Mannual ‘App I’

Type: Web-based application

Title: A smart and user-friendly data visualization tool for non-technical users

Description: Answer a series of designed questions to represent your data in the right chart type.

Version: 1.0

URL: https://majikunaki.shinyapps.io/app1/

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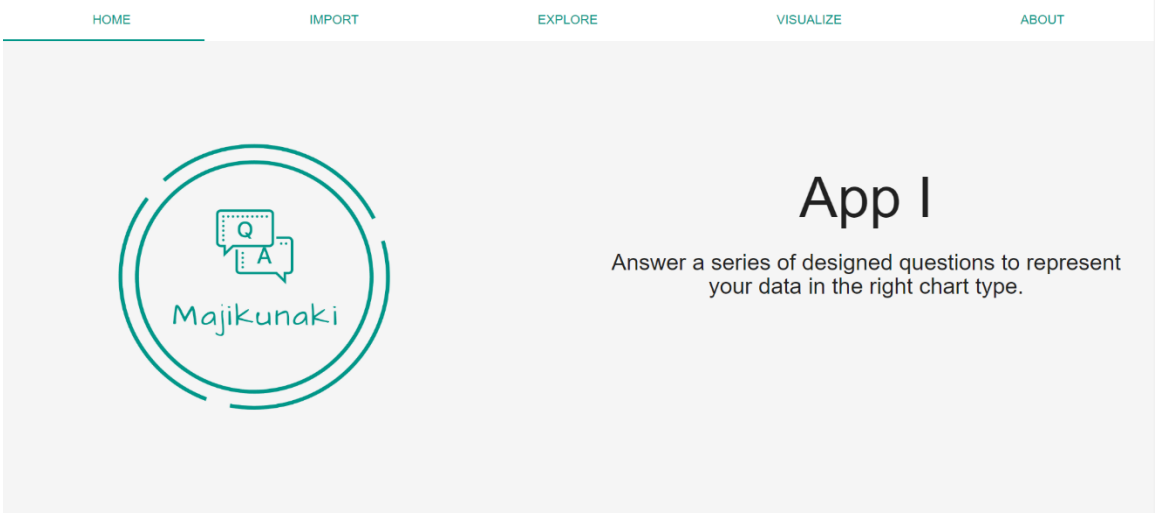
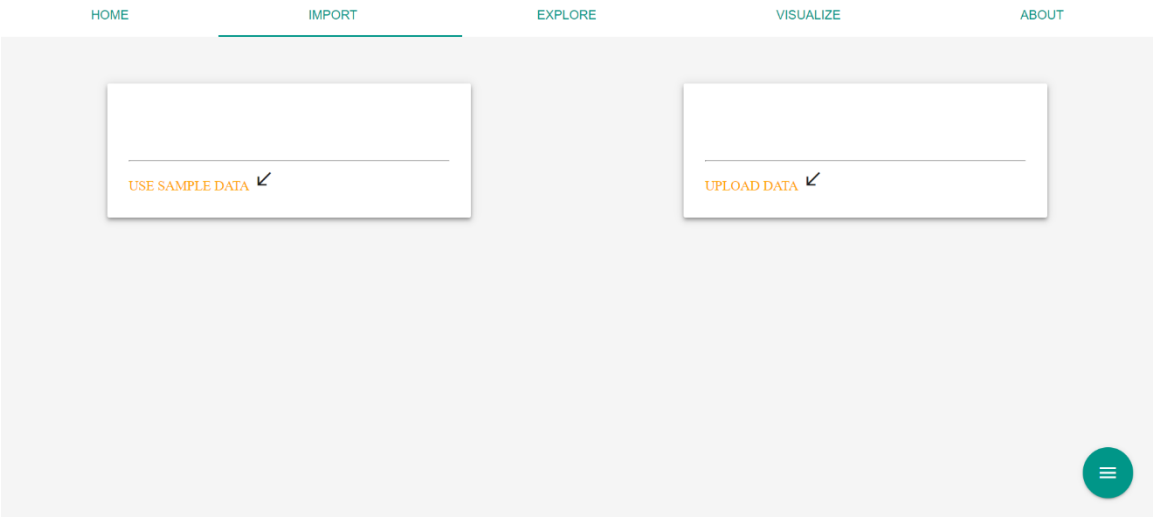
Date: 10-10-2019



