

BudgetWise - Smart Budgeting and Financial Health Assistant

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Abstract

The BudgetWise app is a comprehensive AI-powered budgeting and financial health assistant designed to empower users in managing their personal finances effectively. Tailored for individuals aiming to track spending, set savings goals, and develop better financial habits, BudgetWise provides personalized insights and actionable recommendations to guide users toward their financial goals.

Through seamless integration with bank accounts, credit cards, and digital wallets, BudgetWise automatically categorizes expenses, monitors spending patterns, and identifies areas for potential savings. Users can set and track custom financial goals—such as saving for a trip or paying off debt—with real-time progress indicators and motivational insights. The app's intuitive dashboard displays spending summaries, budget adherence, and goal achievement, with alerts to notify users about budget limits or approaching bill due dates.

With its user-friendly interface and smart financial advice, BudgetWise simplifies budgeting for people at all stages of their financial journey, helping them make informed decisions and work towards long-term financial stability.

Problem Statement

Managing finances can be challenging and time-consuming for individuals, especially those without extensive financial knowledge or budgeting habits. Common issues include:

- **Lack of Insight into Spending:** Many people don't have a clear picture of where their money goes each month.
- **Difficulty in Setting and Reaching Financial Goals:** Users may struggle to set achievable savings goals and track progress.
- **Need for Personalized Financial Advice:** Standard budgeting tools don't offer personalized recommendations based on individual spending patterns and financial health.

Market, Customer, and Business Need Assessment

1. Market Assessment

1. Growth of Digital Personal Finance Tools

- With the rise of digital banking and increased financial awareness, there is growing demand for accessible financial tools. The global market for personal finance software is projected to expand steadily, driven by the convenience of digital solutions that help individuals manage and track their finances.

2. Target Audience

- **Primary Audience:** Young professionals, families, and individuals with limited time for financial planning who want a simplified way to manage finances, set goals, and improve financial habits.
- **Secondary Audience:** Students, recent graduates, and people entering the workforce, who may benefit from an introduction to budgeting and basic financial literacy.

3. Competitive Landscape

- **Existing Solutions:** Many current finance apps, such as Mint, YNAB (You Need a Budget), and Personal Capital, focus primarily on tracking expenses and providing general budget summaries.
- **Market Gap:** These tools often lack advanced personalization, actionable recommendations, and real-time budgeting tips specific to users' financial situations. This presents an opportunity for BudgetWise to offer more tailored insights and goal-oriented guidance.

2. Customer Need Assessment

Identified Needs of Potential Users:

1. Personalized Financial Insights

- Users desire insights that are tailored to their unique spending patterns and financial goals rather than generic advice. Personalized insights help users understand their financial habits and provide specific guidance on how to save and manage money effectively.

2. Ease of Use and Intuitive Design

- Many users find financial tools complex or overwhelming. A clean, user-friendly interface that simplifies budgeting and offers clear action items will appeal to users looking for ease of use.

3. Goal Tracking and Progress Monitoring

- Users benefit from setting specific financial goals (e.g., saving for a vacation, paying down debt) and tracking their progress. Real-time monitoring and motivational prompts can help users stay on track, enhancing their experience and satisfaction with the app.

4. Automated Budgeting and Alerts

- Automation helps users manage their finances with minimal effort. Automated budget suggestions, bill reminders, and alerts when approaching spending limits are highly desirable features that reduce the need for manual tracking.

5. Affordability and Value

- Many potential users seek affordable solutions, making a freemium or tiered pricing model attractive. The ability to access basic features for free or at a low cost, with optional upgrades, will appeal to a broad user base.

3. Business Need Assessment

Value Proposition of BudgetWise for the Business:

1. Increased Demand for Financial Empowerment Tools

- Rising economic uncertainty has led more people to focus on personal finance, creating a sustained demand for budgeting tools. BudgetWise can meet this demand by positioning itself as an accessible, all-in-one financial health assistant.

2. Differentiation Through Personalization and Automation

- By focusing on personalization and actionable recommendations, BudgetWise will stand out from competitors. Unlike existing tools, BudgetWise's goal-oriented approach and real-time insights will add unique value, enhancing customer retention and satisfaction.

3. Revenue Streams Through Freemium and Affiliate Models

- The freemium model will attract a wide user base by offering essential features for free, encouraging upgrades to premium subscriptions for advanced features.

- **Affiliate Partnerships:** Referrals to partner financial products, such as savings accounts or credit-building services, provide an additional revenue stream.

