



DEVELOPED BY

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EXECUTIVE SUMMARY & PROBLEM STATEMENT

Problem Statement

Traditional insurance processes face:

Manual Operations slowing policy handling

Limited Analytics hindering real-time decisions

Poor User Experience from complex interfaces

Scalability Issues with increasing policy volumes

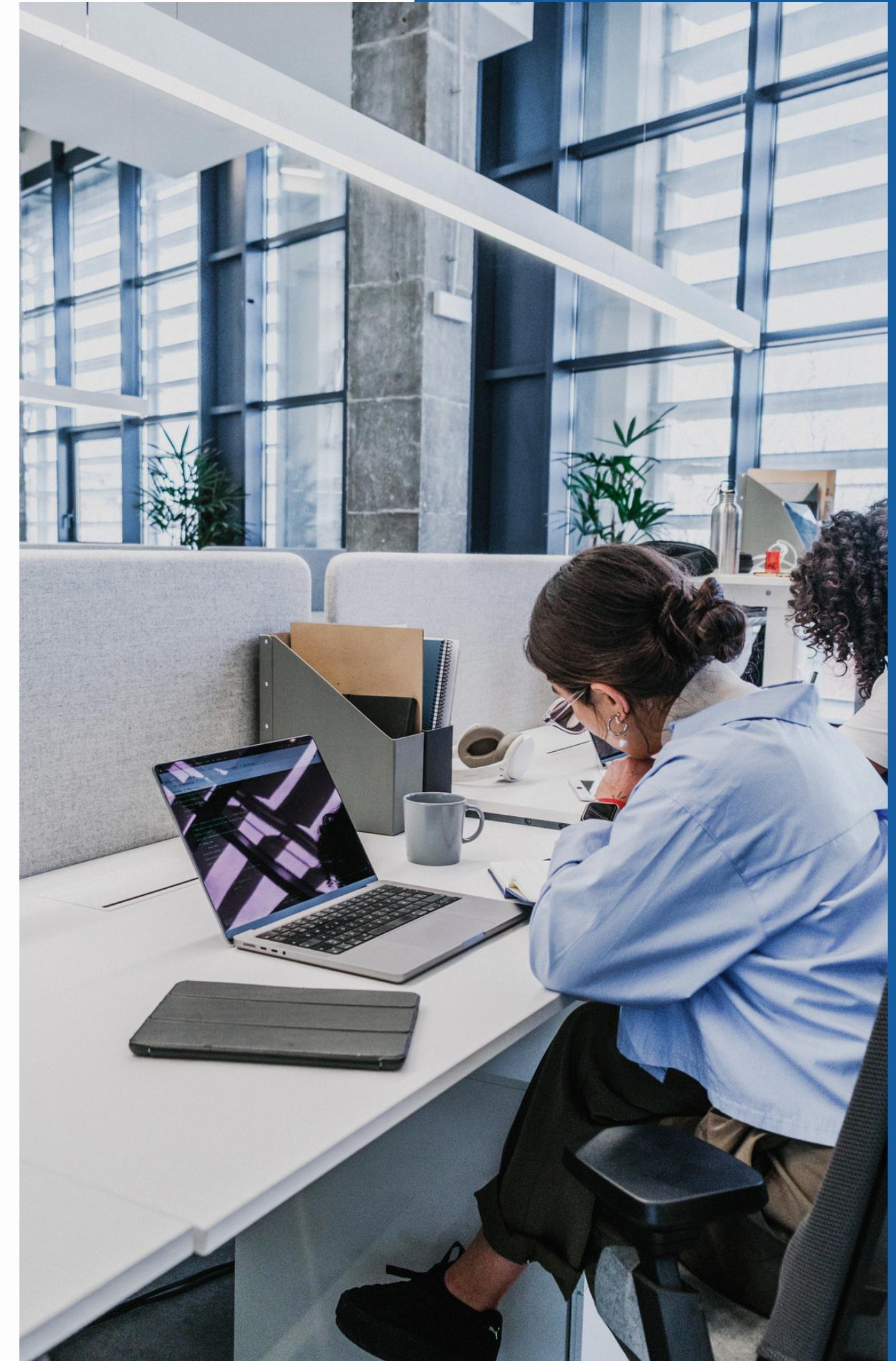
Our Solution

AI Automation for policy and claim management

Real-Time Analytics via interactive dashboards

Role-Based Access for Admin, Broker, and User

Modern UI/UX ensuring fast, intuitive navigation





SYSTEM ARCHITECTURE AND TECH STACK

TECHNICAL FOUNDATION:

