
SYNOPSIS ON

**Project A**
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# Problem Statement

While India's insurance sector has been growing dynamically in recent years, its share in the global insurance market remains abysmally low. The insurance sector faces various challenges. Majority of them being, proper quoting, fraudulent claims, late claim assessment and slow processing of claims which includes but not limited to payment and closure. The fact taken to the consideration "India does not have an effective insurance fraud law despite the fact that frauds burnt a Rs 45,000-crore hole in the Indian insurance industry's pocket in 2019." Looking deeper into the situation Fraud car claims cost the insurance industry a huge sum every year. About 90 percent of auto insurance fraud is the result of claims padding (which means to add damages, fictitious passengers to insurance claim. The other 10% comes from organised accident staging and forged papers.

Since the magnitude of this challenge is significant, this cannot be resolved by the government alone. This has been a serious issue and an immediate action to improve this has to be taken.

# Reasons for selecting this topic

With Digitalisation is on the verge, the insurance industry opens up with opportunities. With coming breakthroughs in Blockchain India needs to implement a solution based on it to reduce frauds in insurance market and help it to grow significantly. The reason for selecting the topic is to test whether such a system can exist and how will it help to improve the market growth and avoid errors.

# Objective of this Project

The objective of this project is too design a fabric platform that will connect claimer, insurance company, hospital and police station. The project is distributed into 4 ledgers.

- **Claimer Insurance ledger**- The ledger will allow the claim with required documents.
- **Hospital Police Ledger**- The ledger will allow the Hospital to register an accident.
- **Insurance Police Ledger**- This ledger will allow the Insurance company to verify the claim.
- **Insurance Claimer Ledger**- This ledger will allow the company to make required transaction.

The above four ledgers will work simultaneously to reduce the frauds and increase the output.

# Methodology

The project is designed with an incremental model approach where the entire software is divided into 3 independent modules.

CIL- Analysis-> Design-> Code-> Test-> Deploy

HPL- Analysis-> Design-> Code-> Test-> Deploy

IPL- Analysis-> Design-> Code-> Test-> Deploy

The **CIL** module will allow a person to register, buy an insurance, apply for a claim and an insurance company to make required transaction with the customer.

Th **HPL** module will allow hospital to register or verify an accident with the police station. This will help to avoid fictitious passengers during an insurance claim.

The **IPL** module will allow the Insurance company to verify the needed with police department for accidental and theft claims.

When these three independent modules will combine the will have a decentralised fabric that can be directly accessed by the Police and Insurance company. This fabric will consist of all the transactions.

# Hardware and Software to be Used

**Tech Stack:**

HTML, CSS, JavaScript, Python, AWS, Blockchain, Dynamo DB

**Software Used:**

Visual Studio Code, Visual Studio,AWS CLI, AWS SDK, Blockchain Hyper ledger Fabric Git, Github

**Hardware used:**

Apple MacBook Pro 2019, Mac OS, 16 gb Ram, 512 SSD, I5 10th generation quad core Asus Vivobook, Windows OS, 8 gb Ram, 512 Gb HDD, i5 10th generation quad core

# Testing Techniques to be used

Web testing is a software testing practice to test websites or web applications for potential bugs. It's a complete testing of web-based applications before making live. A web-based system needs to be checked completely from end-to-end before it goes live for end users.

For our web testing we are using **LoadNinja:**
It lets us load test our web application with real browsers at scale, using test scripts that can

be replayed immediately after recording, producing actionable browser-based performance data to isolate issues and debug errors in real-time.

# What contribution would the project make and where?

The project is focused on the need of the insurance market and how it can be strengthened against frauds. Providing a single source of truth allows friction in business processes to be drastically reduced, using solutions such as smart contracts to facilitate and automate DLT networks.

Data reconciliation is made easier, accuracy is improved, and time spent uncovering information is eliminated, allowing for transparency, efficiency gains and cost reductions throughout a value chain. What's more, shared industry tasks and automation generate more seamless processes and lower total cycle times.

The aggregate improvements in speed and accuracy can also create more positive customer experiences. For example, shortening the claims cycle through improved efficiency could lead to higher customer satisfaction and retention, while faster and better access to data could enable smoother interaction between insurers and their customers. Reducing inefficiencies and costs throughout the value chain could, ultimately, even lead to lower premiums.

# Scope for extension into a major project

We are developing this project keeping in mind of expending it further. At present we focus on to create a minimal viable product. The project will de advanced with cron job that will allow us to easily add more functionalities in the future.

We have designed this software by following the norms of International Software Development and Amazon Virtual Cloud. Thus we can easily launch it in multiple languages covering different countries easily. For marketing and revenue generation we can partner with insurance companies and local authorities.

# Conclusion

After successful implementation of this project, we will be able to automate the insurance filing, claiming and validating the processes for both the company and the client. This project will allow the insurance sector a freedom from forgery and threats and will help to strengthen the infrastructure.