4. Scalability and Potential for Growth

- **As a digital app,** BudgetWise can scale rapidly to accommodate more users with relatively low incremental costs. This scalability aligns well with market growth trends and provides a strong foundation for expansion and long-term business success.

Target Specifications and Characterization

1. Functional Specifications

1.1 Spending Analysis

- **Specification:** Automatically categorize and analyze user expenses from linked accounts, such as bank transactions, credit cards, and digital wallets.
- **Characterization:** Achieve 90% accuracy in transaction categorization (e.g., groceries, dining, utilities) to provide users with a clear view of spending patterns.

1.2 Budgeting Suggestions

- **Specification:** Provide monthly and weekly budgeting suggestions tailored to each user's income, spending habits, and financial goals.
- **Characterization:** AI-driven recommendations with customizable spending limits, alerting users when they approach 80% of a category's limit.

1.3 Goal Setting and Tracking

- **Specification:** Allow users to set and track multiple financial goals, such as savings for emergencies, debt repayment, or major purchases.
- **Characterization:** Real-time progress tracking with visual indicators (e.g., percentage complete) and motivational prompts when goals are 25%, 50%, 75%, and 100% achieved.

1.4 Personalized Financial Advice

- **Specification:** Based on user spending patterns and goals, offer actionable tips, such as suggested cutbacks in overspending areas or savings tips.
- **Characterization:** Provide at least two actionable tips per week per user, driven by spending data and budget trends, with 85% accuracy in identifying actionable insights.

1.5 Real-Time Notifications and Alerts

- **Specification:** Send alerts for upcoming bills, budget threshold notifications, and reminders to help users stay on track.
 - **Characterization:** Ensure alerts are delivered with minimal delay (within 5 seconds) to effectively remind users of key events.
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2. Usability Specifications

2.1 User Interface (UI) Simplicity

- **Specification:** Clean, intuitive interface with easy-to-navigate sections for budget overview, goals, and spending analysis.
- **Characterization:** Achieve a high usability rating from user feedback (e.g., 8/10 or higher) by minimizing clicks needed to access core features, ideally within three clicks.

2.2 Customizable Dashboard

- **Specification:** Allow users to customize the dashboard by pinning important goals, alerts, or budget categories for easy access.
- **Characterization:** Provide layout customization options with no more than three clicks required to add or remove items from the main dashboard.

2.3 Data Visualization

- **Specification:** Offer visual tools such as graphs, charts, and progress bars for a quick understanding of spending patterns, budget adherence, and goal tracking.
- **Characterization:** Use at least three types of visualizations (e.g., pie charts, line graphs, progress bars) to display spending breakdowns and goal progress clearly.

2.4 Onboarding Experience

- **Specification:** Simple onboarding process that guides new users through account linking, goal setting, and budget customization within 5 minutes.
- **Characterization:** 90% of new users should be able to complete onboarding within 5 minutes, and achieve a satisfaction rating of 8/10 or higher for ease of setup.

3. Technical Specifications

3.1 Data Security and Privacy

- **Specification:** Use AES-256 encryption for data storage and SSL/TLS for data transmission to secure user financial data.
- **Characterization:** Ensure 100% encryption compliance for all stored and transmitted data, maintaining user privacy and adherence to data protection regulations (e.g., GDPR, CCPA).

3.2 API Integrations

- **Specification:** Seamlessly integrate with APIs from banks, payment platforms, and credit card providers to pull real-time transaction data.
- **Characterization:** API response times must remain under 500 milliseconds to ensure smooth data retrieval and timely updates for users.

3.3 AI Model Performance

- **Specification:** NLP and ML models used for categorizing transactions, generating budgeting suggestions, and providing financial insights.

- **Characterization: Model accuracy of 85% or higher for categorization and personalized recommendations, with response times under 1 second for seamless interaction.**
- **4. Characterization Summary**
- The specifications and characterization goals for **BudgetWise** emphasize ease of use, reliability, data security, and accuracy in financial analysis. By achieving high accuracy in spending categorization, real-time budget alerts, and an intuitive UI, **BudgetWise** aims to become a reliable financial tool that empowers users to manage and improve their financial health. These specifications ensure the app meets the essential needs of its target audience while adhering to industry standards for security and performance.

Benchmarking Alternate Products (Comparison with Existing Products/Services)

To differentiate BudgetWise, here's a comparison with popular budgeting tools to identify unique features and opportunities for improvement.

