

Peer-graded Assignment: Peer-Graded Final Assignment

Instructions My submission

Discussions

Credit Card Fraud Analysis

Submitted on January 24, 2023

Shareable Link

PROMPT

List at least 5 (five) data points that are required for the analysis and detection of a credit card fraud. (3 marks)

Anomalies in:

1. IP Address
2. Shipping Address
3. Transaction Date
4. Transaction Time
5. Transaction Value

RUBRIC

Did the learner list 5 or more data points out of the 8 data points listed below that are required for the analysis and detection of a credit card fraud?

1. Card holder / Customer Id
 2. Transaction date
 3. Transaction time
 4. Transaction value
 5. Shipping address
 6. IP address
 7. Device model
 8. Location
- 3 points
Correct. The learner listed 5 or more data points out of the 8 data points listed below that are required for the analysis and detection of a credit card fraud.
1. Card holder / Customer Id
 2. Transaction date
 3. Transaction time
 4. Transaction value
 5. Shipping address
 6. IP address
 7. Device model
 8. Location
- 2 points
Partially Correct. The learner listed 3 to 4 data points out of the 8 data points listed below that are required for the analysis and detection of a credit card fraud.
1. Card holder / Customer Id
 2. Transaction date
 3. Transaction time
 4. Transaction value
 5. Shipping address
 6. IP address
 7. Device model
 8. Location
- 1 point
Partially Correct. The learner listed 1 to 2 data points out of the 8 data points listed below that are required for the analysis and detection of a credit card fraud.
1. Card holder / Customer Id
 2. Transaction date
 3. Transaction time
 4. Transaction value
 5. Shipping address
 6. IP address
 7. Device model
 8. Location
- 0 points
Incorrect. The learner did not list any data points out of the 8 data points that are required for the analysis and detection of a credit card fraud.

PROMPT

Refer to the data table below and identify 3 (three) errors/issues that could impact the accuracy of your findings. (3 marks)

IP Address	User ID	Account Number	Age	Shipping Address	Transaction Date	Transaction Type	Transaction Value	Product Category	Units Purchased
830.123.0	johnp	29812345	32	3245, Oakhill Lane, WA 98105, US	18 Nov 2020	3500.00	\$123.50	Clothing	1
570.123.0	johnp	29812345	32	1545, Oakhill Lane, WA 98105, US	04 Nov 2020	1075.00	278.75	Electronics	2
830.123.0	johnp	29812345	32	3245, Oakhill Lane, WA 98105, US	18 Nov 2020	87.14.99		Home Office	3
1180.51.7	johnp	29812345	32	Home	04 Nov 2020	81.11.00	\$1,000.00	Electronics	10
1180.51.7	johnp	29812345	32	Home	2020-08-03	81.11.00	\$1,100.00	Electronics	10
1180.51.7	johnp	29812345	32	P.O. Box 1040	05 Nov 2020	81.11.04	\$1,000.00	Tools	10
1180.107.1	ellend	51421789	40	40 Rosemont Blvd, Atlanta, GA 30303, Canada	17 Nov 2020	17.00.00	\$10.10	Footwear	1
830.187.0	ellend	51421789	40	40 Rosemont Blvd, Atlanta, GA 30303, Canada	18 Nov 2020	32.14.99	\$145.00	Kitchen Appliances	3
830.187.0	ellend	51421789	40	40 Rosemont Blvd, Atlanta, GA 30303, Canada	01 Nov 2020	17.00.15	\$137.15	Car Tires	2
830.187.0	ellend	51421789	40	40 Rosemont Blvd, Atlanta, GA 30303, Canada	17 Nov 2020	18.00.00	100.00	Kitchen Appliances	1
171.185.10.1	johnp	11508518		P.O. Box 1022	07 Nov 2020	15.50.12	100.00	Clothing	1
171.185.10.1	johnp	11508518		P.O. Box 1022	08 Nov 2020	17.15.00	151.15	Security	1
1347.209.10	johnp	11508518		P.O. Box 1401	03 Nov 2020	00.00.00	\$1,000.00	Jeans	3

1. Missing IP Address
2. Missing Transaction Value
3. Transaction Date format

RUBRIC

Did the learner identify at least 3 errors/issues that could impact the accuracy of the findings?

Some of the issues that could impact the accuracy of findings include:

- Missing transaction value
- Missing IP Address
- Date format inconsistency

- 3 points
Correct. The learner identified 3 errors/issues that could impact the accuracy of the findings.
- 2 points
Partially Correct. The learner identified at least 2 errors/issues that could impact the accuracy of the findings.
- 1 point
Partially Correct. The learner identified 1 error/issue that could impact the accuracy of the findings.
- 0 points
Incorrect. The learner did not identify any error/issue.

