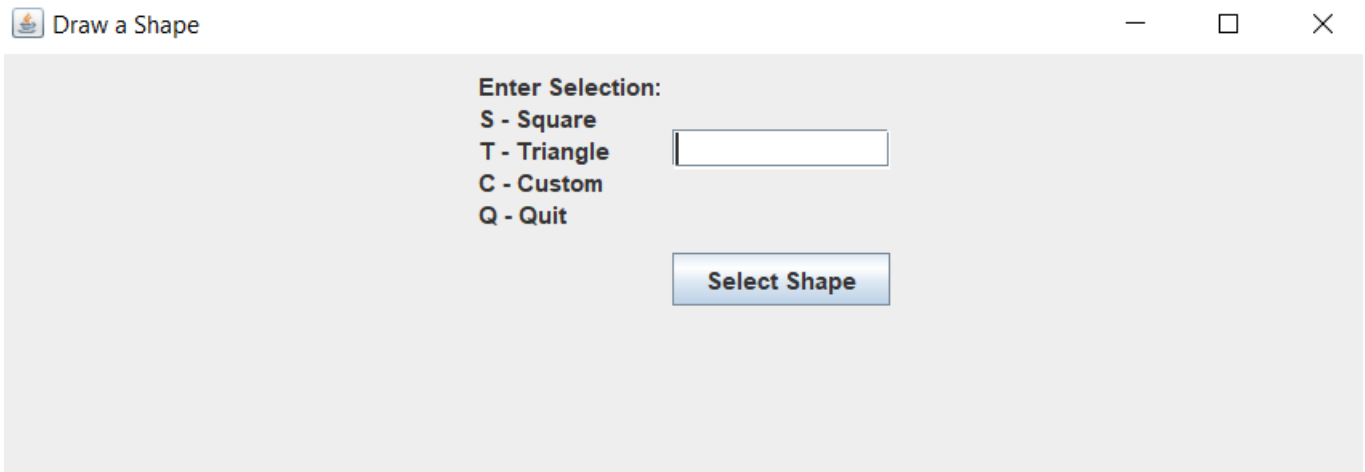# Draw a shape
User manual

1.1 Starting the program

To begin user should place the finch on level ground, this will display the initial form as seen below.
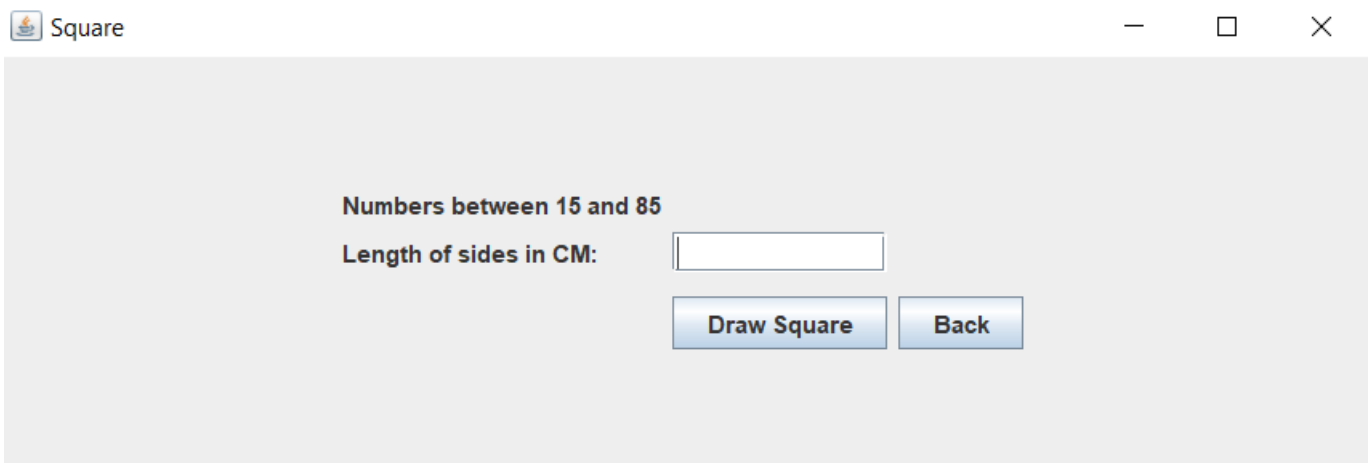
```
Draw a Shape                                          —    □    ✕

                              Enter Selection:
                              S - Square
                              T - Triangle    [                    ]
                              C - Custom
                              Q - Quit

                                              [  Select Shape  ]



```

1.2 User input

User should enter which shape they wish to be drawn from the choices given, S for Square, T for Triangle, C for a custom polygon or Q to quit and write all drawn shapes to a text file. Incorrect inputs will prompt the user and allow them to re-enter.