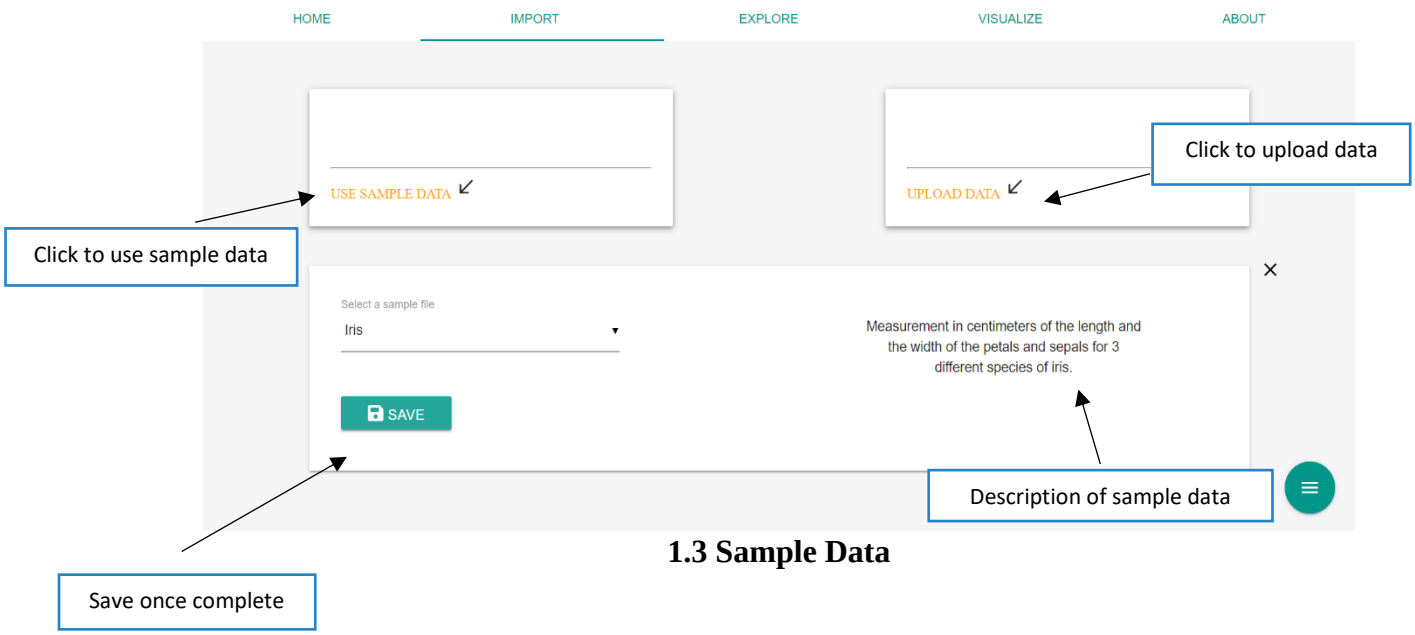
1.1 Homepage

Homepage gives users a brief idea on how the application helps them in visualizing data.

