



User Guide

Application Development



As soon as the application is started this screen will be displayed.

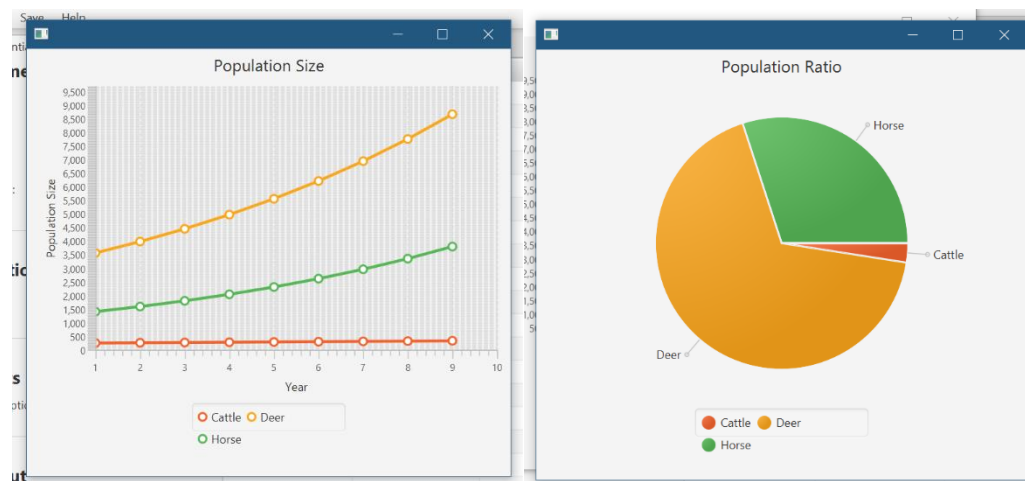
The screenshot shows the 'Application' window with several callouts explaining its features:

- Model Selection:** The user can choose which model he wants to view in this bar. (Callout pointing to the model tabs: Exponential, Logistic, Age, Competitive, Predation)
- Randomize:** The user can choose for the application to randomly enter values for the (Callout pointing to the Randomize button)
- Variables:** The user has to put in the variables. (Callout pointing to the input fields for r-Value and n-Value for Cattle, Horse, and Deer)
- Duration:** The user has to put in for how long the prediction has to be. (Callout pointing to the t-Value input field)
- Charts:** The user chooses for a different output besides a list. (Callout pointing to the Linear and Pie Chart options)
- Output:** If every parameter is filled in the user can now view the output or if the user wants he can get the parameters from the data available. (Callout pointing to the Get Parameters and Show Predictions buttons)

After pressing the show predictions button, the table on the right will be filled with the calculated data.

[illegible]

If the user chose for a graph one or both of these graphs will pop up.



The same approach applies to the other models, each model does have different parameters.

Here are all the parameters and what they stand for.

r – Value = intrinsic rate of increase

n – Value = population size

k – Value = carrying capacity *in the logistic model

$f1$ = fertility

$p1$ = probability

α = competition coefficient*in the competition model

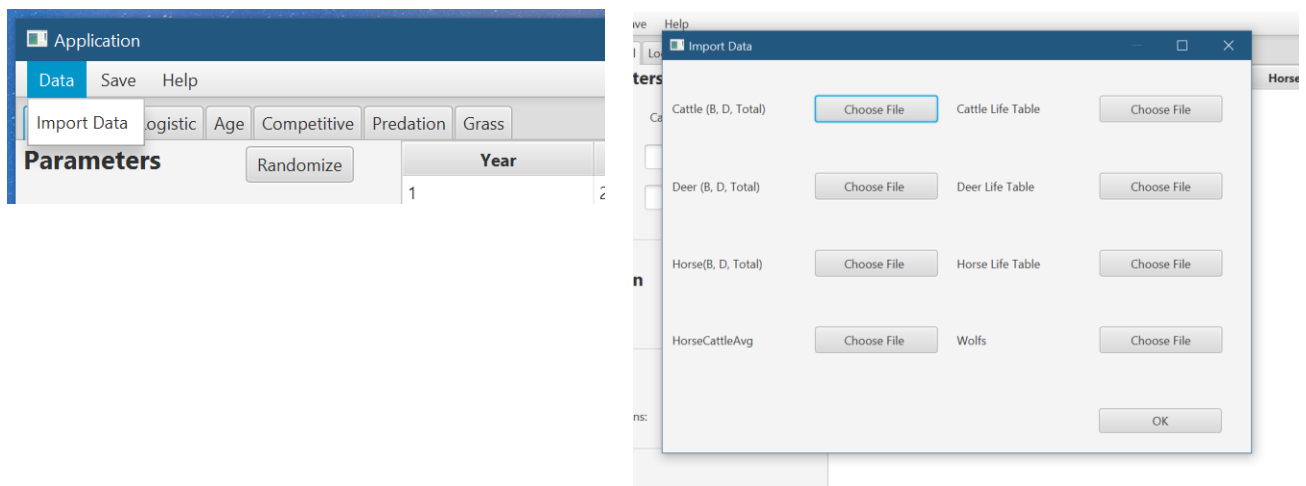
k – Value = maximum feeding rate *in the predation model

h – Value = handling time

d – Value = half-saturation constant

α = capture efficiency *in the predation model

The user can also import data through the Data button on the top left corner.



The user can also save the calculations through the Save button and get help or contact the developers through the About button

If after reading the user manual, you still have questions please contact the developers:

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