Royaume du Maroc
Université Abdelmalek Essaâdi
Faculté des Sciences et Techniques – Tanger

Master AI & DATA Science University Year: 2023-2024

Manuel Of Use

Intituled :

SI Departement

Framed By :

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Du 30/11/2023 au 15/01/2024

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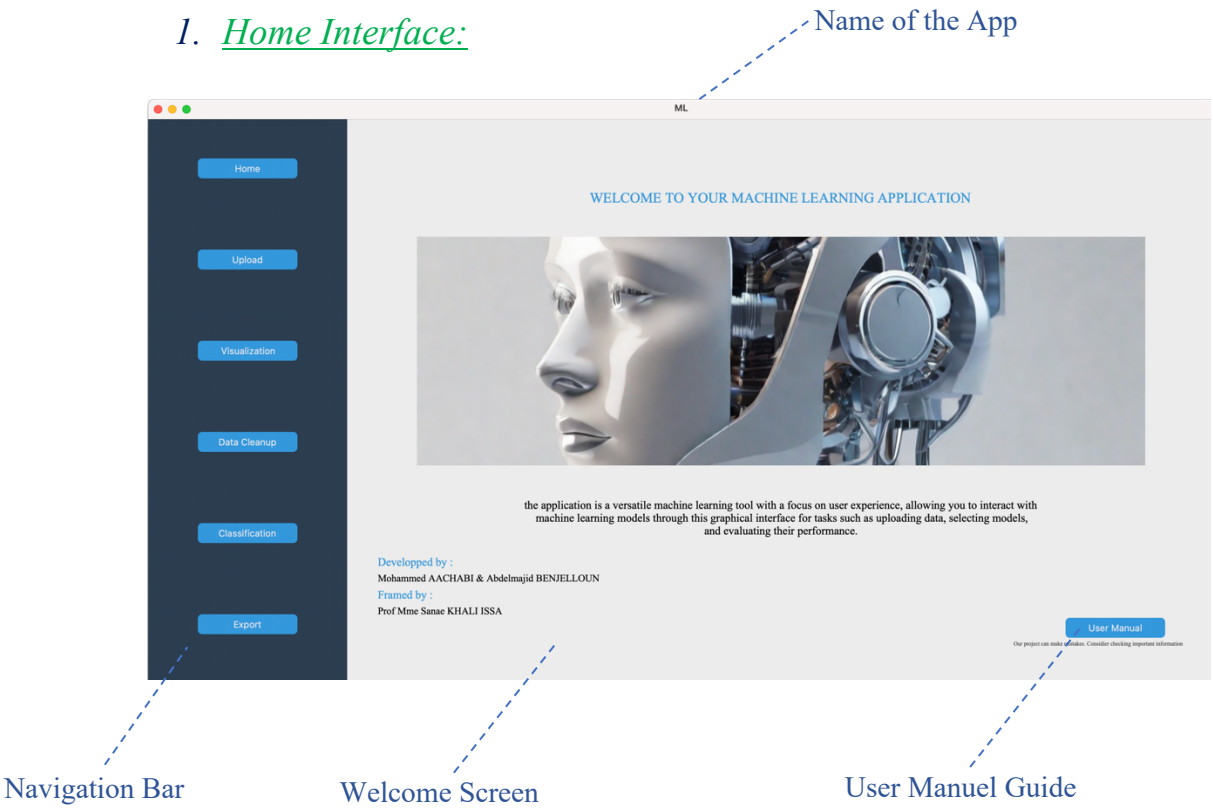
How To Use The Application?

