UNRAVEL

Team Members

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PROBLEM HYPOTHESIS

We believe that the common Indian person experiences difficulty in understanding policy details because of the complex platforms, terms, and language

Problem 1

Everyone fears that the companies manipulate data of policies to show high settlement ratio, as well as to avoid giving claims because of Lack of Transparency

Problem 2

Also, Most feel troubled while searching for a good policy catering to their personal needs because of too many complex choices.

Problem 3

The problem my customer faces is Complex language, Lack of Transparency and not having a highly accurate policy suggester.

The customer faces this problem because there is no platform in the market which is using Blockchain for transparency, NLP model for chatting and ML model for accurate predicting to find the best policy for you.

SOLUTION

Combine healthcare, payer, and insurance services in a user-friendly app/website. Provide access to medical records, share documents for insurance claims, and communicate with providers seamlessly. Utilize ML for premium prediction, NLP for a better user experience, and Blockchain for transparency.

Solution at Payer End

- Provide them with a chatbot like GPT to ask doubts and help in claim settlement
- Use ML predictions to provide best personalized policies
- Put policies and records in Blockchain for transparency and trust
- Provide complete environment with all facilities like OAuth, Payment Gateway etc.

Solution at Provider End

- Provide ML predictions to Insurance Providers so that they can provide better services and accurate policies
- Provide necessary documents to facilitate the claim settlement.
- Provide a Natural Language Processing Model(GPT-like) to extract health data from User prescription

BUSINESS MODEL CANVAS

Key Partners

Healthcare Networks: Partnerships with hospitals and clinics for integrated care.

Insurance Networks: Alliances with insurance providers for a wide range of services.

Technology Providers: Collaborations with tech companies for advanced features.

Healthcare Networks
- Hospitals
- Clinics
- Pharmacy

Insurance Networks
- Banks
- Insurance Companies
- ML model

Key Activities

Platform Development: Continuous improvement of the app and website functionalities.

Marketing : Promoting the platform to target customer segments.

Customer Service: Providing top-notch support and assistance to users.

Create healthcare related designs and ensure customer Insurance claim resolution as soon as possible

Key Resources

Technology Infrastructure: Robust servers and security systems to handle sensitive data.

Partnerships: Collaborations with healthcare providers and insurance companies.

Expert Team: A skilled team of developers, customer service reps, and healthcare professionals.

- Robust servers and security systems
- Industry connections
- Expert Team

Value Proposition

The **primary need addressed** is the **complexity** and **inconvenience** faced by individuals when managing their healthcare and insurance requirements.

- **Streamlined communication**: Direct communication channels with healthcare providers and insurance companies.
- **One-stop solution**: Users can manage their healthcare and insurance needs in one place.
- **Fair Premium Prediction:** Leverage our **ML** model for unbiased insurance premium assessments, ensuring equitable rates for clients, insurers, and healthcare providers.
- **Direct Savings** : Eliminate middleman fees and hidden charges by using our direct insurance policy purchasing platform.

Ease of access: Simplified access to personal medical records and insurance policies.

Customer Relationships

Personalized Experience: Customized user profiles with tailored healthcare and insurance options.

Community Engagement: Forums and support groups for users to share experiences and advice.

Feedback System: Regular surveys and feedback channels to improve services.

Forums to share experiences and regular surveys for feedback.

Channels

Website: A comprehensive portal to manage healthcare and insurance needs.

Mobile App: A user-friendly app for patients to access services on-the-go.

Customer Support: Dedicated support for assistance and inquiries.

Official website
Mobile App
Customer Support

Customer Segments

Patients: Individuals seeking easy access to healthcare services and insurance.

Healthcare Providers: Hospitals and clinics looking to streamline patient care and insurance processing.

Insurance Companies: Insurance providers aiming to offer better customer service and efficient claim processing.

Patients
Healthcare Providers
Insurance Companies

Cost Structure

Development Costs: Expenses related to app and website development.

Operational Costs: Day-to-day expenses of running the platform.