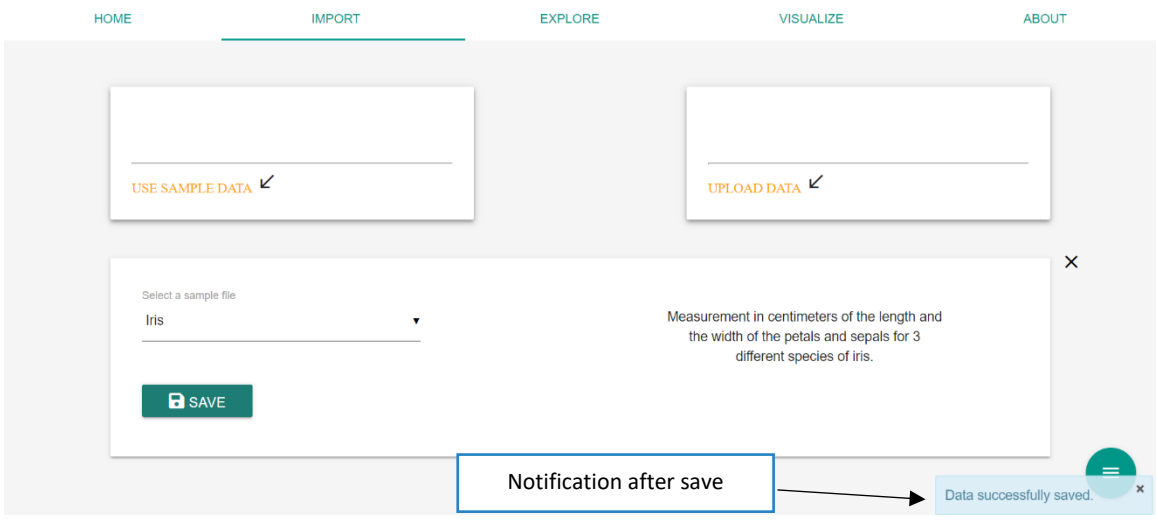


1.2 Data Import

The ‘import’ tab gives users options either use the existing sample data or upload their own dataset.