- Backend: Spring Boot 3.x (REST APIs)
- Frontend: React.js (Hooks & Context)
- Database: MySQL
- Security: JWT-based role authorization

KEY COMPONENTS:

- Policy & Claims Management
- Analytics Dashboard
- User Authentication
- Document Handling

CORE FEATURES IMPLEMENTATION

POLICY MANAGEMENT:

- Auto policy creation
- AI-based risk assessment
- Policy comparison & tracking

CLAIMS PROCESSING:

- Digital claim submission
- AI validation & approvals
- Payment tracking



ADVANCED ANALYTICS DASHBOARD

REAL-TIME INSIGHTS

Revenue Analytics: Tracks monthly revenue trends in INR.

Policy Performance: Displays type-wise policy data and approval rates.

Claim Analytics: Visualizes claim status, average amount, and processing rates.

User Growth: Shows trends for policies, users, and revenue over six months.

KEY METRICS

Policy distribution, claim ratios, customer retention, and growth indicators.



ROLE-BASED ACCESS CONTROL

ADMIN DASHBOARD

- System overview & full analytics
- Manage users, policies & claims
- Track revenue & performance
- Monitor system health

BROKER DASHBOARD

- Client portfolio management
- Policy creation & upload
- Commission tracking & analytics
- Client relationship tools

USER DASHBOARD

- Personal policy portfolio
- Claim submission & tracking
- Premium history & coverage summary



ADVANCED ANALYTICS IMPLEMENTATION

DASHBOARD CAPABILITIES

- 💰 Revenue Analytics – Monthly growth & performance
- 📊 Policy Approval Rate – Auto-calculated percentages
- ⚖️ Risk Distribution – Low / Medium / High categories
- 💵 Claim Analytics – Success rates & processing time
- 📈 Growth Trends – 12-month historical visuals

SECURITY & DATA PROTECTION

AUTHENTICATION & AUTHORIZATION

-  JWT Secure Login & Token Validation
-  Role-Based Access Control (RBAC)
-  Protected API Routes & Session Management

DATA SECURITY

-  Sensitive Data in .env (GitIgnored)
-  Encrypted Database Connections
-  Validated File Uploads & Safe Processing

PRIVACY COMPLIANCE

-  Encrypted User Data & Audit Trails
-  GDPR-Ready Data Handling Practices

TECHNICAL ACHIEVEMENTS & PERFORMANCE

CODE QUALITY & DEVELOPMENT

-  CLEAN ARCHITECTURE – SEPARATION OF CONCERNS
-  RESTFUL APIs – CONSISTENT ENDPOINT DESIGN
-  CENTRALIZED ERROR HANDLING & DOCS

PERFORMANCE OPTIMIZATIONS

-  OPTIMIZED QUERIES + INDEXING
-  FAST REACT RENDERING & STATE MANAGEMENT
-  API CACHING & REDUCED LOAD TIMES

USER EXPERIENCE

-  INTUITIVE ROLE-BASED NAVIGATION
-  REAL-TIME UPDATES & NOTIFICATIONS
-  ACCESSIBILITY (WCAG STANDARDS)
-  RESPONSIVE DESIGN (LIGHT THEME)

BUSINESS IMPACT & FUTURE ROADMAP

BUSINESS IMPACT

- ⚙️ 80% REDUCTION IN MANUAL PROCESSING TIME
- 📊 REAL-TIME ANALYTICS FOR DATA-DRIVEN DECISIONS
- 🤖 AUTOMATED WORKFLOWS REDUCING ERRORS
- 💰 STREAMLINED CLAIMS & FASTER SETTLEMENTS

FUTURE ROADMAP

- 🧠 AI-BASED POLICY RECOMMENDATIONS
- 🛡️ FRAUD DETECTION & ANOMALY MONITORING
- ☁️ CLOUD SCALABILITY & MICROSERVICES
- 📱 MOBILE APP FOR POLICY & CLAIM ACCESS