Marketing Costs: Investment in **advertising campaigns** and **Promotional Activities** : such as awareness drives

Content Creation: Investment in high quality blogs,short movies to promote our products.

Revenue Streams

Subscription Fees: Monthly or annual fees for premium features.

Commission: A percentage fee from insurance companies for each policy sold.

Service Fees: Charges for additional services like expedited claim processing.

Printable sales through social media

Affiliate marketing commissions from healthcare-related businesses

ARCHITECTURE

Healthcare

Policiies

Policy Pool

Filtered Results

Buying Policy

Blockchain

User

User Details

ML Model

Premium Prediction

Payment Gateway

Save Policy Records on Blockchain

Reply

Query

NLP(GPT like) model

Save Medical /Policy Record

Claim Settlemment

Admin

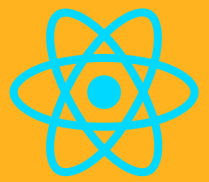
Add Healthcare Services and check malicious activities

TECH STACK

FRONTEND

- React + Vite Setup
- Tailwind CSS
- Material UI
- Redux Toolkit

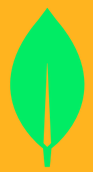




BACKEND

- Node.js
- Express.js
- MongoDB
- Redis
- AWS
- Google Cloud
- Firebase






ML/NLP

- Python
- Scikit-Learn
- Numpy
- FastAPI
- Pandas
- Seaborn

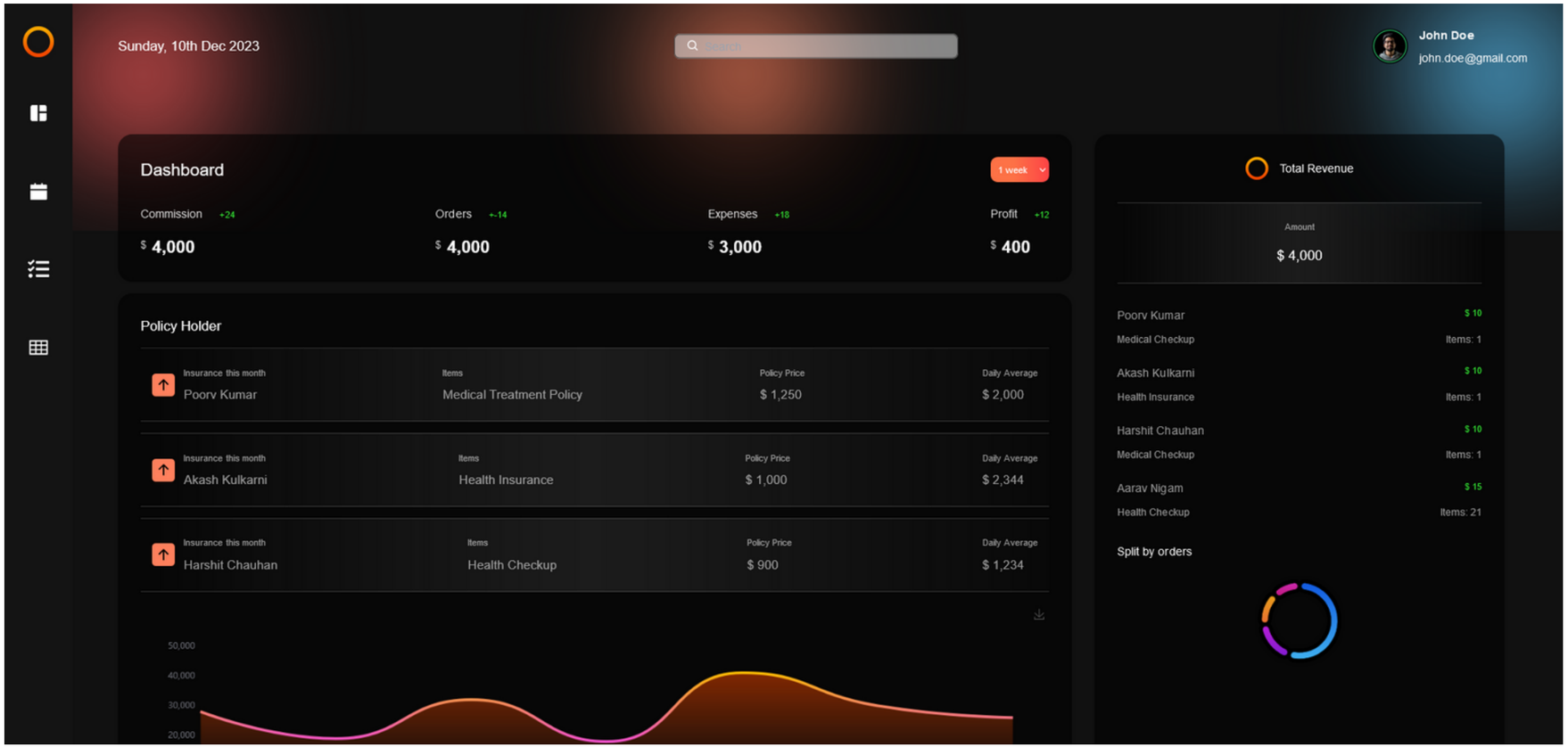



BLOCKCHAIN

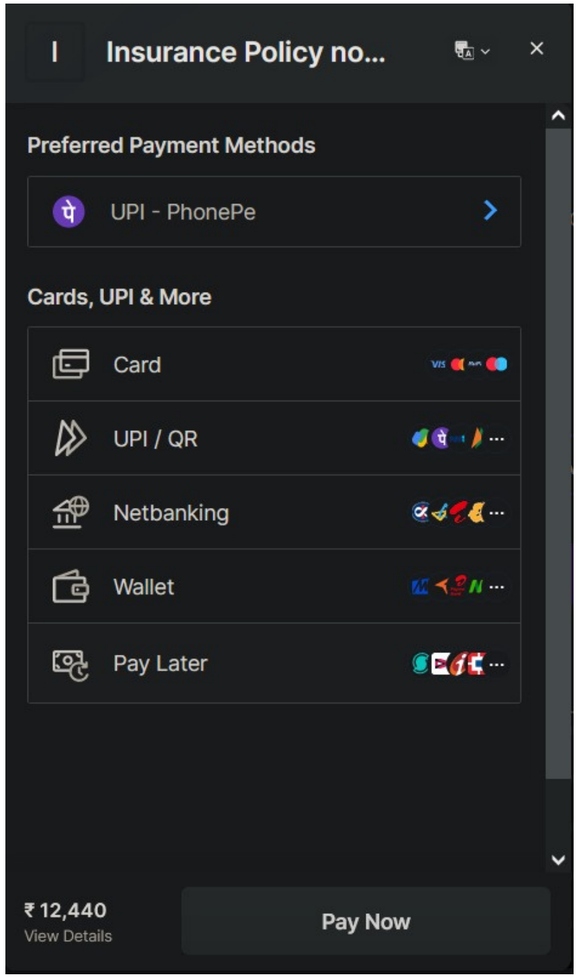
- Solidity
- Ethereum
- Metamask
- Hardhat



DASHBOARD



PAYMENT



LOGIN

Login to your account

Don't have an account yet? Signup

Email address

Password

Remember me Forgot your password?

Login

SIGNUP

Signup to create an account

Already have an account? Login

Username

Email address

Age

Height(in meters)

Weight(in KG)

