



Software Project Management
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Project Proposal- Credit Card Fraud Detection

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Introduction

Credit card fraud is an important topic, especially within today's digital world. With the widespread use of credit cards for transactions, the chance of fraudulent activity has also increased. Besides from the fact of users losing money, it also puts the image that electronic payments are not trust-worthy. To resolve this issue, creating a credit card fraud detection system that effectively protects the users information instantaneously, will result in financial losses and reduced fraudulent actions. The project team scopes to use programs that can detect abnormal transactions that could be a result of fraudulent activity.

Objectives

For the credit card fraud detection system the project teams objective aims to satisfy the following:

1. Creating the web app on a secure service that allows users to do daily transactions
2. That the users information is 'well-protected', to ensure that fraudsters are not able to have access to it, or prevent and information leaks
3. Reduce the amount of fraudulent activity, which will result in reduced money loss
4. By giving users real-time notifications by any unauthorized transactions, or suspicious activity

5. Informing users on how to keep their information 'safe', for example: to regularly monitor your account, use strong passwords or to use secure payments that are well known, and keep track of recent transactions to verify that you are aware of them

Measure of Success

In order to ensure we attain our objectives, the following measure of success have been established:

1. By viewing the number of complaints from users; the fewer complaints, the greater the level of success.
2. By running practical credit card fraud detection test to see if the system properly works and achieves listed objectives
3. Allocation and approval of cost, making sure the project does not exceed the drafted budget.
4. Remote database server successfully contains customer profiles and we are able to process that data to determine if a customer is vulnerable to a fraud attack
5. Being able to successfully meet iterative development deadlines to be able to launch service within the given time frame

Infrastructure

The infrastructure of this application we would need to build this product would most likely include:

1. A remote server that will store user information such as client profile, billing data, and risk percentage
2. Using a data engineering pipeline that will gather data about user trends on spending, and merge information from other resources
3. Ideally having a 3-tiered web application architecture that will have a separate database tier, application tier where all logic and data will be processed, and a presentation tier where the customer can view data about their profile
4. Creating system based off of a web stack that will involve front-end and back-end technologies that will allow for all the capabilities for the product to function