AI Driven Personal Finance Assistant

Risk Mitigation Plan

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| Risk ID | Risk Description | Likelihood | Impact | Mitigation Strategy | Contingency Plan |
| R1 | Security Breach of Bank Data | High | High | Use end-to-end encryption (e.g., AES-256), secure API tokens, and OTP-based authentication | Lock affected accounts, notify users, and restore from backup. Initiate a forensic audit |
| R2 | Bank API Failure or Incompatibility | Medium | High | Implement a modular API manager and failover support; monitor API status | Switch to manual transaction input and notify users of temporary limitation |
| R3 | Inaccurate AI Categorization of Transactions | Medium | Medium | Provide category override functionality and continuous AI learning based on user feedback | Log misclassifications and prompt users for manual recategorization |
| R4 | Delayed or Missing Notifications | Medium | Medium | Queue notifications with retry logic and offline support | Resend notifications and allow summary view of missed alerts in the dashboard |
| R5 | Poor Budgeting Suggestions from AI | Low | Medium | AI models to be trained on broad, realistic data; include manual budget adjustment options | Allow manual reset and re-entry of budget goals; highlight AI-generated values separately |
| R6 | User Account Deletion Mistakes | Low | High | Add password confirmation and two-step prompts before deletion | Implement a temporary recovery window (e.g., 7 days) before final data purge |
| R7 | Lack of Compliance with Data Privacy Laws (e.g., GDPR) | Low | High | Review system for regulatory compliance regularly and update privacy policy | Suspend affected features, conduct compliance audit, and notify users |
| R8 | Mobile UI/UX Bugs Affecting Financial Summary or Exports | Medium | Medium | Conduct cross-device responsive testing and use PDF/Excel libraries with error logging | Provide downloadable error logs and offer in-app user support for recovery |
| R9 | System Downtime or Crashes During Key Tasks (e.g., goal setting/export) | Low | High | Deploy scalable cloud infrastructure, run stress/load tests regularly | Enable autosave and restore sessions after crash; communicate status in real-time |
| R10 | AI-generated Insights Not Being Clear or Actionable | Medium | Medium | Include explainable AI insights and link suggestions to actionable sections (e.g., budgets) | Allow user feedback on insights to improve relevance and future output quality |