number Of children

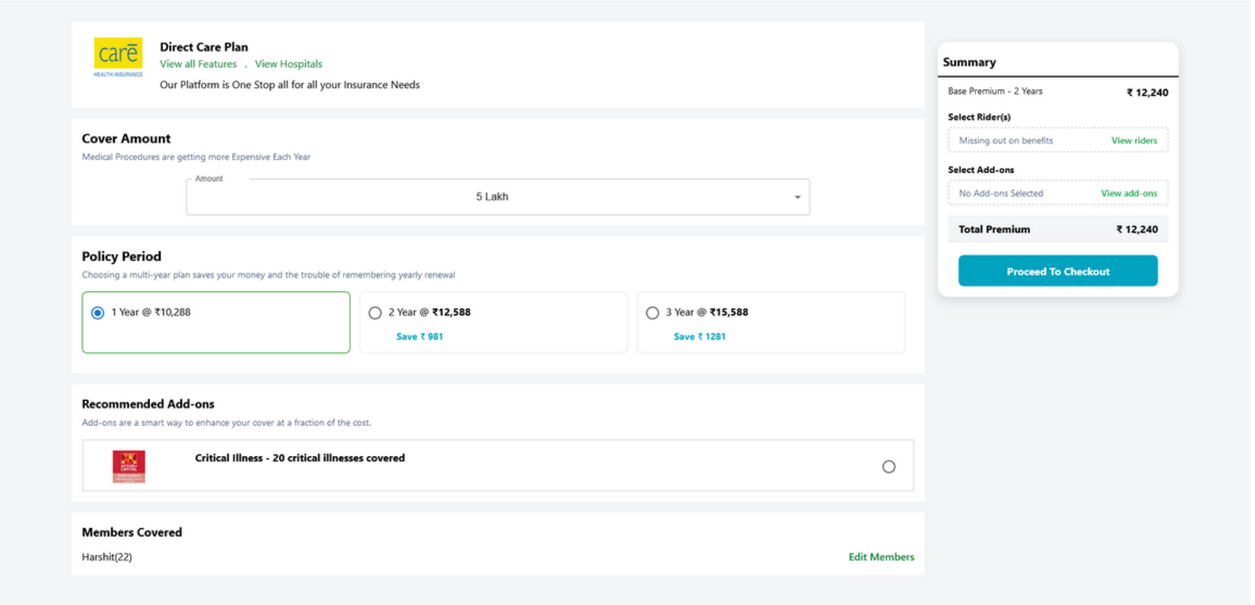
Are you a smoker

Password

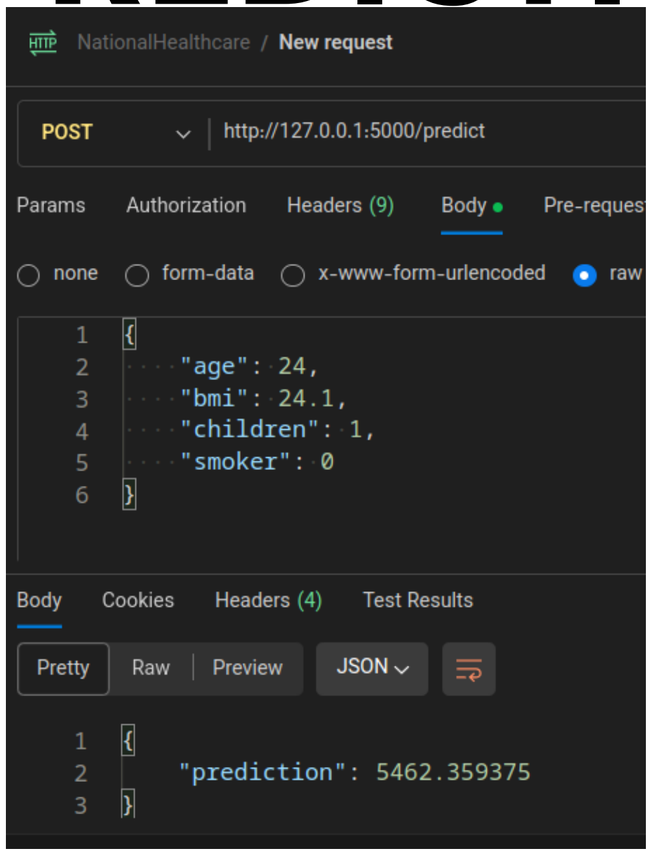
Confirm Password

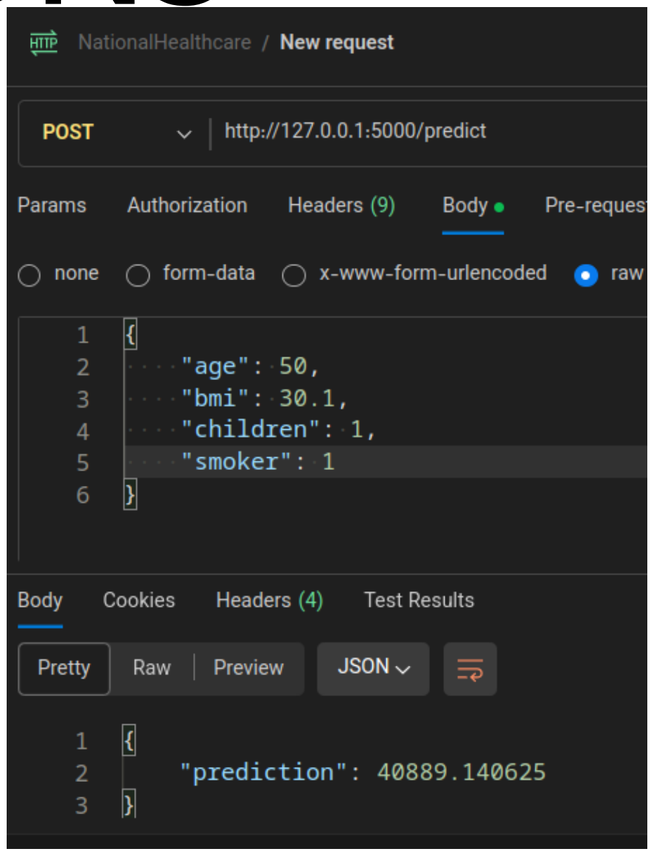
Signup

POLICY DETAILS

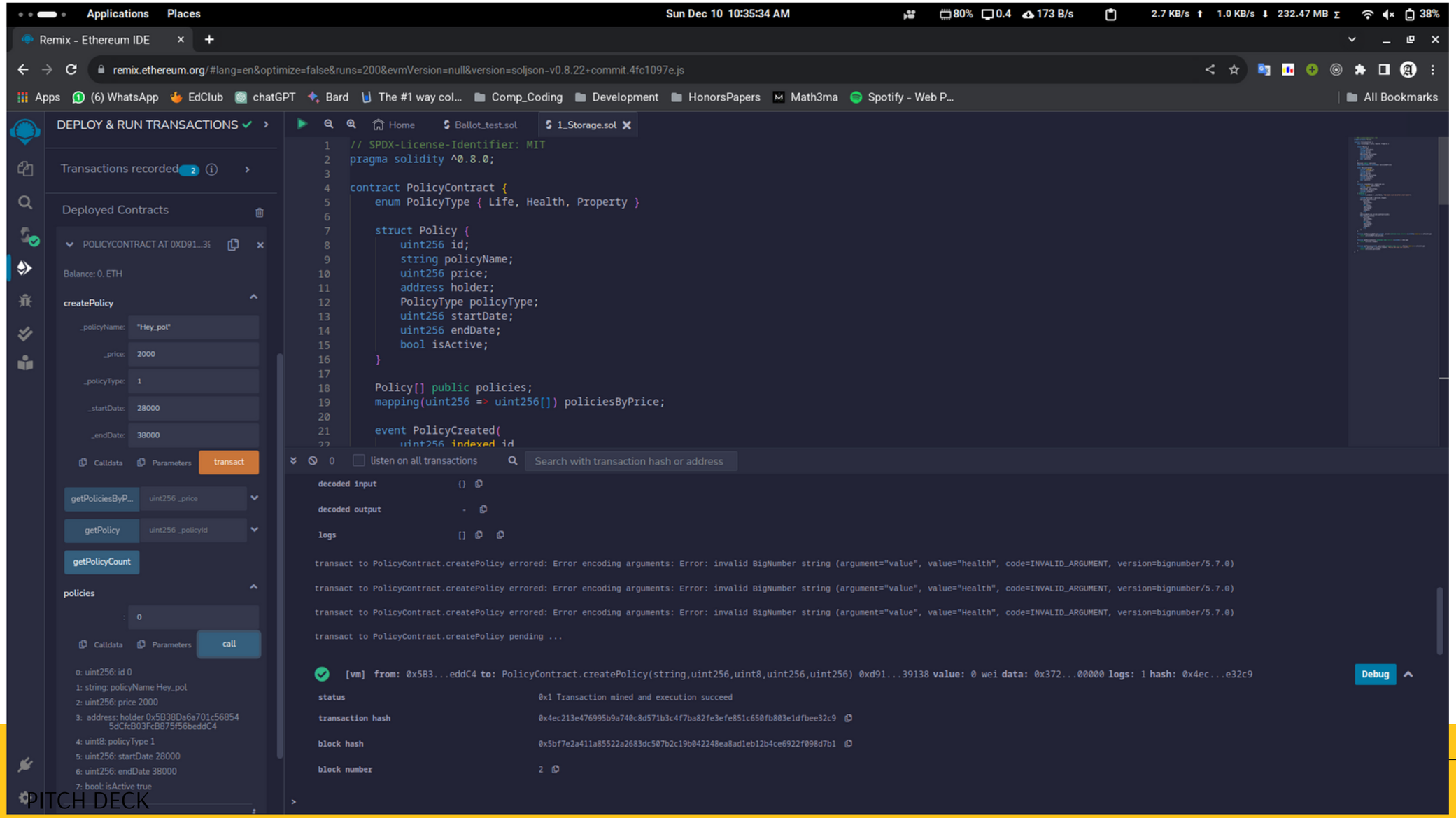


MACHINE LEARNING PREDICTIONS

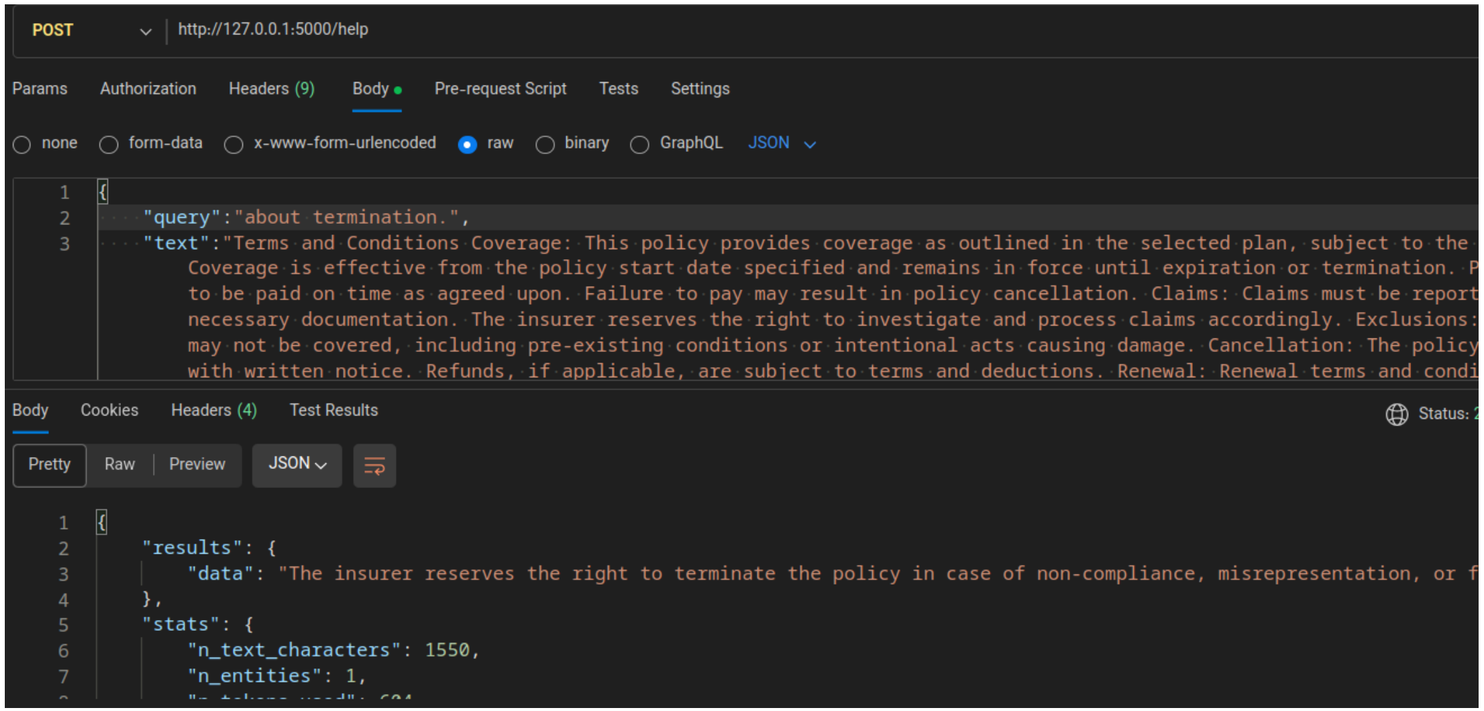


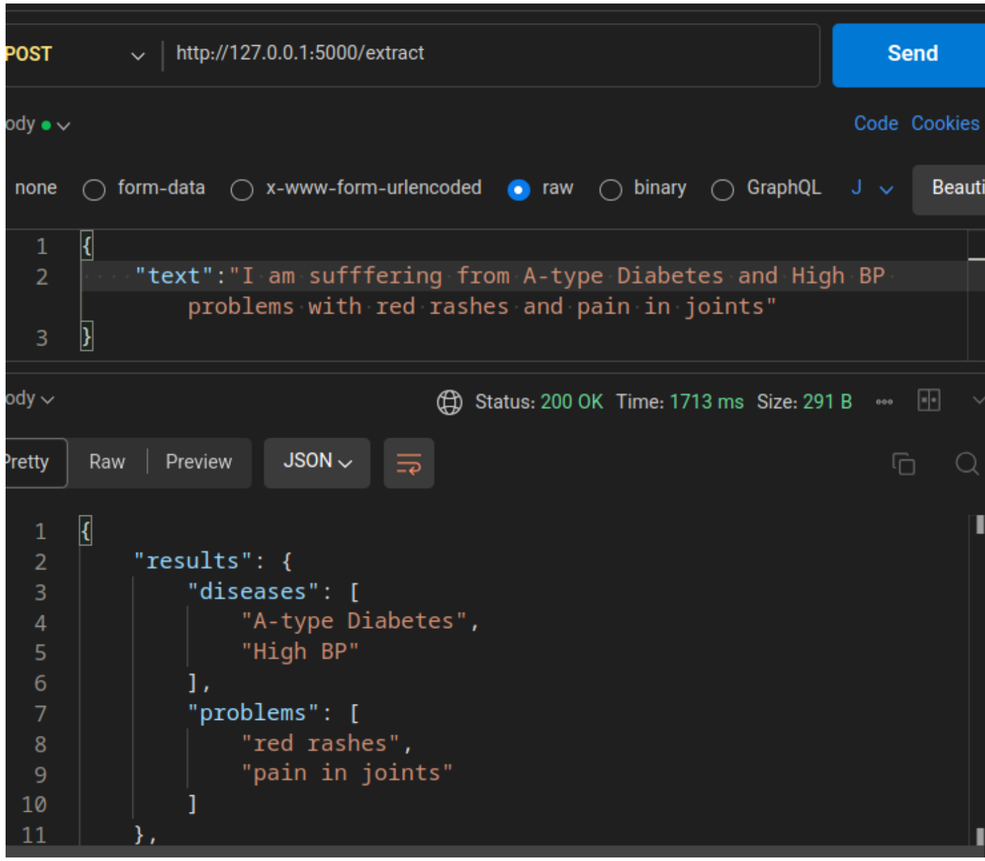


BLOCKCHAIN


Applications Places
Sun Dec 10 10:35:34 AM
Remix - Ethereum IDE
remix.ethereum.org/#lang=en&optimize=false&runs=200&evmVersion=null&version=soljson-v0.8.22+commit.4fc1097e.js
DEPLOY & RUN TRANSACTIONS
Transactions recorded
Deployed Contracts
POLICYCONTRACT AT 0XD91...39
Balance: 0. ETH
createPolicy
_policyName: "Hey_pol"
_price: 2000
_policyType: 1
_startDate: 28000
_endDate: 38000
