

# 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**
- 

### 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
- 

# 5. Dashboard Layout (Overview Screen)

## 5.1 Header Section

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

## 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
-

## 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

---

## 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

## 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**