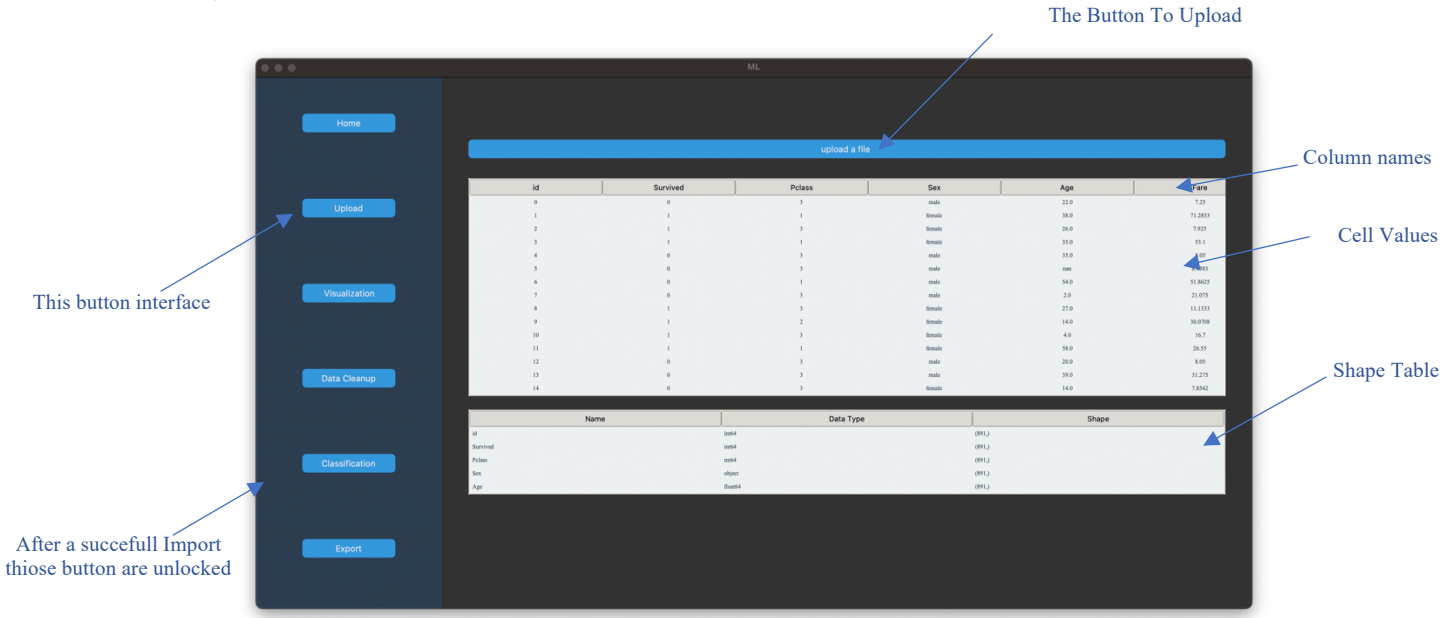
we meticulously detail the processes, methodologies, and technologies that propelled our project forward. From the initial coding endeavors to the seamless integration of algorithms and the meticulous refinement of user interfaces, every facet of the development phase is laid bare. The chapter not only unravels the collaborative efforts and challenges that shaped our software solution but also places a spotlight on the tangible results achieved

1. *Home Interface:*



2. *Uploading interface:*

Upon successful data upload, a summary table is presented, showcasing the column names, data shape, and corresponding data types. This tabular representation provides a quick overview of the uploaded dataset, offering insights into its structure and characteristics.



We've seamlessly integrated data visualization using the Treeview function with the file explorer facilitated by `filedialog.asksaveasfilename`. To optimize the user experience and streamline the workflow, we've implemented three key functions:

Show Buttons: Activating relevant buttons for further actions.

Hide Buttons: Disabling unnecessary buttons, ensuring a clean interface during the data upload process.

Upload Success Test: Validating the successful upload of the file before enabling subsequent actions. These functionalities collectively enhance user interaction by providing a responsive and intuitive environment.

3. *Visualization Interface*

In our exploration of the dataset, we leveraged various visualization techniques to gain insights and better understand the underlying patterns. The visualization interface provides four distinct options tailored to different aspects of the data:

Histograms:

Utilizing histograms allows us to visualize the distribution of numeric variables in the dataset. Each histogram provides a visual representation of the frequency and shape of the data.

Heatmaps:

