

Design Document

Predictive Analytics for Personal Expenses & Financial Planning

1. Introduction

This design document defines the **UI/UX and system design approach** for the *Predictive Analytics for Personal Expenses and Financial Planning* project. The design is inspired by the referenced **Personal Finance Dashboard UI** (Dribbble – Fireart UI/UX) and aligned strictly with the **Product Requirements Document (PRD)** to ensure usability, clarity, and data-driven decision support.

The goal of the design is to present **financial insights, predictions, and planning tools** in a clean, intuitive, and actionable manner.

2. Design Objectives

- Provide a **clear financial overview at a glance**
 - Highlight **predictive insights** alongside historical data
 - Support **budgeting and goal-based financial planning**
 - Ensure **simple navigation** for non-technical users
 - Maintain a **modern, minimal, and trustworthy visual style**
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3. Design Inspiration Reference

- **Source:** Personal Finance Dashboard (Fireart UI/UX – Dribbble)
- **Key Inspiration Elements:**
 - Card-based layout for financial KPIs
 - Clean typography with strong visual hierarchy
 - Graph-driven insights (line charts, donut charts)
 - Subtle color usage for income vs expenses
 - Dashboard-first approach

This design adapts the visual style while extending functionality to support **predictive analytics and financial planning**, as defined in the PRD.

4. Information Architecture

Primary Navigation

- **Overview (Dashboard)**
 - Wallet
 - Analytics
 - Transactions

- Reports
- Settings

Secondary Navigation (Contextual)

- Daily / Weekly / Monthly filters
 - Category filters
 - Forecast vs Actual toggle
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5. Dashboard Layout (Overview Screen)

5.1 Header Section

- Greeting message (e.g., *Good Morning, User*)
 - Search bar
 - Profile & account switcher
 - Notification & chat icons
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5.2 Key Financial Summary Cards

Displayed at the top for quick insights:

1. Account Balance Card

2. Total balance
3. Percentage change vs last month
4. Quick actions: *Send Money, Request Money*

5. Monthly Income Card

6. Current month income
7. Month-over-month comparison

8. Monthly Expenses Card

9. Current month expenses
10. Expense trend indicator (increase/decrease)

11. Expense Breakdown Card

12. Daily, weekly, monthly totals
 13. Donut chart by category
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6. Analytics & Visualization Design

6.1 Income vs Expense Trend Chart

- **Line graph** showing:
 - Total income (green)
 - Total expenses (orange)
 - Time range: Monthly (default), with filters
 - Interactive hover tooltips

Purpose: - Compare financial inflow vs outflow - Identify spending trends and seasonal patterns

6.2 Predictive Analytics Visualization

- Forecast line (dashed) extending beyond current date
- Predicted expense and savings trends
- Confidence range (optional future enhancement)

Purpose: - Help users anticipate future expenses - Enable proactive financial planning

7. Budget & Planning Design

7.1 Budget Status Section

- Budget allocated vs spent
- Visual indicators for overspending risk
- Progress bars for each category

7.2 Financial Goals Panel

- Savings goals (short-term & long-term)
 - Goal progress visualization
 - Predicted completion timeline
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8. Transaction & Activity Design

Transaction List

- Recent transactions table
- Search and filter options
- Category, amount, date, and status indicators

Design Focus

- Readability
 - Quick scanning
 - Minimal clutter
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9. Visual Design System

Color Palette

- **Primary Green:** Income, positive trends, actions
- **Orange/Red:** Expenses, alerts, overspending
- **Neutral Grays:** Backgrounds, borders, secondary text

Typography

- Large bold headings for KPIs
- Medium-weight labels
- Light secondary text for comparisons

Iconography

- Simple, finance-oriented icons
- Consistent stroke width

10. Accessibility & Usability Considerations

- High contrast for critical data
- Clear labels and tooltips
- Responsive layout for different screen sizes
- Minimal cognitive load

11. System Design Alignment with PRD

PRD Requirement	Design Implementation
Expense tracking	Transaction tables & charts
Predictive analytics	Forecast graphs & insights
Budget planning	Budget progress indicators
Financial goals	Goal tracking cards
Insights dashboard	Overview screen

12. Future Design Enhancements

- Personalized AI-driven insights panel
- Scenario simulation UI ("What if I save more?")
- Mobile-first adaptive design
- Dark mode support

13. Conclusion

This design document outlines a **user-centered, analytics-driven dashboard** that transforms raw financial data into **clear insights and predictions**. By combining modern UI inspiration with the functional depth defined in the PRD, the design supports better financial awareness, planning, and long-term stability.

End of Design Document