Study Notes

Of course! Here are your concise, visual study notes on Exploratory Data Analysis.

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■ Key Concepts

- **Exploratory Data Analysis (EDA)**: The process of summarizing and visualizing data to understan...
- **Summary Statistics**: Key numbers (like mean, median) that quickly describe your data.
- **Data Visualization**: Using graphs and charts ■ to see patterns and trends hidden in data.

■ Important Points

- **Primary Goal** ■: To "get to know" your data *before* formal analysis or modeling.
- **Main Objective** ■: Uncover hidden patterns, relationships, and strange outliers.
- **Key Outcome** ■: Helps you form hypotheses, build better models, and make data-driven decisions.
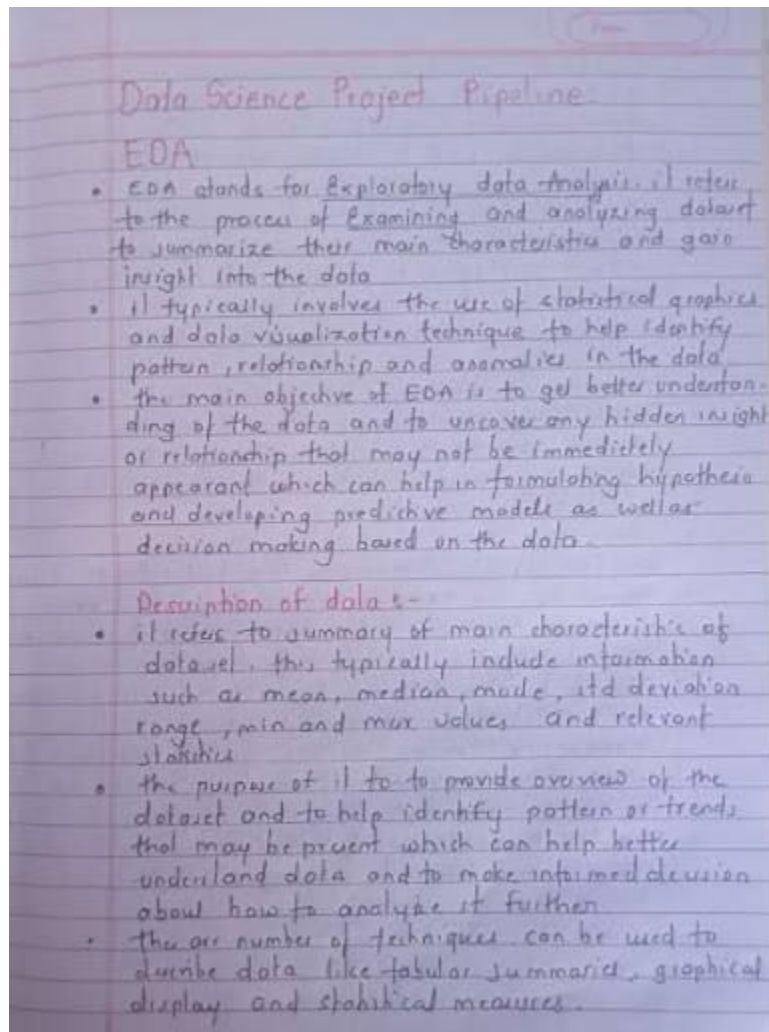
■ Quick Facts

- Relies heavily on **visual tools** like charts and graphs.
- It's the first step in almost any data project.
- Commonly checks for: **mean**, **median**, **standard deviation**, and **min/max** values.