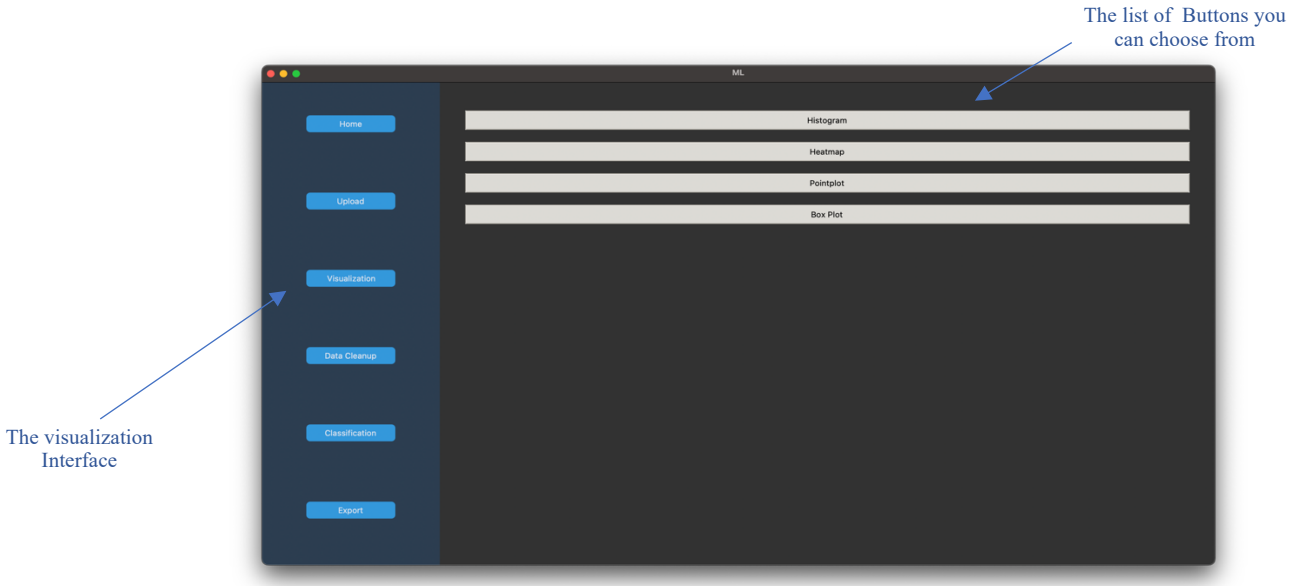
Heatmaps are employed to visualize the correlation between different variables in the dataset. This technique provides a color-coded matrix, making it easy to identify patterns and relationships.

Box Plots:

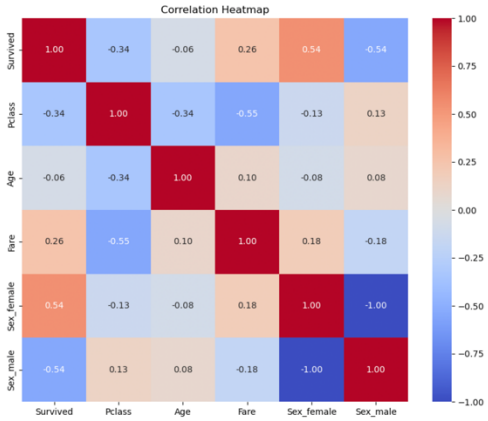
Box plots are effective for understanding the spread and central tendency of numerical data. Each box plot encapsulates the interquartile range, median, and potential outliers, providing a comprehensive view of the data distribution.

Stem Plots:

Stem plots are utilized to showcase the distribution of values in a dataset, particularly useful for visualizing individual data points and their frequency.

