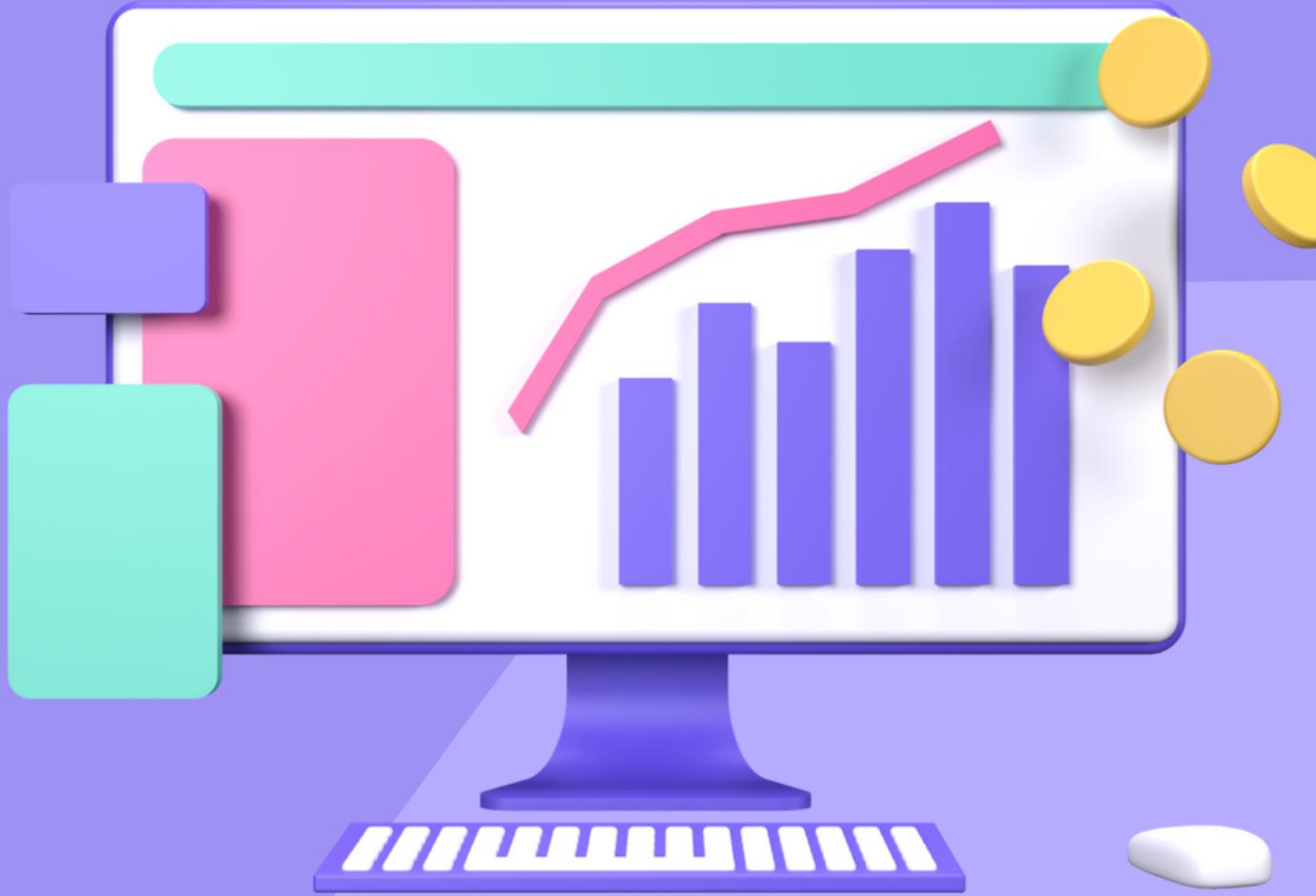


TEAM:- PHOENIX

# DATA ANALYSIS SOFTWARE FOR FINANCIAL FRAUDS



# TABLE OF CONTENT



01. OBJECTIVE
02. BACKGROUND OF THE PROBLEM STATEMENT
03. SOLUTION
04. VISUAL PRESENTATION
05. KEY FEATURES
06. END

The primary objective of the Financial Data Analysis Software is to design and implement a robust and advanced system for analyzing and processing financial data from diverse sources, encompassing transaction records, trading activities, and customer behavior. The overarching goal is to proactively identify and mitigate potentially fraudulent activities within the financial ecosystem. The software aims to achieve the following specific objectives

- Behavioral Analysis and Profiling:- Develop customer behavior analysis tools to create profiles and understand typical financial behavior for each customer or entity.
- Transaction Tracking and Visualization:- Provide interactive and visual representations of financial data to enhance the ability to identify complex relationships and transactions.
- Anomaly Detection:- Develop machine learning algorithms to identify anomalies in financial data.

# OBJECTIVE

Design and implement advanced Financial Data Analysis Software to analyze and process financial data from various sources, including transaction records, trading activities, and customer behavior. The goal is to identify potentially fraudulent activities.