■ Memory Tips

- **Acronym**: Think **EDA** → "**E**xplore **D**ata **A**lways" (before you start modeling).
- **Analogy**: EDA is like being a detective ■■■■■, looking for initial clues in the data before ma...
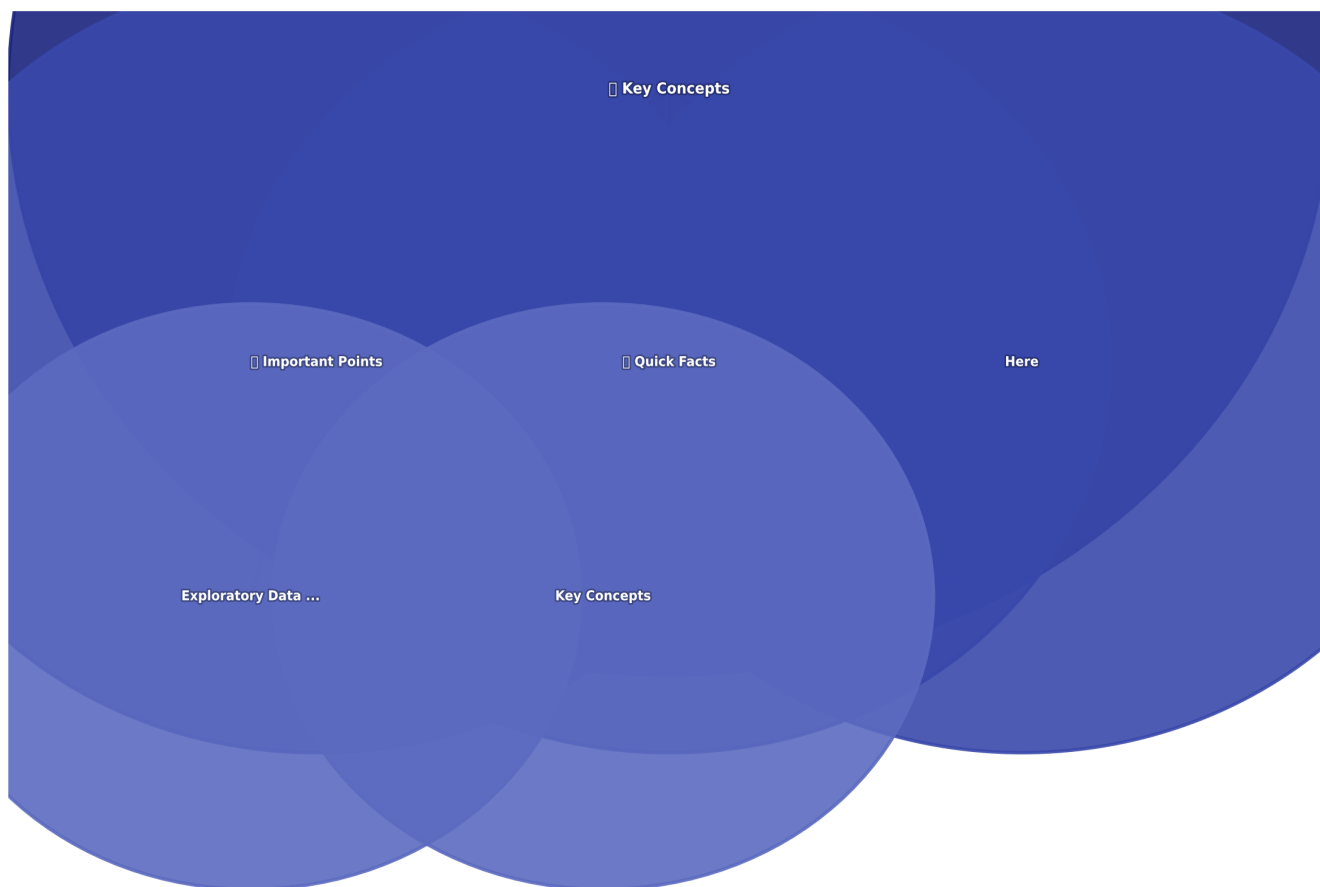
■ Reference Images
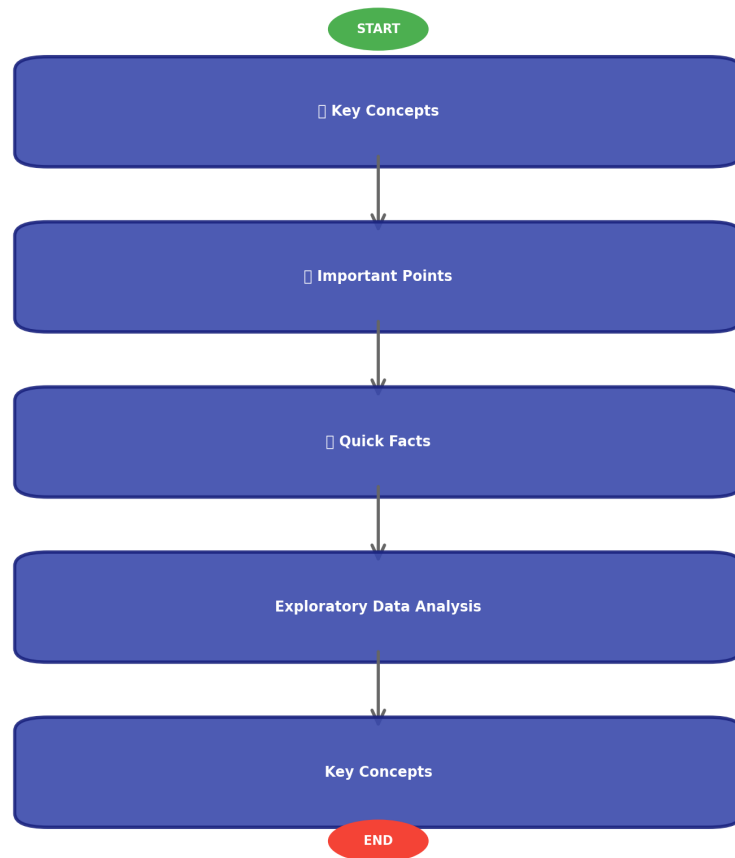
Image 1

Data Science Project Pipeline

EDA

- EDA stands for Exploratory data Analysis. it refer to the process of Examining and analyzing dataset to summarize their main characteristics and gain insight into the data
- it typically involves the use of statistical graphics and data visualization technique to help identify pattern, relationship and anomalies in the data.
- the main objective of EDA is to get better understanding of the data and to uncover any hidden insight or relationship that may not be immediately appearant which can help in formulating hypothesis and developing predictive models as well as decision making based on the data.

Description of data :-

- it refer to summary of main characteristics of dataset. this typically include information such as mean, median, mode, std deviation range, min and max values and relevant statistics
- the purpose of it to to provide overview of the dataset and to help identify pattern or trends that may be present which can help better understand data and to make informed decision about how to analyze it further
- there are number of techniques can be used to describe data like tabular summaries, graphical display and statistical measures.

■ Visual Diagrams

Concept Mind Map

Key Concepts

Important Points

Quick Facts

Here

Exploratory Data ...

Key Concepts

Process Flowchart

START

 Key Concepts

 Important Points

 Quick Facts

Exploratory Data Analysis

Key Concepts

END

Concept Hierarchy

 Key Concepts

 Important ...   Quick Facts   Here   Exploratory ...