Feature	BudgetWise	Mint	YNAB (You Need a Budget)	Personal Capital
Target Audience	Everyday users seeking budgeting + advice	General users	Budget-conscious users	Investment-focused users
Budget Tracking	AI-driven, with personalized suggestions	Tracks spending, no AI insights	Goal-based tracking	Focus on investment tracking
Goal Setting and Tracking	Custom goals with progress tracking	Basic goal setting	Deep goal prioritization	Limited goal setting
Spending Analysis	AI-driven categorization and insights	Standard expense categorization	User-defined categorization	Investment-centric analysis
Personalized Financial Advice	Actionable, AI-based tips	No personalized advice	Focuses on budgeting advice	Focuses on investment advice
Alerts and Notifications	Real-time alerts for budgets, bills	Basic notifications	Reminders for goals	Limited notifications
Affordability	Freemium model	Free with ads	Subscription-only	Free, investment services charge

BudgetWise stands out by combining AI-driven insights, tailored financial tips, and actionable advice that other tools lack. This personalized approach addresses unmet needs for real-time

budgeting, spending awareness, and goal tracking at an affordable price, making it suitable for a wide user base.

Applicable Patents (Patent of Tech/Software/Framework)

To support BudgetWise, here are relevant patents covering technologies in budgeting, NLP, and AI-based financial recommendations:

1. Sentiment and Spending Analysis

- **Patent Number: US10387254B2**
 - **Title: "Apparatus and method for text-based sentiment analysis"**
 - **Summary: Techniques for NLP-based text classification that can help BudgetWise analyze spending patterns and deliver personalized financial insights.**

2. Recommendation Engine for Financial Insights

- **Patent Number: US9710408B2**
 - **Title: "System and method for personalized recommendations based on user data"**
 - **Summary: Covers generating personalized recommendations from user data, relevant for BudgetWise's actionable financial advice feature.**

3. Budget Categorization and Aggregation

- **Patent Number: US10545927B2**
 - **Title: "System and method for aggregating data from multiple sources"**
 - **Summary: Aggregates multi-platform data, helping BudgetWise unify data from various financial accounts securely.**

4. Goal Tracking and Progress Analysis

- **Patent Number: US9710408B2**
 - **Title: "Tracking and analysis of user progress toward predefined goals"**
 - **Summary: Useful for BudgetWise's goal-setting and tracking module, enabling users to monitor their progress and receive periodic updates.**

Applicable Regulations

1. Data Privacy and Protection

- **General Data Protection Regulation (GDPR) (EU):** Since **BudgetWise** processes sensitive personal financial data, GDPR compliance is essential for users in the EU. This includes:
 - Obtaining clear user consent for data collection.
 - Providing users with the right to access and delete their data.
 - Ensuring secure data handling practices.
- **California Consumer Privacy Act (CCPA) (California, USA):** Similar to GDPR, CCPA requires **BudgetWise** to protect data privacy for Californian users, including data deletion and transparency about data usage.
- **Brazil's LGPD and Canada's PIPEDA:** These regional laws also impose strict data privacy regulations, making **BudgetWise**'s compliance framework globally adaptable to ensure lawful data practices in multiple markets.

2. Financial Compliance Standards

- **Payment Card Industry Data Security Standard (PCI DSS):** Since **BudgetWise** processes and stores financial data, it must comply with PCI DSS requirements. This includes data encryption, restricted access to sensitive information, and regular security audits to safeguard user data.

3. Consumer Protection Regulations

- **Federal Trade Commission Act (FTC Act) (USA):** The FTC oversees digital finance apps, ensuring fair and non-deceptive practices. **BudgetWise** must disclose data use, ensure transparency in billing practices, and provide accurate information about features to maintain compliance.
- **Advertising and Marketing Regulations:** If **BudgetWise** promotes financial products (e.g., credit cards, loans) through affiliate partnerships, it must adhere to advertising standards, ensuring recommendations are unbiased and compliant with financial marketing regulations.

4. Environmental Regulations

- **Digital Carbon Footprint:** While **BudgetWise** operates as a digital service, considerations for energy-efficient data processing and cloud storage practices align with sustainable operations. Although no specific environmental regulations apply to digital apps, **BudgetWise** can reduce energy usage and minimize environmental impact through efficient server usage.

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Applicable Constraints

1. Budget Constraints

- **Initial Development Costs:** BudgetWise requires an estimated budget of \$150,000 - \$250,000 for app development, machine learning model training, cloud infrastructure, and legal compliance. Budget allocations include:
 - **Technology Stack:** API integrations, cloud storage, and machine learning infrastructure.
 - **Compliance and Security:** Legal and technical costs to meet data privacy standards (GDPR, CCPA).
- **Ongoing Maintenance:** Approximately \$3,000 - \$5,000 per month for cloud hosting, API usage fees, and regular updates to the AI models and user interface.