The rise of cybercriminals engaging in deceptive practices to manipulate individuals into transferring money has become a pervasive and sophisticated threat in the financial landscape. These malicious actors leverage various techniques to exploit human vulnerabilities and trust. Their tactics often involve social engineering, manipulation, and psychological manipulation to trick individuals into making unauthorized financial transactions. The consequences of falling victim to such schemes extend beyond immediate financial losses, often resulting in severe reputational damage for both individuals and organizations.

## BACKGROUND OF THE PROBLEM STATEMENT



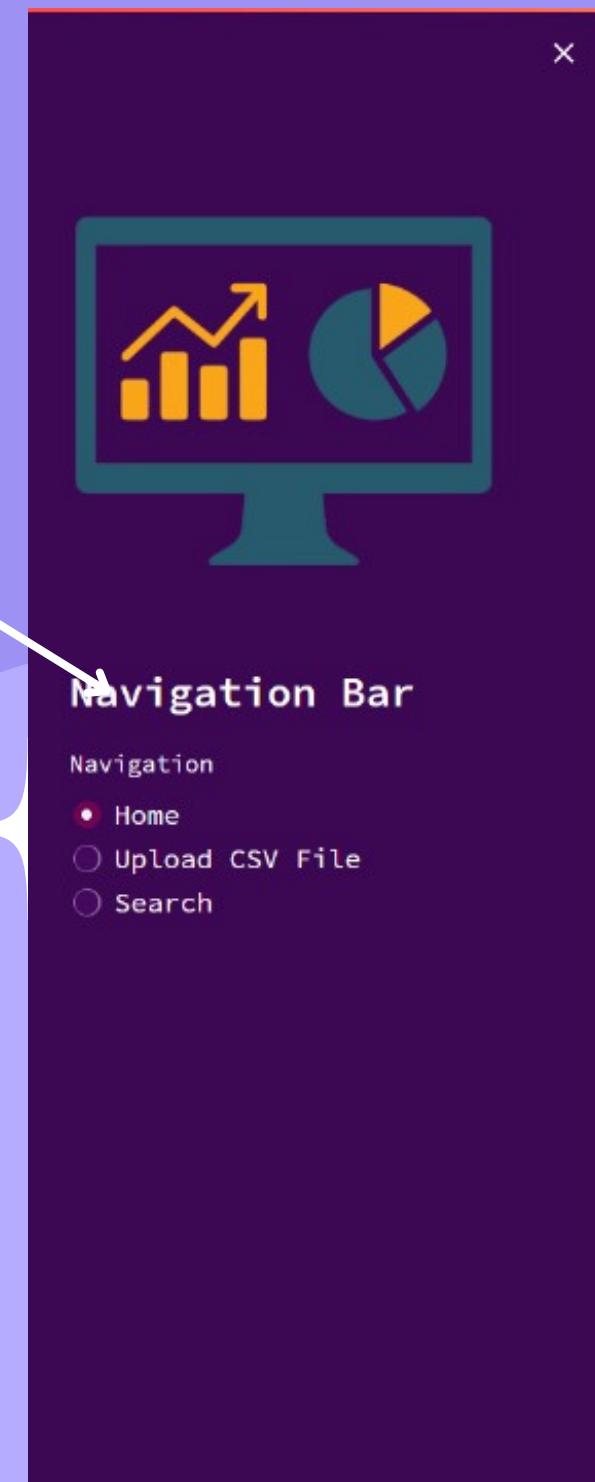
# OUR SOLUTION



01. EFFORTLESS DATA UPLOAD
02. SMART FRAUD DETECTION ALGORITHM
03. QUICK DATA SEARCH WITH MERCHANTID OR CLIENTID
04. UNDERSTANDABLE FRAUD DETAILS

# ABOUT THE PAGE

NAVIGATION BAR  
TO DO  
PROCESSES



The main content area features a dark background with a stylized illustration of a server stack composed of red, blue, and purple cubes. To the right of the illustration, the text 'Welcome to Rock - Your Guardian Against Fraud!' is displayed in large, white, sans-serif font. Below this, a smaller line of text reads 'Unlock the Power of Fraud Detection with Ease:'. Underneath that, another paragraph states: 'Are you worried about potential fraud in your transactions? Fret not! Our Fraud Detection Website is designed to make safeguarding your business easy and interactive.' At the bottom, the text 'Key Features:' is shown in white.

# EFFORTLESS DATA UPLOAD

The screenshot displays a user interface for data upload. On the left, a dark sidebar contains a navigation bar with three items: "Home" (unselected), "Upload Data File" (selected, indicated by a red dot), and "Search" (unselected). Below the navigation is a section titled "Upload your dataset here" with a "Drag and drop file here" placeholder and a "Limit 200MB per file" note. A "Browse files" button is also present. The main content area on the right features a large teal icon of a computer monitor displaying a bar chart and a pie chart. A prominent message box in the center-right says "Please upload data to proceed." At the top right of the main area, there are "Deploy" and three-dot buttons.