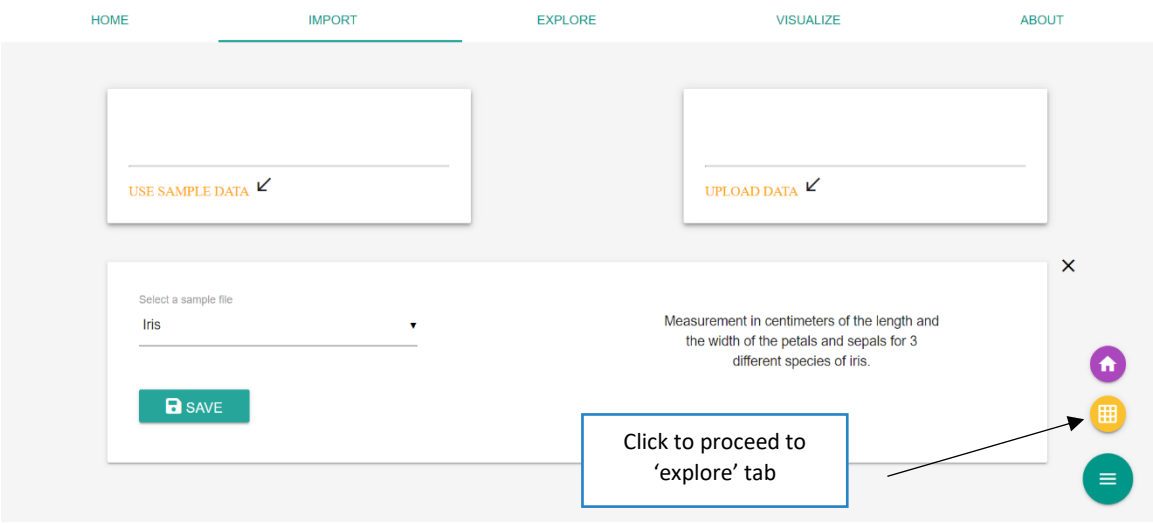


1.3 Sample Data

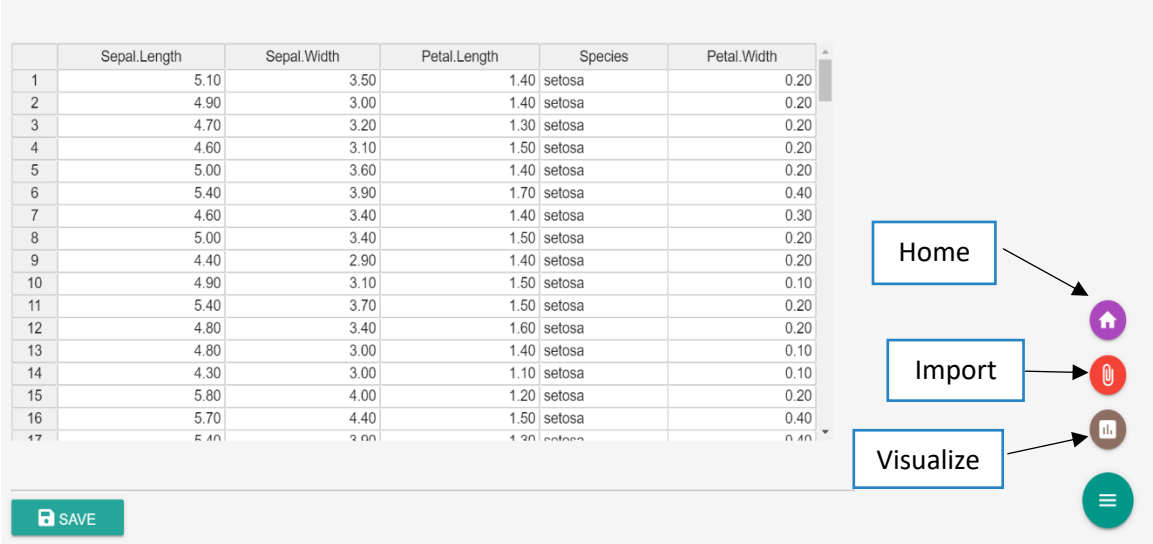


1.4 Notification

Once users have saved the selected sample data, a success notification will pop out at the right bottom corner. Then the users can proceed to the next tab by clicking on the right bottom button as Figure 1.5 below.