Calldata Parameters transact
getPoliciesByP... uint256 _price
getPolicy uint256 _policyId
getPolicyCount
policies
0
Calldata Parameters call
0: uint256: id 0
1: string: policyName Hey_pol
2: uint256: price 2000
3: address: holder 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
4: uint8: policyType 1
5: uint256: startDate 28000
6: uint256: endDate 38000
7: bool: isActive true
Home Ballot_test.sol 1_Storage.sol
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.0;
contract PolicyContract {
enum PolicyType { Life, Health, Property }
struct Policy {
uint256 id;
string policyName;
uint256 price;
address holder;
PolicyType policyType;
uint256 startDate;
uint256 endDate;
bool isActive;
}
Policy[] public policies;
mapping(uint256 => uint256[]) policiesByPrice;
event PolicyCreated(
uint256 indexed id
listen on all transactions
Search with transaction hash or address
decoded input {}
decoded output -
logs []
transact to PolicyContract.createPolicy errored: Error encoding arguments: Error: invalid BigNumber string (argument="value", value="health", code=INVALID_ARGUMENT, version=bignumber/5.7.0)
transact to PolicyContract.createPolicy errored: Error encoding arguments: Error: invalid BigNumber string (argument="value", value="Health", code=INVALID_ARGUMENT, version=bignumber/5.7.0)
transact to PolicyContract.createPolicy errored: Error encoding arguments: Error: invalid BigNumber string (argument="value", value="Health", code=INVALID_ARGUMENT, version=bignumber/5.7.0)
transact to PolicyContract.createPolicy pending ...