Please upload data to proceed.

Navigation Bar

Navigation

- Home
- Upload Data File
- Search

Upload your dataset here

Drag and drop file here  
Limit 200MB per file

Browse files

Deploy :

# UNDERSTANDABLE FRAUD DETAILS



## Navigation Bar

Navigation

- Home
- Upload CSV File
- Search

Upload your dataset here

Drag and drop file here  
Limit 200MB per file

Browse files

 your\_dataframe (2... X  
138.9KB)

## Detailed Analysis

Would You Like To See Stats About The Data?

Showing Result

### Overview

Overview   Alerts 11   Reproduction

Dataset statistics

Number of variables	17
Number of observations	999
Missing cells	0
Missing cells (%)	0.0%
Duplicate rows	0
Duplicate rows (%)	0.0%
Total size in memory	128.9 KiB
Average record size in memory	132.1 B

Variable types

Numeric	10
Categorical	3
DateTime	2
Text	2

# SMART FRAUD DETECTION ALGORITHM

X Deploy :



## Detailed Analysis

Would You Like To See Stats About The Data?

## Predicted Frauds

	TransactionID	Category	TransactionAmount	AnomalyScore	Timestamp
22	364	4	78.3468	0.8304	2022-01-16 03:00:00
192	227	4	29.6793	0.9392	2022-01-10 10:00:00
214	658	1	86.5905	0.613	2022-01-28 09:00:00
285	162	3	93.9098	0.1303	2022-01-07 17:00:00
382	794	2	11.8296	0.1754	2022-02-03 01:00:00
417	253	4	15.0535	0.5105	2022-01-11 12:00:00
441	272	4	30.8233	0.0443	2022-01-12 07:00:00
465	289	0	51.1389	0.7573	2022-01-13 00:00:00
506	332	4	28.3558	0.2218	2022-01-14 19:00:00
671	611	0	35.5362	0.6464	2022-01-26 10:00:00

Navigation Bar

Navigation

- Home
- Upload CSV File
- Search

Upload your dataset here

Drag and drop file here  
Limit 200MB per file

Browse files

your\_dataframe (2... X  
138.9KB)

# QUICK DATA SEARCH WITH MERCHANTID OR CLIENTID



**Navigation Bar**

Navigation

- Home
- Upload CSV File
- Search

Upload your dataset here

Drag and drop file here  
Limit 200MB per file

Browse files

your\_dataframe (2... X  
138.9KB)

Deploy :

1	2	3	4	5	6	7	8	9	10
1 70	2 02	3 38	4 13	5 79	6 98	7 76	8 10	9 56	10 00
55.0000	12.8812	50.1763	52.9912	41.634	48.738	22.0132	87.0116	78.1229	0.0000
Customer	1027	Customer 1955	Customer 1955	Customer 1796	Customer 1796	Customer 1796	Customer 1796	Customer 1946	Customer
1002	1,027	1,955	1,955	1,796	1,796	1,796	1,796	1,946	1002
Address	1027	1955	1955	1796	1796	1796	1796	1946	Address
1002	9,527.9471	9,288.3555	9,288.3555	5,588.0499	5,588.0499	5,588.0499	5,588.0499	7,324.7853	1002

How would you like to be contacted?

CustomerID

You selected: CustomerID

Enter no.

1952.00

0	1	2	3	4	5	6	7	8	9
TransactionID	FraudIndicator	Category	TransactionAmount	AnomalyScore	Time				
0	1	0 Other	79.4136	0.6867	202				
1	895	0 Food	90.422	0.0408	202				

**1.**

### **Effortless CSV Upload:**

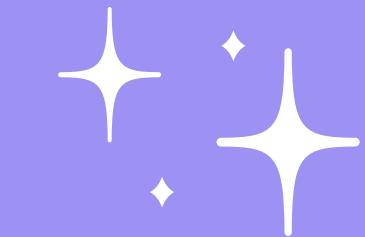
Simply upload your transaction data in CSV format, and let our magic begin! Our backend, powered by a smart Random Forest machine learning model, digs deep to spot any unusual patterns in your data.



**2.**

### **Smart Random Forest Algorithm:**

Meet your fraud-fighting ally! Our Random Forest algorithm is like a superhero for your data, detecting tricky patterns and uncovering potential fraud. Your peace of mind is our mission!



**3.**

### **Quick MerchantID and ClientID Search:**

Take control in a click! Enter a MerchantID or ClientID to fetch instant, useful data. Get the scoop on individual transactions, spot risks, and make informed choices to keep fraud at bay.

## **KEY FEATURES**

**4.**

### **Understandable Fraud Details:**

We're not here to confuse you. Our platform not only flags potential fraud but also breaks down the details. Understand the 'what' and 'why' behind each red flag, and make decisions with confidence.

# Thank you