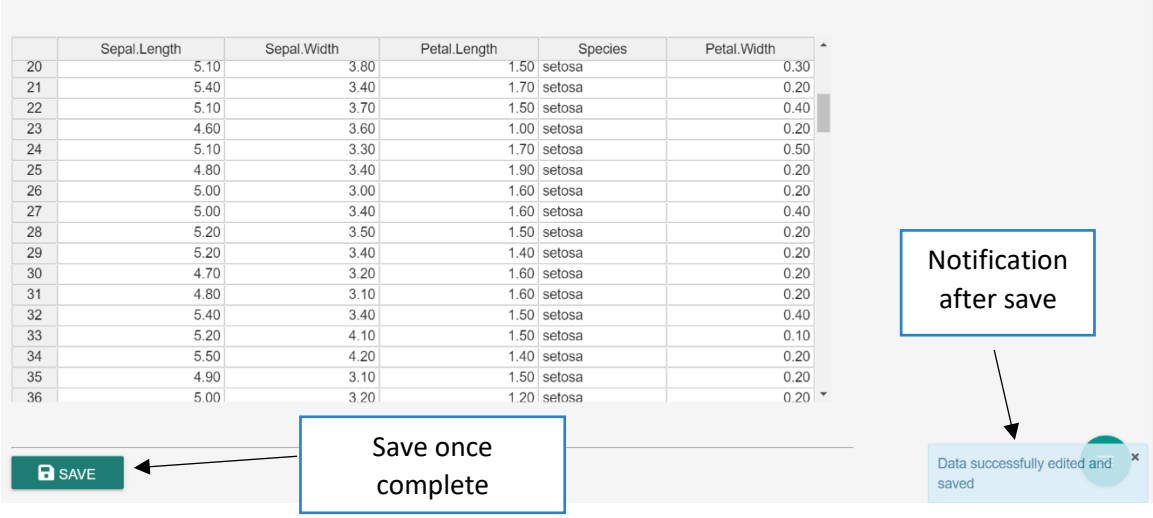


1.5 Navigation button

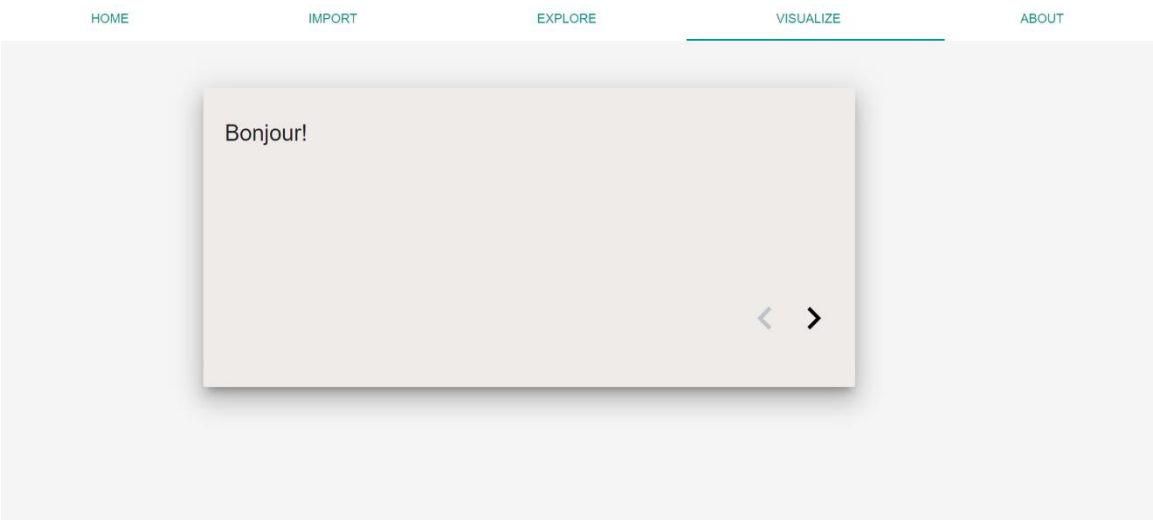


1.6 Explore tab

The imported/sample data is represented in an interactive table as Figure 1.6. Users are able to edit data, reorder column and currently **dragging is not fully supported**. Dragging along column may cause serious problem at the later stage due to the problems of the open-source package.

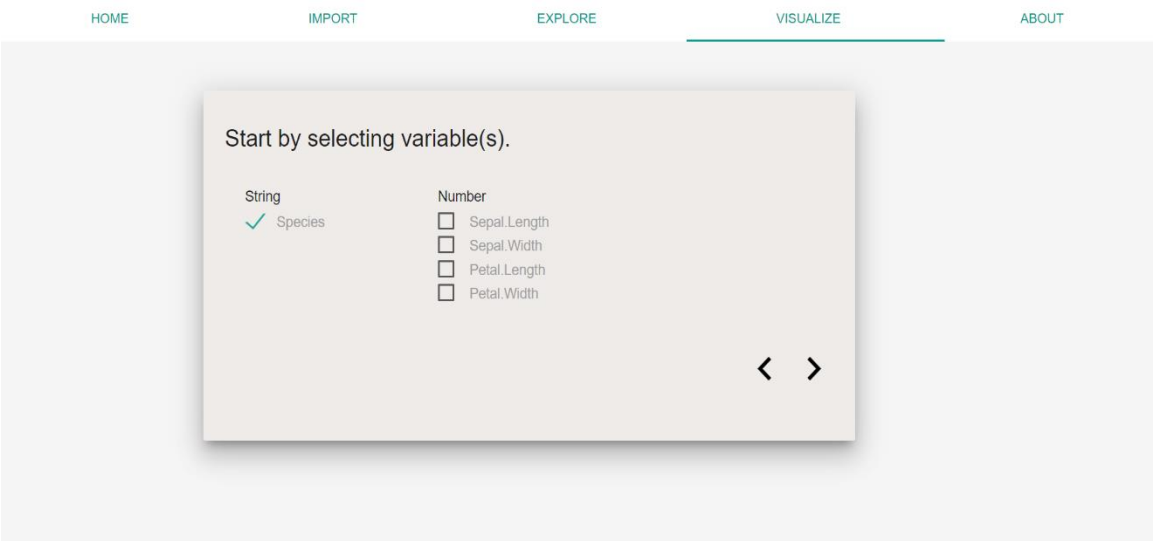


1.7 Notification



1.8 Welcome card

Once users have saved the edited data and navigate to the ‘Visualize’ tab, a welcome card will be showed up as Figure 1.8.

