Statistical Measure Desktop Application Instruction Manual

The Statistical Measure Desktop Application allows users to input or upload a set of data and perform a multitude of different statistical analyses. From uploading from a CSV file to manually entering data in a table, user's can perform over fifteen different measures with some allowing for a graphical output. Output options range from simple on screen text to other file types such as TSV to allow a wide range of use cases. This desktop application is very powerful in performing large computations and analyses.

This instruction manual will demonstrate how to use the basic operations of the Statistical Measure Desktop Application.

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Overview of Buttons

Along the top row of the **Home Screen** above the table, there are a row of drop down menu buttons that have different functionalities:

- **File**
  - **New**
    - **Project** - creates a new project, can save old project
  - **Open**
    - **Project** - opens a saved project
  - **Import**
    - **CSV** - imports a CSV file to fill the chart
    - **XLSX** - imports a XLSX file to fill the chart
  - **Save Project** - saves the project
  - **Save Project As** - can save the project under a specific name
  - **Exit** - exits the program
- **Settings**
  - **Application Settings** - allows the user to adjust the zoom level and set the application to a variety of light or dark modes
- **Run**
  - **Run Measures** - runs the statistical measures selected
- **Help** - help section for user

In the middle of the **Home Screen** depending on which statistical measure is selected, data section and variable fields can be found:

- **Import from Chart** - allows user to choose which data from table to use for analysis

On the far right side of the **Home Screen** in the **Statistical Measure Section**, there is:

- **Add** - add selected statistical measure
- **Remove** - remove selected statistical measure

Upload a Data File

Uploading a data file is one of the first actions to take when performing statistical measures. Multiple different file formats can be uploaded such as CSV, TSV, and Excel Sheets to automatically fill the chart with data.

1. From the **Home Screen**, click on the "**File"** button above the table.

2. Click **"Import"** and select either **"CSV"** or **"XLSX"**.

3. Choose the desired file from the file explorer pop up window.

4. The data within the selected file will now appear in the table.

Note: To insert data manually, see <u>Manually Enter Data in Chart</u> p. 4

Manually Enter or Edit Data in Chart

Besides uploading a data file, a user can manually enter or edit data into the table provided. This approach works well for quick analysis or small data sets.

1. From the **Home Screen**, click on a cell within the chart.

2. Type in a **number**.

3. Repeat steps one and two until the desired number of cells and data is input into the table or edited.

Note: To upload a data file, see

Select Specific Data to Analyze

Sometimes, the user may not want the entire data set in the application to be considered when the statistical measures run. Switching subsets of data allows for more flexibility of a single uploaded data file.

1. Select the statistical measure you want the data to apply to in the **Statistical Measure Section**.

2. While holding the **Shift** or **Ctrl** key, select the data desired from the chart.

3. Click **"Import From Chart"** next to the **Data Section** or **Variable Section** in the middle pane of the application. The data should now appear in the **text box**.

4. Repeat this process for each statistical measure.

Remove a Selected Measure

Accidents can happen or minds can change when selecting which statistical measures to run. An accidental or unneeded statistical measure can be removed.

1. In the **Statistical Measure Section**, select the statistical measure to remove.

2. Click **"Remove"** and the statistical measure will now be removed from the list.

Select Graphical Outputs

Some statistical measures allow for graphs to be created from their output to create a visual aid. There are multiple different graph types to choose from; however, not all apply to every measure.

1. Select the desired statistical measure from the **Statistical Measure Section** list.

2. In the middle pane of the **Data Section**, select the desired graph from the "**Graphs"** dropdown menu.

Note: To download a graph, see

Run Statistical Measures

After adding the data and selecting which statistical measures are wanted, the user can then execute the program.

Note: Make sure there is data within the table, at least one statistical measure to run, and the statistical measure Data Section and Variables are filled

1. From the **Home Screen**, click on the **"Run"** button and then **"Run Measures"**. The program should now run and provide output.

Download Results

The output of the statistical measures and graphs can be downloaded in multiple formats to be used later by the user.

1. After the statistical measures have been ran, a pop up window will appear with the results in text form. To download the results as a file, click **"Save Output"** at the bottom of the pop up window.

2. Ensure the **checkboxes** of the desired statistical measures are checked. Click the **checkboxes** if the desired statistical measure is not selected.

3. Click **"Save Outputs"**
4. Save the output in the desired format at the desired location using the pop up file explorer.

Change Theme and Zoom

Some users may not like the bright background of the application. This can be changed by switching to dark mode allowing for a darker experience.

1. From the **Home Screen**, click on **"Settings"** and then **"Application Settings"**.

2. Select the desired visual mode with the **Theme** drop down menu.

2. Select the zoom level with the **slide bar**.

Enable Bias Correction and Expressions

Bias Correction is an option that can be enabled if the user desires. The ability to have expressions as valid cell entries can also be enabled.

1. Navigate to **"Settings"** and then click **"Application Settings".**

1. After the settings window appears, check either the **Bias Correction** or **Allow Expressions in Evaluations** checkboxes to enable or disable.