2.1 Shapes

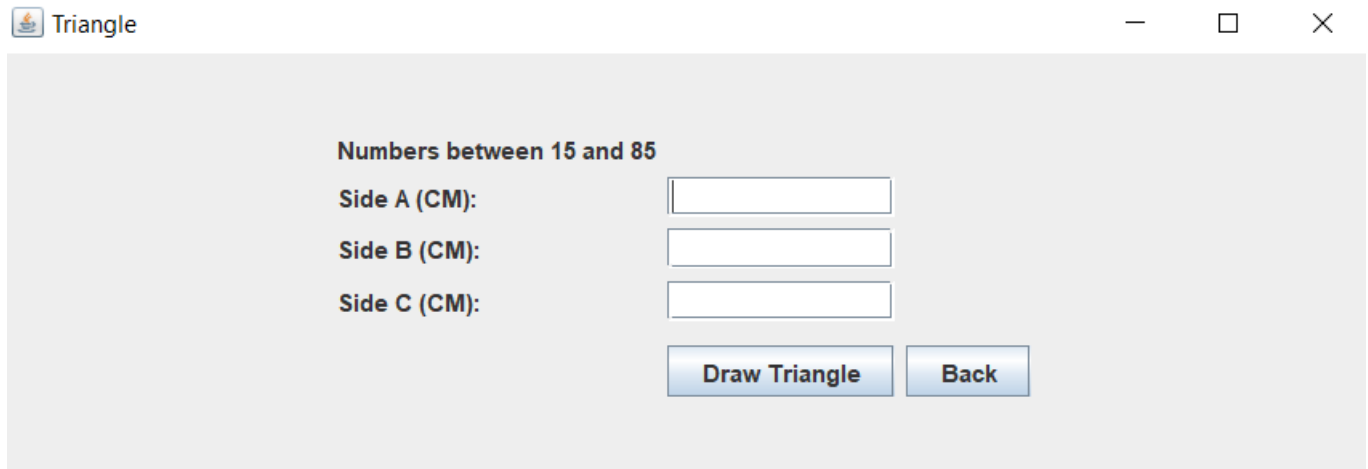When users choses to draw a Square the program will display the following form.

```
Square                                                —    □    ✕



                    Numbers between 15 and 85

                    Length of sides in CM:    [                ]

                                      [  Draw Square  ]  [  Back  ]



```

To draw a Square the user should enter a positive whole number between 15 and 85. Once the number has been entered the finch will begin drawing the shape and once complete the finch will beep and the program will return to the initial form. Incorrect inputs will prompt the user and allow them to re-enter, and the user can return to the selection screen by pressing the back button.

2.2 Triangle

When users choses to draw a Triangle the program will display the following form.
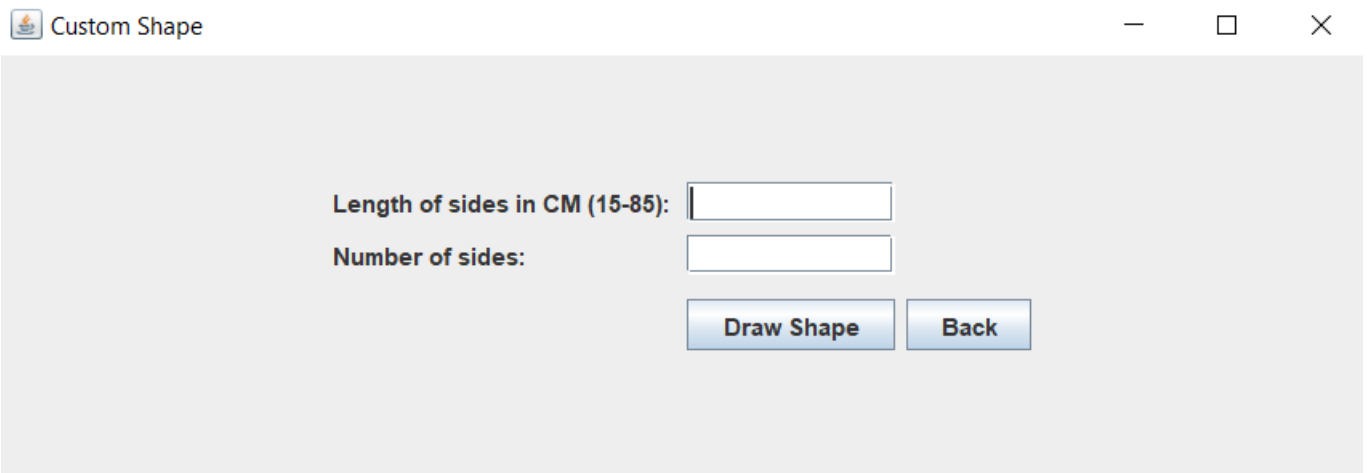

To draw a Triangle the user should enter three positive whole numbers between 15 and 85, the program will check that the given sides can form a triangle. Once the numbers have been validated the finch will begin drawing the shape and once complete the finch will beep and the program will return to the initial form. Incorrect inputs will prompt the user and allow them to re-enter, and the user can return to the selection screen by pressing the back button.

2.3 Custom

When users choses to draw a custom polygon the program will display the following form.

To draw a Custom polygon the user should enter a positive whole number in the "Length of sides box" the number should be between 15 and 85, the user should also enter a whole number 5 or higher, if user requires the finch to draw a three or four sided shape they should choose another option. Once valid numbers have been entered the finch will begin drawing the shape, once complete the finch will beep and program will return to initial form. Incorrect inputs will prompt the user and allow them to re-enter, and the user can return to the selection screen by pressing the back button.