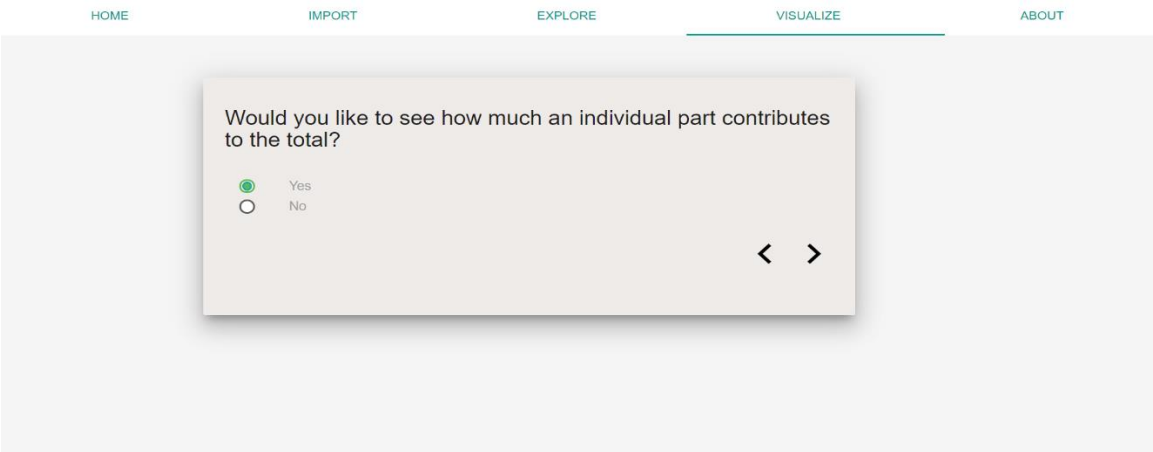


1.9 Variable Selection

Users are prompted to select the variables(s) they wish to visualize. The variables are grouped into qualitative and quantitative variables (String and Number). Users are able to tick either:

i) A qualitative variable
ii) Two qualitative variables
iii) Two qualitative variables and a quantitative variable
iv) A qualitative and a quantitative variable
v) A quantitative variable
vi) Two quantitative variables

A warning message will be given for any incorrect selection which is appeared in red color at the right bottom corner.



2.0 A sample question

A sample question has been asked based on the characteristics of the selected variable. After users have answered a series of designed question, a recommended chart type will be plotted for them automatically as Figure 2.1.

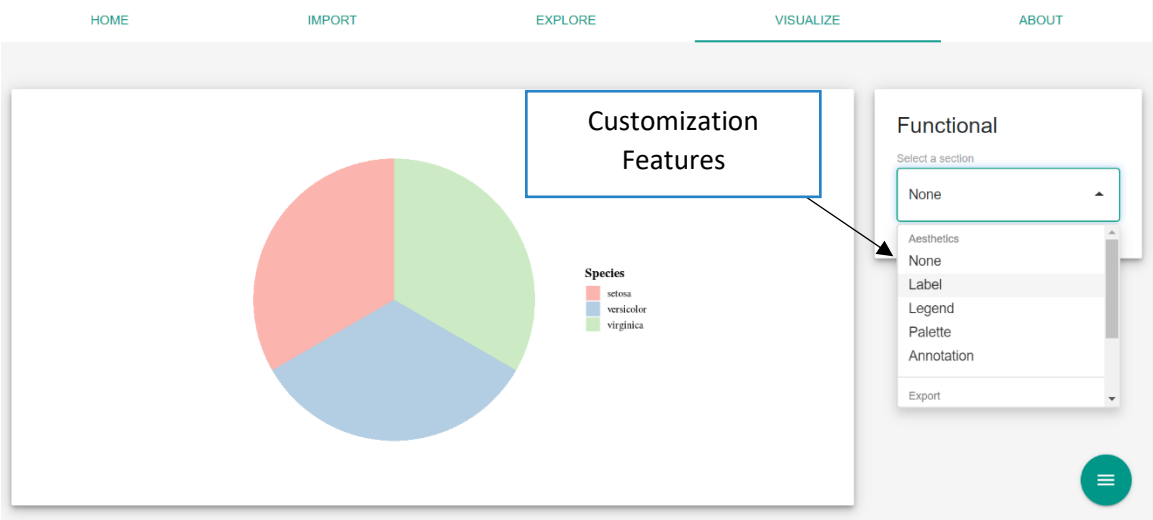


Figure 2.1 A pie chart

The card which is showed on the right-hand side consists of the customization features for the sample pie chart. The customization power for App I is minimal unlike App II. Its main purpose is to simplify the process in visualizing data for non-technical users.