[vm] from: 0x5B3...eddC4 to: PolicyContract.createPolicy(string,uint256,uint8,uint256,uint256) 0xd91...39138 value: 0 wei data: 0x372...00000 logs: 1 hash: 0x4ec...e32c9
Debug
status 0x1 Transaction mined and execution succeed
transaction hash 0x4ec213e476995b9a740c8d571b3c4f7ba82fe3efe851c650fb803e1dfbee32c9
block hash 0x5bf7e2a411a85522a2683dc507b2c19b042248ea8ad1eb12b4ce6922f098d7b1
block number 2

NATURAL LANGUAGE PROCESSING(LIKE CHATGPT)





OUR TEAM

Aarav Nigam

TEAM LEADER
AI/ML EXPERT
BLOCKCHAIN DEV

1. Structure the use cases
2. Develop the **ML model** with best Accuracy
3. Create a **Natural Language Processing** Model to extract important terms from user's description
4. Create a **Blockchain app** to record all policy data

Akash Kulkarni

FRONTEND DEVELOPER
UI/UX DESIGNER

1. Design the UI for both the App and Web page for a **good user experience**
2. Create the **frontend website** using **REACT**
3. Integrating websites with backend APIs for a **smooth experience**

Harshit Chauhan

BACKEND DEVELOPER
DOMAIN EXPERT

1. Develop a multi-functional and **scalable server** to handle a large amount of users
2. Create **functional and fast APIs** to provide a seamless experience
3. Provide Domain Knowledge about the Problem Statement.

Poorv Kumar

FRONTEND DEV(WEB + APP)
BACKEND DEVELOPER

1. Develop the **App using React native** to provide facilities to more users
2. **Integrate** and adjust **APIs** for better functionality.
3. Make the App smooth for a **smooth User Experience**.

THANKS FOR GIVING US THIS OPPORTUINITY!!!