

Gen AI-Powered Data Profiling

Team Name : Neural Nomads

Neha Anand

Sukriti Bohra

Nikhil Giri

Aishwarya Attanti

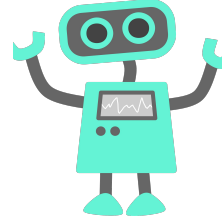
Lalitha Ramakrishnan



Challenges & Need for AI-Powered Profiling



Regulatory Compliance: Banks must meet strict reporting standards with accurate data validation.



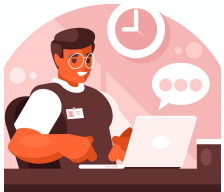
Need for AI-Powered Profiling: Automating rule generation and anomaly detection improves accuracy and efficiency.



Anomaly Detection Challenges: Identifying irregular transactions is complex and time-consuming.



Lack of Automation: Manual rule creation limits efficiency and adaptability.

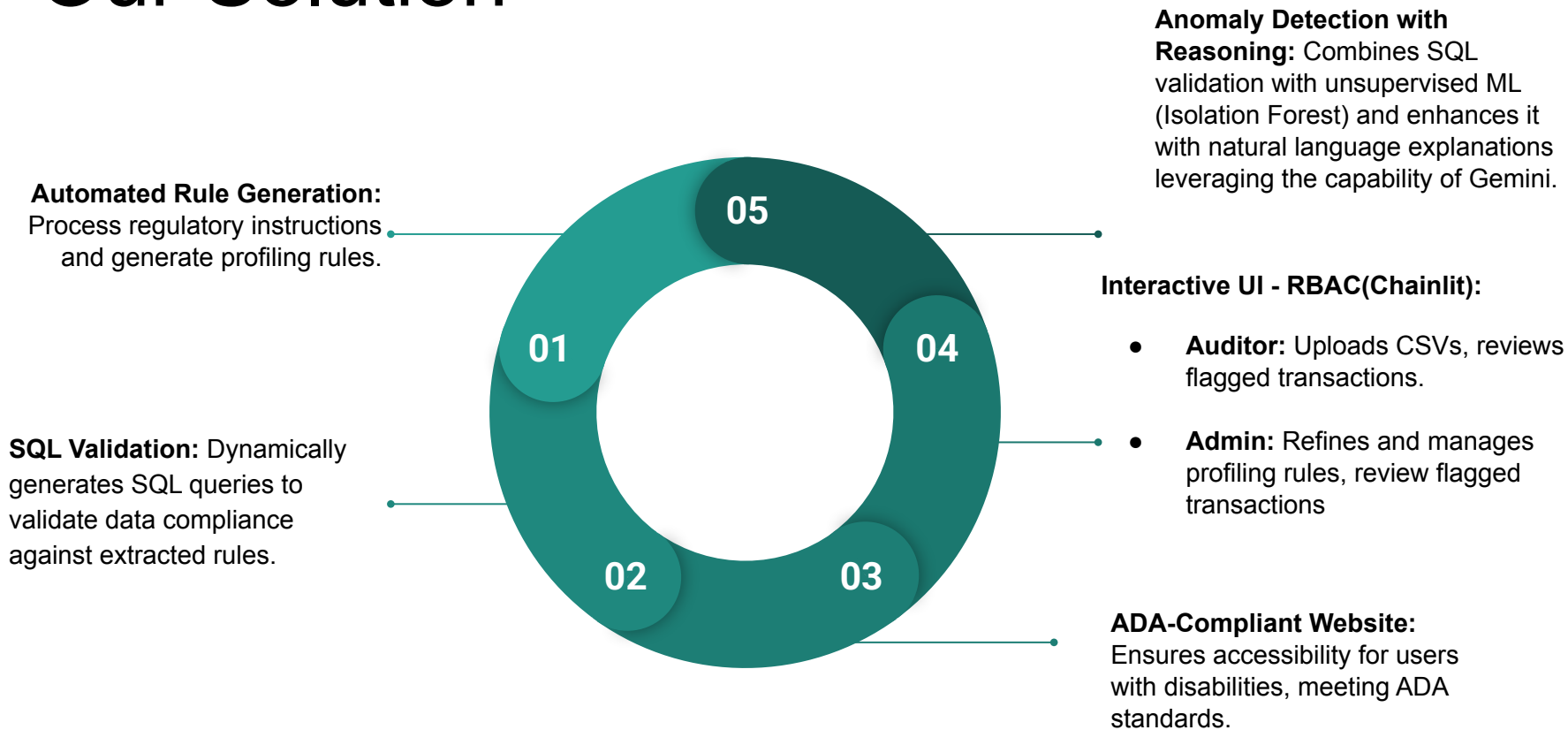


Manual Profiling Issues: Traditional methods are slow, error-prone, and hard to scale.

