

HACKATHON 2.0



Problem Statement No. - 07

Problem Statement - Health Insurance Assistant (InsureSmart)

PS Category - Software

Team Name – NOVA





Assessing User's Health Condition:

- ❖ Detect Pre-existing diseases.
- ❖ Identify health risk by assessing user medical test report



"Health Score"

- ❖ Input of lifestyle factors like Smoking, Drinking, Exercise etc. taken as ordinal categorical values.
- ❖ Weighted average method used to calculate score (0-5) defined by registered insurance cos.



Recommend Insurance Plans:

- ❖ Rank available insurance plans by assessing user's needs and health.
- ❖ Advise on value of Sum Assured to apply for.
- ❖ Provide users with insurer's contact and purchase option

Technologies to be Used:

Frontend = Next JS

Backend = Express and Python API
Routes

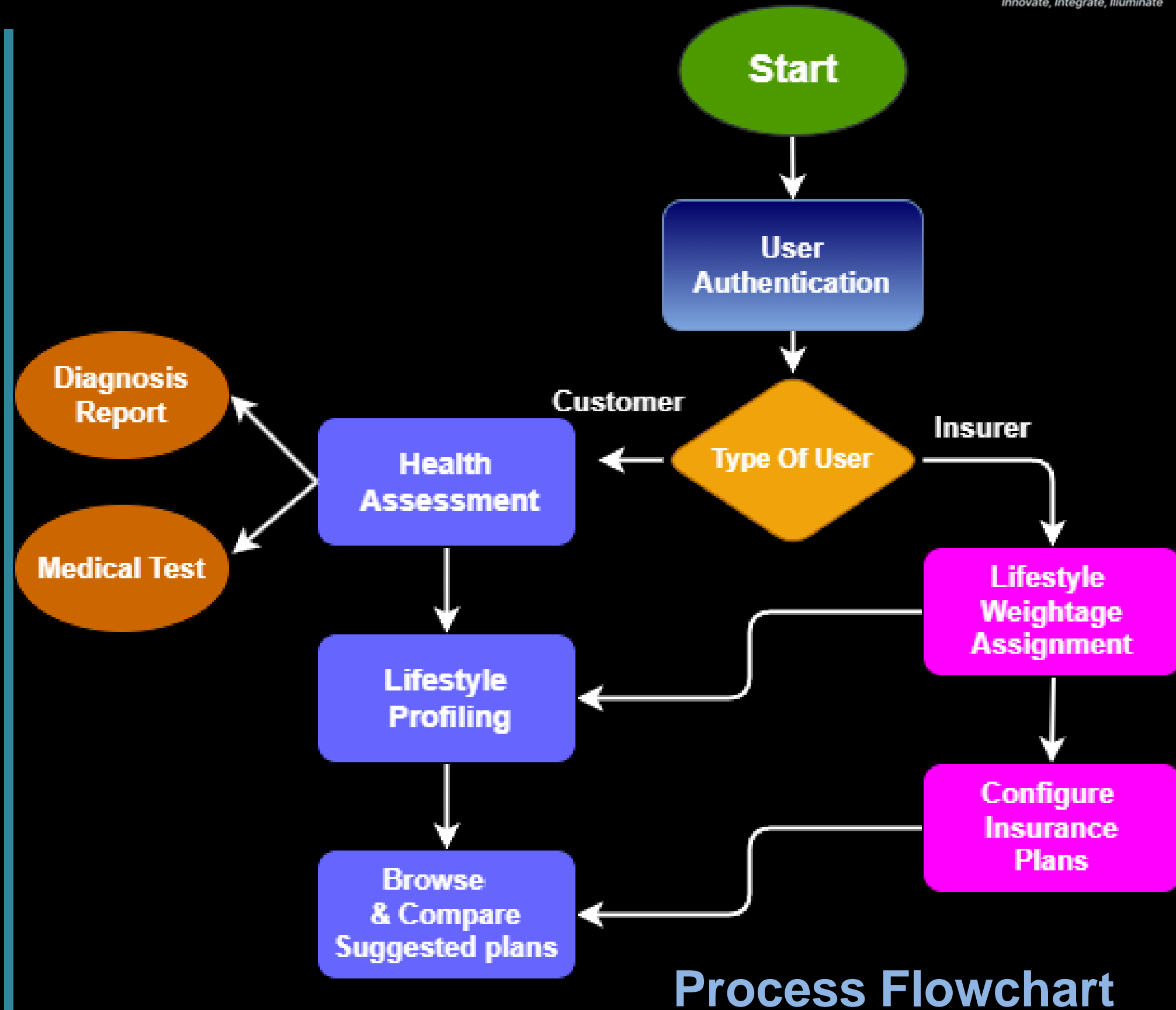
Database System = MySQL

Document Parsing = Tesseract OCR,
pdf2image, PIL.