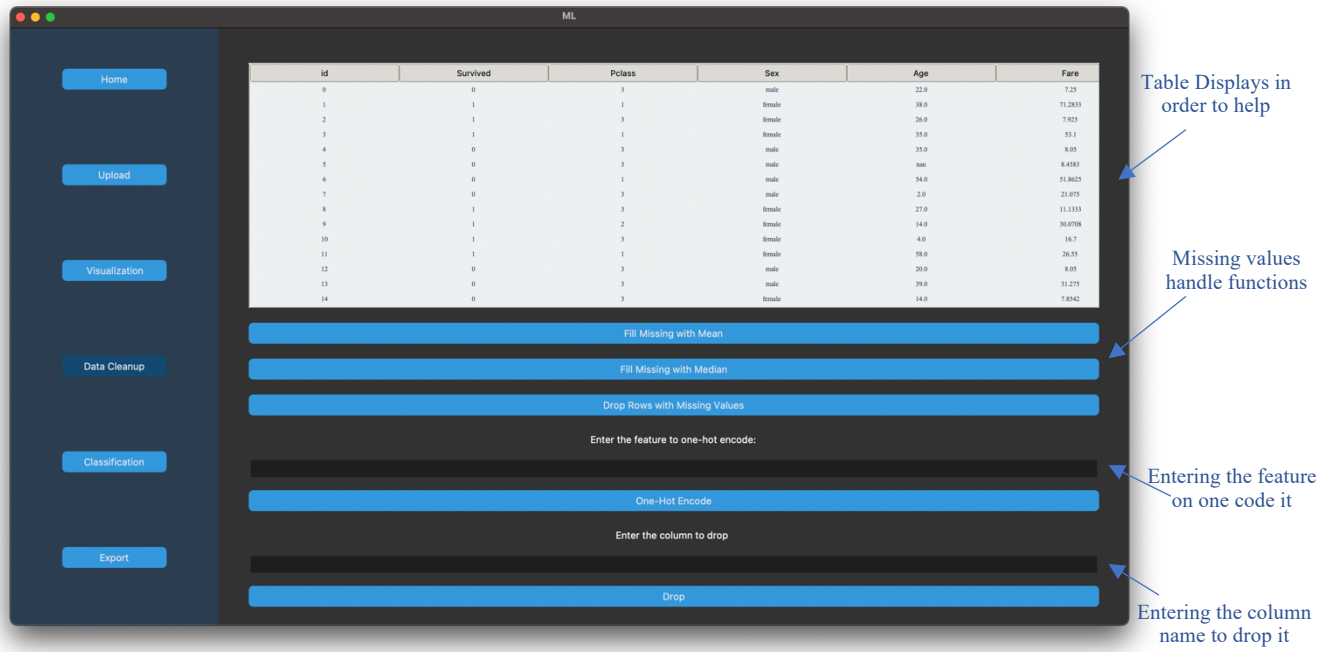


An exemple of the result of HeatMap

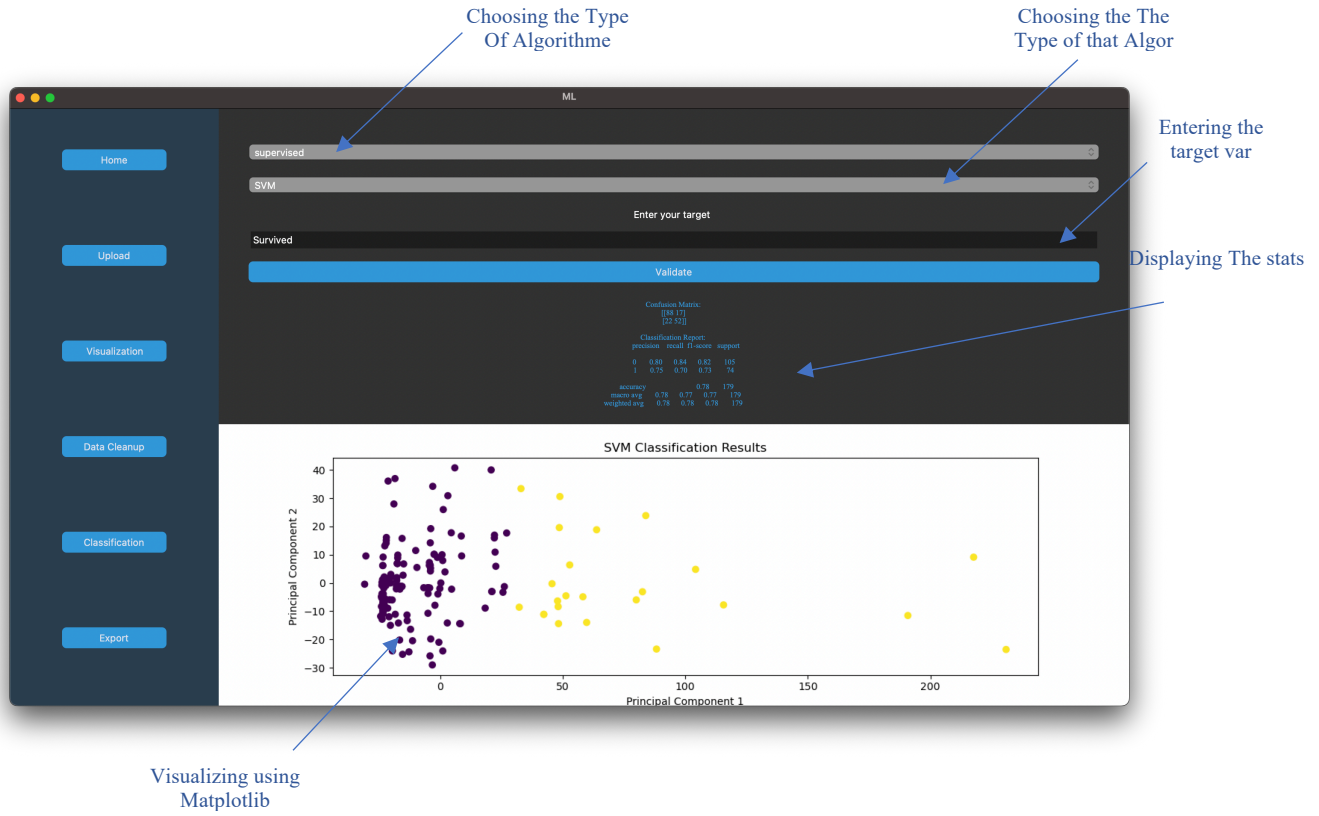


4. *Data Cleanup Interface:*

In order to ensure the integrity and quality of our dataset, we implemented a robust data cleanup process.

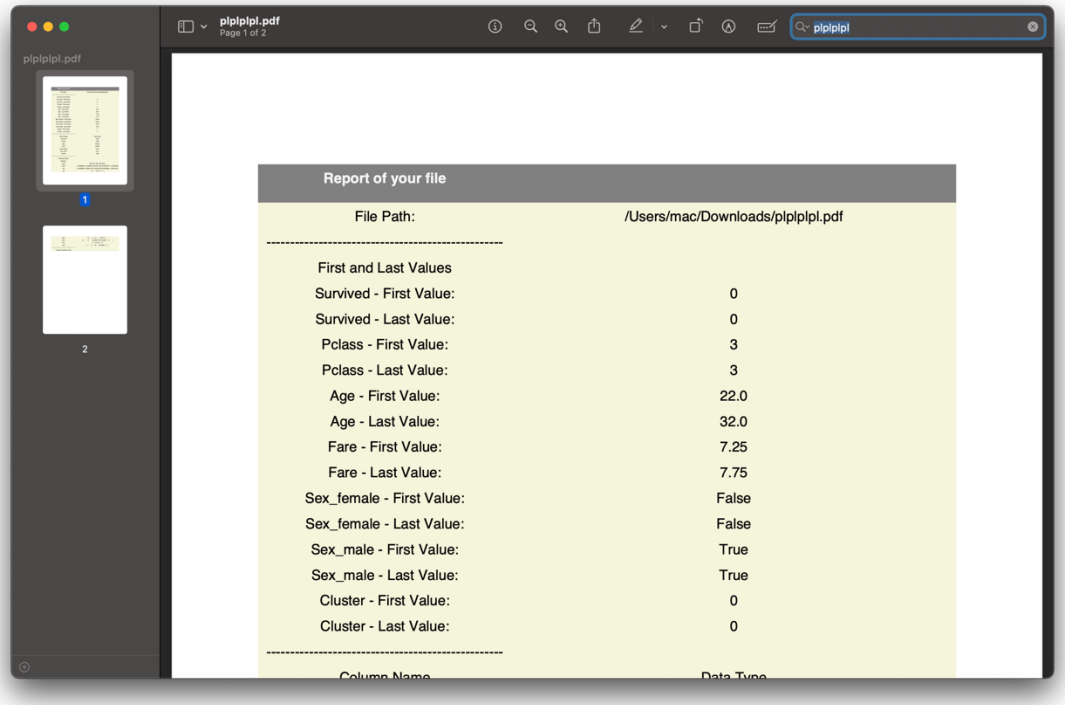


5. *Supervised Algorithms Interface:*



6. *Unsupervised Algorithms Interface:*

7. *Exporting Interface:*



Report of your file

File Path:	/Users/mac/Downloads/plplplpl.pdf
First and Last Values	
Survived - First Value:	0
Survived - Last Value:	0
Pclass - First Value:	3
Pclass - Last Value:	3
Age - First Value:	22.0
Age - Last Value:	32.0
Fare - First Value:	7.25
Fare - Last Value:	7.75
Sex_female - First Value:	False
Sex_female - Last Value:	False
Sex_male - First Value:	True
Sex_male - Last Value:	True
Cluster - First Value:	0
Cluster - Last Value:	0

As For the exportation we have made our best to extract the important data as there is much room to improve but we will do our best