

Ideation Phase Empathize & Discover

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| Date | 17 October 2023 |
| Team ID | Team-592689 |
| Project Name | Online Payment Fraud Detection using ML |
| Maximum Marks | 4 Marks |

TEAM MEMBERS:

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WHO are we empathizing with?

- Person:** The user/consumer of the online payment system.
- Situation:** Attempted online payment with potential fraud.
- Role:** The payer who wants to securely make transactions.

What do they need to DO?

- Differently:** Ensure the safety of their online transactions.
- Jobs to be done:** Make secure transactions without the fear of fraud.
- Decisions:** Choose a reliable online payment platform.
- Success:** Completion of transactions without any unauthorized activities.

What do they SEE?

- Marketplace:** Various online payment platforms, security features.
- Immediate Environment:** Transaction interface, security prompts.
- Others Saying/Doing:** Reviews and feedback on secure payment methods.
- Watching/Reading:** News or articles related to online payment fraud and prevention.

What do they SAY?

- Heard them say:** Concerns about online payment security, experiences with fraud.
- Imagine them saying:** "I want to be sure my payments are secure."

What do they DO?

- Today:** Use online payment methods cautiously, check transaction histories.
- Observed Behavior:** Utilize two-factor authentication if available.

--Imagine them doing: Exploring fraud prevention features on the payment platform.

What do they HEAR?

--Others Saying: Friends discussing secure payment methods.

--From Friends: Recommendations for secure payment platforms.

--From Colleagues: Conversations about recent fraud cases and precautions.

--Second-hand: News about the latest fraud detection technologies.

What do they THINK and FEEL?

--PAINS:

Fears of unauthorized access to personal information.

Frustrations with complex or unreliable security measures.

Anxieties about the possibility of financial loss due to fraud.

--GAINS:

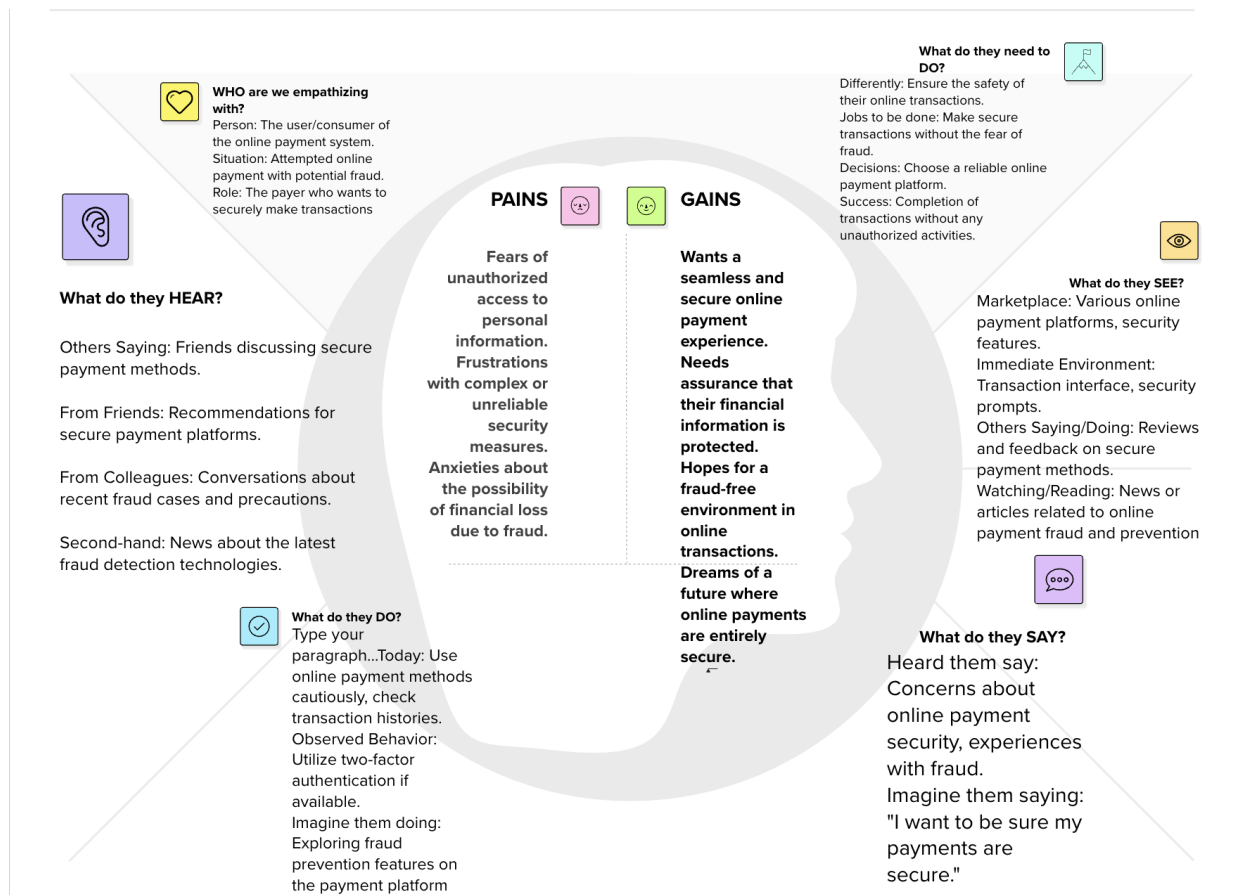
Wants a seamless and secure online payment experience.

Needs assurance that their financial information is protected.

Hopes for a fraud-free environment in online transactions.

Dreams of a future where online payments are entirely secure

EMPATHY MAP CANVAS:



PROBLEM STATEMENT:

Online Payments Fraud Detection Using ML

The growth in internet and e-commerce appears to involve the use of online credit/debit card transactions. The increase in the use of credit / debit cards is causing an increase in fraud. The frauds can be detected through various approaches, yet they lag in their accuracy and its own specific drawbacks. If there are any changes in the conduct of the transaction, frauds are predicted and taken for further process. Due to large amount of data credit /debit card fraud detection

problem is rectified by the proposed method. We will be using classification algorithms such as Decision tree, Random forest, SVM, and Extra tree classifier, xgboost Classifier. We will train and test the data with these algorithms. From this the best model is selected and saved in pkl format. We will be doing flask integration and IBM deployment.