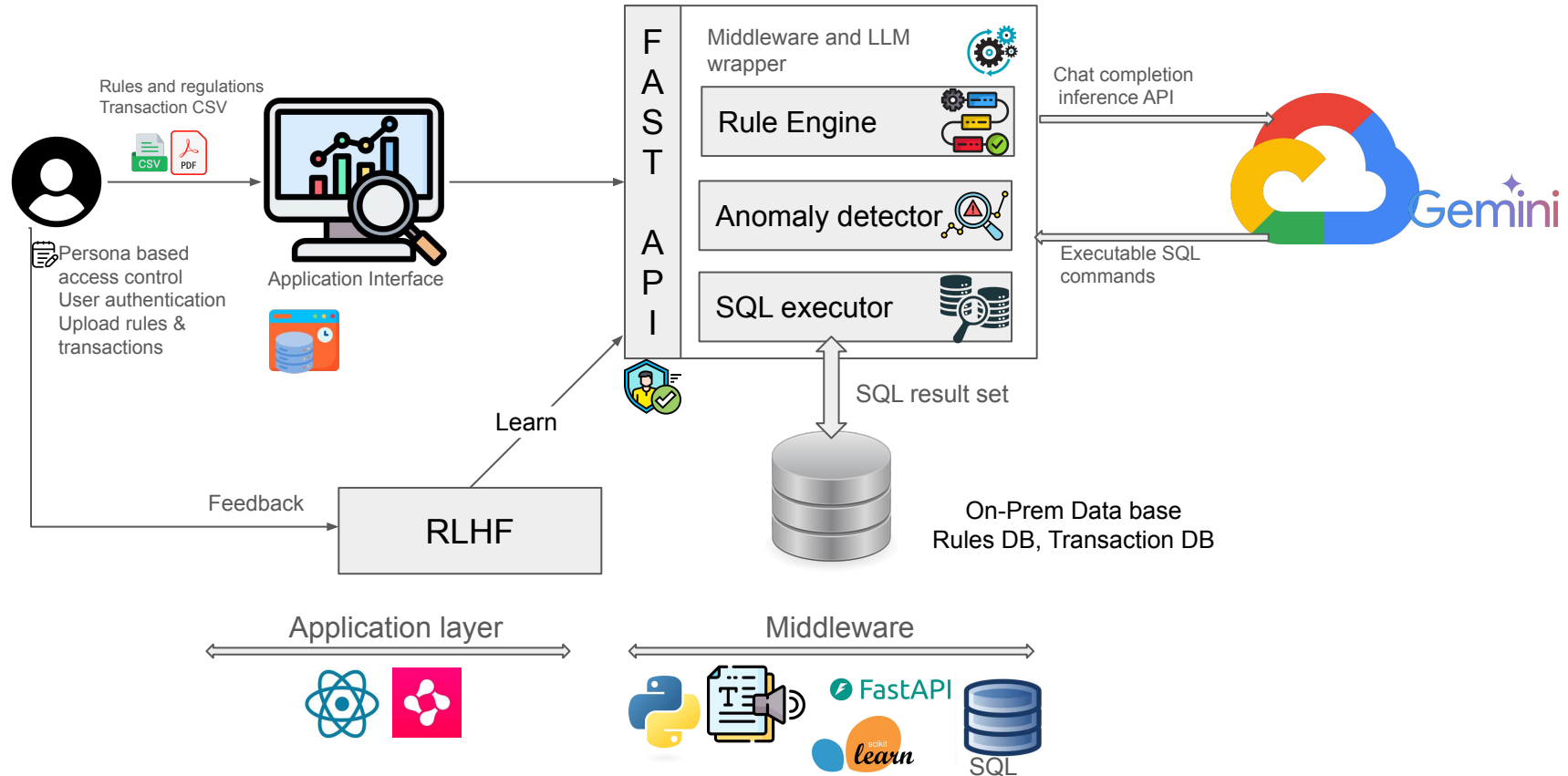


Evolving Regulatory Requirements: Constant updates make manual profiling inefficient and unsustainable.

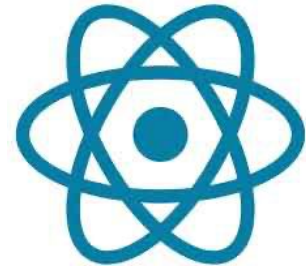
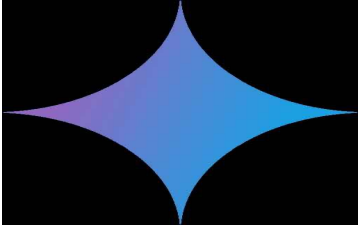
Our Solution



Architecture diagram



Tech Stack



Future Scope



Multi-Language Support: Extend rule extraction to handle regulatory instructions in multiple languages.



Broader Reporting Coverage: Expand the solution to cover additional reporting schedules in federal regulatory PDFs.



Real-Time Data Profiling: Enable continuous, real-time validation for live transaction monitoring.



Advanced Anomaly Detection: Integrate more sophisticated ML models for enhanced anomaly detection accuracy.



Personalized User Experience: Persist user preferences for a personalised user experience.

THANK YOU