ML Model = Random Forest or Multi-level
Perceptron deployed as .pkl file

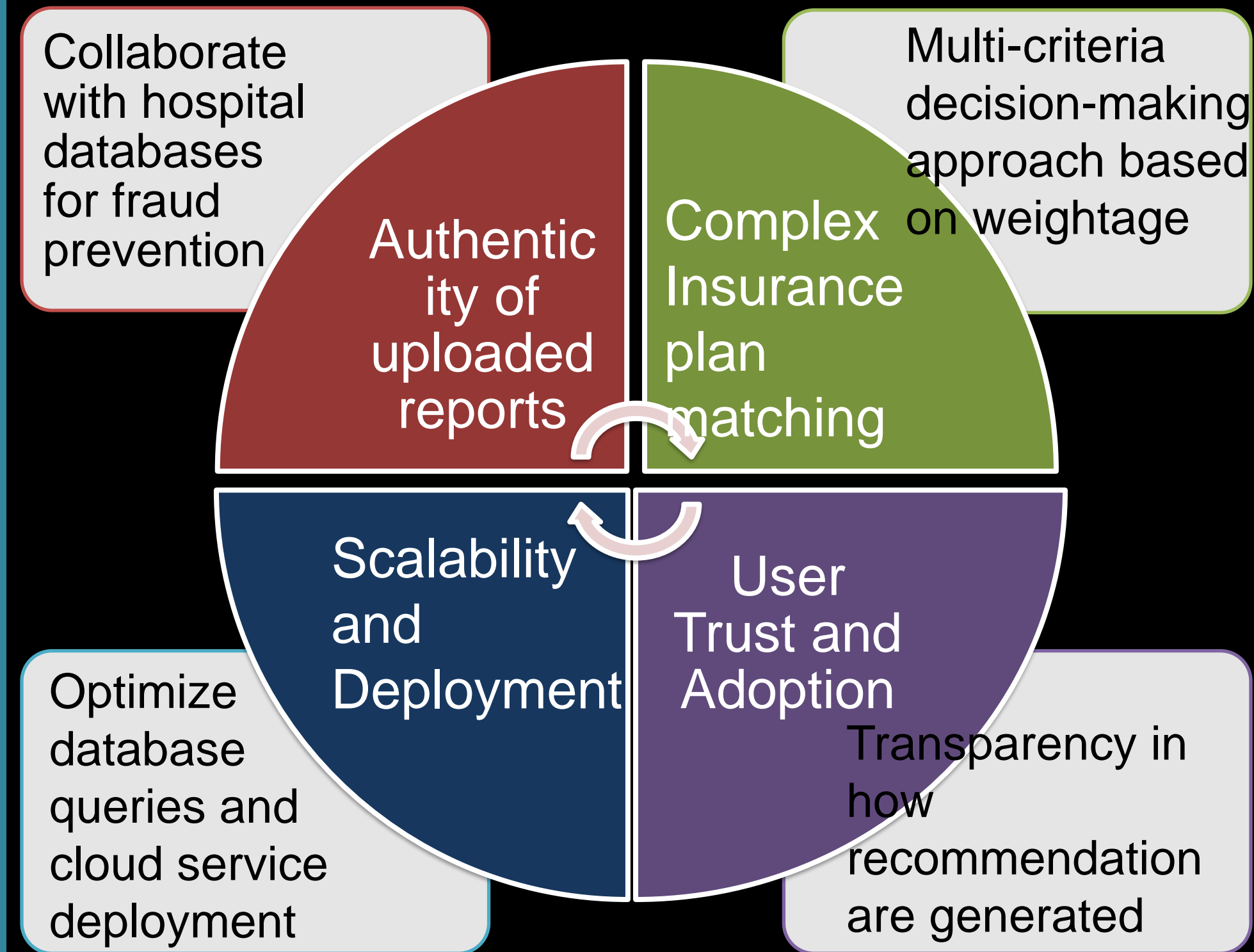
Payment gateway = Razorpay API
integration.

Location display = Google Maps API



Feasibility of the Idea:

- **AI-Driven Insurance Matching :**
analyzes user's medical history, lifestyle & predicts health risks for tailored insurance recommendations.
- **Monetization model :** Affiliation with insurers, API licensing for B2B partners, and premium AI insights for users.
- **Expansion Scope** – Can be extended to global insurance providers.



Challenges(in) and Strategies(out) to overcome them



Simplified
Health
Insurance
Selection



Data driven
Insights



Market
expansion
for Insurers



Reduced
dependence
on Agents



NOVA

RESEARCH AND REFERENCES



- ❑ **Dataset named Diagnostic Pathology Test Results -**
https://www.kaggle.com/datasets/pareshbadnore/diagnostic-pathology-test-results?utm_medium=social&utm_campaign=kaggle-dataset-share

- ❑ **RazorPay API** (For payment gateway) - <https://razorpay.com/docs/api/>



- ❑ **Tesseract OCR** (For text extraction) – <https://tesseract-ocr.github.io/>

- ❑ **Google Maps API** – <https://developers.google.com/maps/documentation>