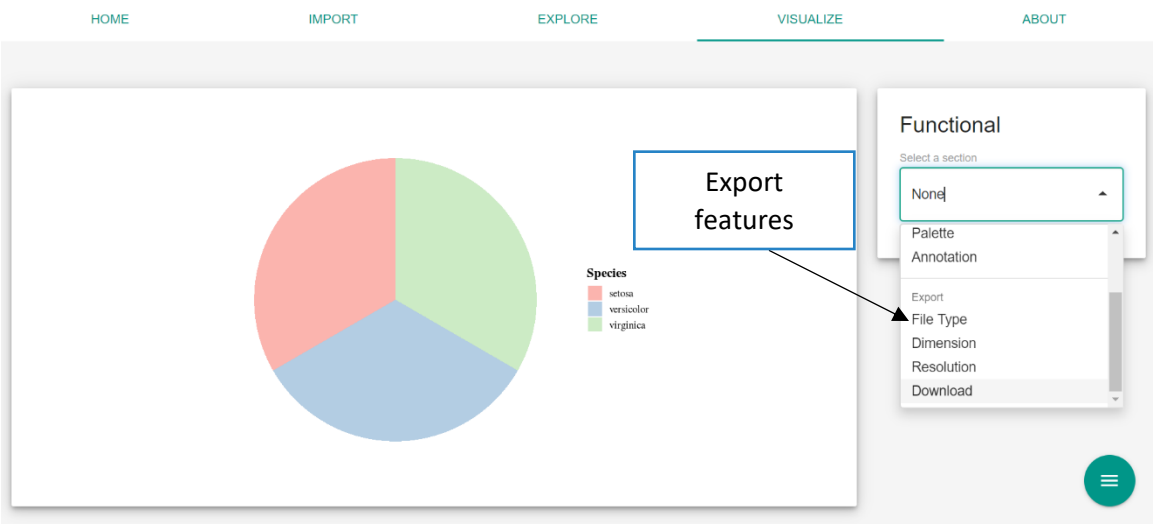


Figure 2.2 Export Feature

The below section of the card is the export features. Users are able to adjust the file type, dimension and also the resolution of generated image.

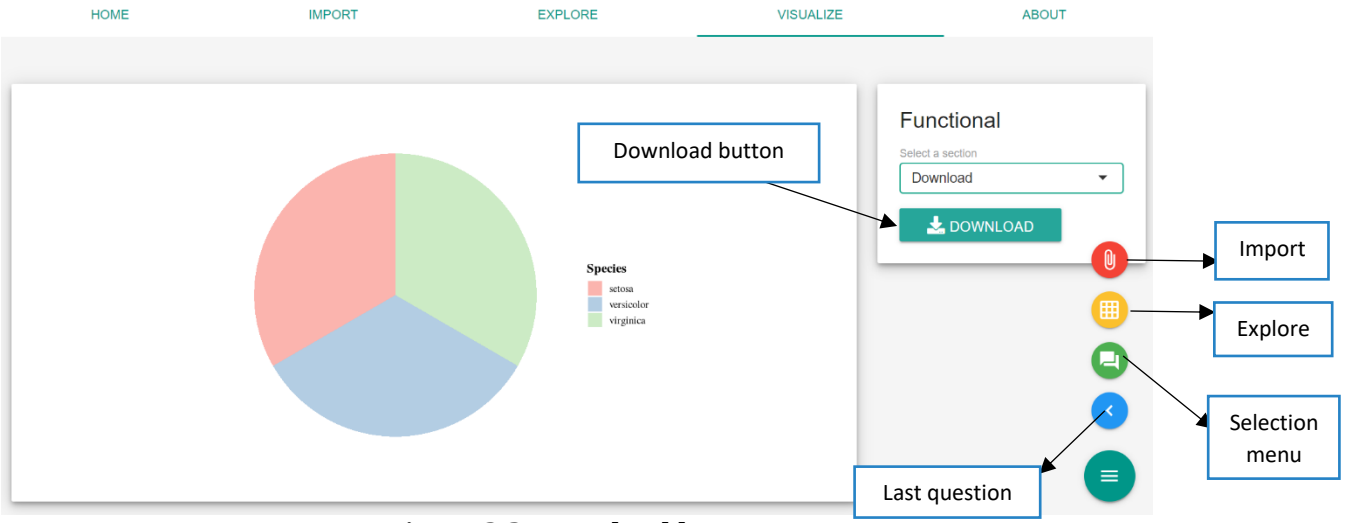


Figure 2.3 Download button

Finally, users can download the customized image by the deep green button. Blue button leads users back to the last card of question while the light green button will bring them back to the menu of variable selection. **Note that: By clicking on the light green button, all the information such as the options that the users have selected previously will be erased.**