PROMPT

Refer to the data table below and identify 2 (two) anomalies or unexpected behaviors, that would lead you to believe the transaction may be suspect. (2 marks)

IP Address	User ID	Account Number	Age	Shipping Address	Transaction Date	Transaction Type	Transaction Value	Product Category	Units Purchased
830.123.0	johnp	29812345	32	3245, Oakhill Lane, WA 98105, US	18 Nov 2020	3500.00	\$123.50	Clothing	1
570.123.0	johnp	29812345	32	1545, Oakhill Lane, WA 98105, US	04 Nov 2020	1075.00	278.75	Electronics	2
830.123.0	johnp	29812345	32	3245, Oakhill Lane, WA 98105, US	18 Nov 2020	87.14.99		Home Office	3
1180.51.7	johnp	29812345	32	Home	04 Nov 2020	81.11.00	\$1,000.00	Electronics	10
1180.51.7	johnp	29812345	32	Home	2020-08-03	81.11.00	\$1,100.00	Electronics	10
1180.51.7	johnp	29812345	32	P.O. Box 1040	05 Nov 2020	81.11.04	\$1,000.00	Tools	10
1180.107.1	ellend	51421789	40	40 Rosemont Blvd, Atlanta, GA 30303, Canada	17 Nov 2020	17.00.00	\$10.10	Footwear	1
830.187.0	ellend	51421789	40	40 Rosemont Blvd, Atlanta, GA 30303, Canada	18 Nov 2020	32.14.99	\$145.00	Kitchen Appliances	3
830.187.0	ellend	51421789	40	40 Rosemont Blvd, Atlanta, GA 30303, Canada	01 Nov 2020	17.00.15	\$137.15	Car Tires	2
830.187.0	ellend	51421789	40	40 Rosemont Blvd, Atlanta, GA 30303, Canada	17 Nov 2020	18.00.00	100.00	Kitchen Appliances	1
171.185.10.1	johnp	11508518		P.O. Box 1022	07 Nov 2020	15.50.12	100.00	Clothing	1
171.185.10.1	johnp	11508518		P.O. Box 1022	08 Nov 2020	17.15.00	151.15	Security	1
1347.209.10	johnp	11508518		P.O. Box 1401	03 Nov 2020	00.00.00	\$1,000.00	Jeans	3

1. A sudden increase in transaction value and units purchased
2. Suspicious IP address and Shipping Address

RUBRIC

Did the learner identify 2 anomalies, or unexpected behaviors, that would lead them to believe the transaction may be suspect?

Some of anomalies in the provided data set include:

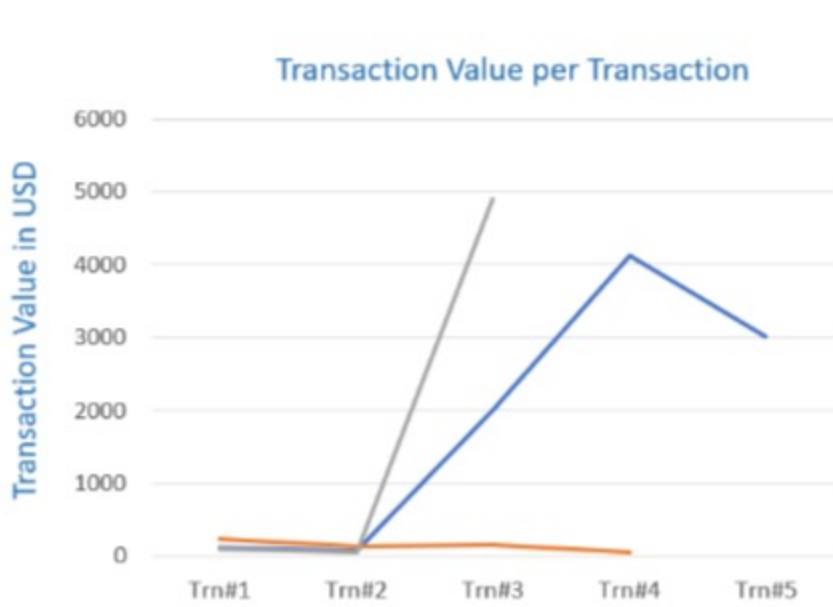
- Significantly higher **Transaction Value** where **Shipping Address** has been changed from home/office address to P.O. Box.
- Higher **Transaction Value** and increased frequency of transactions.
- **IP Address** change and significantly higher **Transaction Value**.
- **IP Address** change and **Shipping Address** change

Note: It is OK for the learners to answer this in their own words.

- 2 points
Correct. The learner identified 2 anomalies or unexpected behaviors that would lead them to believe the transaction may be suspect.
- 1 point
Partially Correct. The learner identified 1 anomaly or unexpected behavior that would lead them to believe the transaction may be suspect.
- 0 points
Incorrect. The learner did not identify an anomaly or unexpected behavior.

PROMPT

Briefly explain your key take-away from the provided data visualization chart. (1 mark)



A significant increase in transaction value from johnp and ellend in short period of time

RUBRIC

Did the learner explain a key take-away from the data visualization chart?

The visualization depicts the transaction values per transaction for all three users. The **key take-away** from this visualization is the sharp rise in the transaction values for users johnp and ellend, which may be indicative of an anomaly.

Note: It is OK for the learners to answer this in their own words.

- 1 point
Correct. The learner provided a key take-away.
- 0 points
The learner did not provide any key take-away

PROMPT

Identify the type of analysis that you are performing when you are analyzing historical credit card data to understand what a fraudulent transaction looks like.

Hint: The four types of Analytics include: Descriptive, Diagnostic, Predictive, Prescriptive. (1 mark)

Descriptive analytics

RUBRIC

Did the learner identify the type of analysis that they are performing when they are analyzing historical credit card data to understand what a fraudulent transaction looks like?

- 1 point
Correct. The learner identified '**Descriptive Analytics**' as the type of analysis that they are performing when they are analyzing historical credit card data to understand what a fraudulent transaction looks like.
- 0 points
Incorrect. The learner did not identify the type of analysis as '**Descriptive Analytics**'.

Start new attempt

Comments left

Comments left for the learner are visible only to that learner and the person who left the comment.

RK

Share your thoughts...