2. Expertise Constraints

- **AI and Machine Learning:** Expertise in NLP and machine learning is essential for BudgetWise's recommendation and spending analysis models. Hiring or consulting with AI specialists will ensure high-quality, scalable model deployment.
- **Data Privacy and Security Compliance:** Legal and cybersecurity experts are needed to maintain compliance with international data protection laws and secure financial data handling.
- **UI/UX Design and Development:** Experienced designers are essential to create an intuitive, accessible app interface, especially as BudgetWise targets a broad range of users.

3. Technical Constraints

- **Data Integration and API Reliability:** BudgetWise relies on third-party banking and payment APIs for data aggregation. Ensuring reliable, responsive API connections is crucial for delivering real-time spending analysis and insights.
- **Computational Resources:** NLP and machine learning models require significant processing power, particularly for real-time recommendations. Budget constraints may limit initial scalability, requiring optimization to manage costs.

4. Space and Infrastructure Constraints

- **Cloud Infrastructure:** As a digital-only product, BudgetWise relies on cloud storage for data management rather than physical space. However, it requires reliable cloud resources (e.g., AWS, Google Cloud) for data processing and storage scalability.
- **Energy Efficiency:** Sustainable, energy-efficient cloud solutions can minimize operational costs and environmental impact.

Business Model (Monetization Idea)

BudgetWise's business model is structured to offer a freemium service with multiple revenue streams, making it accessible to a broad user base while encouraging upgrades to paid plans for advanced features.

1. Freemium Model

Basic (Free) Plan

- Provides essential features for budgeting, expense tracking, and goal-setting.
- Users can connect their bank accounts and track spending with limited insights.
- Allows BudgetWise to reach a larger audience, with the option to convert users to paid plans for additional value.

Premium (Paid) Plans

- **Standard Plan:** Access to advanced features, such as personalized financial advice, automated budget suggestions, and real-time alerts. Priced at approximately \$5-10 per month.
 - **Pro Plan:** Includes all Standard Plan features plus custom financial reports, in-depth goal tracking, and priority support. Priced at \$15-20 per month.
 - **Annual Discount:** Users can opt for annual billing at a reduced rate, increasing customer retention and reducing churn.
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2. Affiliate Partnerships

Financial Product Referrals

- BudgetWise partners with financial institutions and services (e.g., savings accounts, investment platforms, credit cards) to recommend products that align with user goals.
- Earns affiliate commissions for each successful user referral or account signup, providing an additional revenue stream.

Relevant Offers Based on Spending Habits

- By analyzing user data, BudgetWise can offer targeted product recommendations that improve financial wellness (e.g., high-interest savings accounts for users focused on saving).
 - This non-intrusive approach builds trust while adding revenue through relevant financial services.
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3. Custom Financial Reports and Add-Ons

Custom Financial Health Reports

- Offer personalized, in-depth financial reports that analyze spending patterns, suggest optimizations, and provide a snapshot of financial health.
- Users can purchase reports as a one-time add-on or as part of the Pro Plan.

Goal-Based Add-Ons

- For users with specific goals, such as debt repayment or retirement planning, BudgetWise provides tailored add-ons to help track progress with advanced insights.
 - These could be one-time purchases or included as a premium feature in higher subscription tiers.
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4. In-App Advertising (Optional)

Non-Intrusive, Relevant Ads for Free Users

- Display ads selectively for free users, focusing on relevant financial products and services.
- Ads are carefully placed to avoid disrupting the user experience and can be removed in premium plans.

Concept Generation (Process of Coming up with the Idea)

Idea Development Process:

- **Problem Identification:** Recognized that individuals struggle to manage finances effectively due to a lack of personalized tools. Many existing apps provide basic tracking but lack tailored insights for actionable financial improvement.
 - **Feature Brainstorming:** Explored features that address these gaps, such as spending analysis, real-time budget alerts, goal tracking, and personalized advice.
 - **Competitive Analysis:** Reviewed popular finance apps (e.g., Mint, YNAB) and identified an opportunity for a tool offering real-time insights and AI-driven financial tips, especially for users new to budgeting.
 - **User Feedback:** Informal surveys showed demand for financial advice and alerts on spending, supporting BudgetWise's focus on personalized recommendations and alerts.
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11. Concept Development (Brief Summary of Product/Service)

Product Summary:

BudgetWise is an AI-driven budgeting app designed to help individuals manage personal finances by providing actionable insights. The app aggregates user financial data, categorizes spending, and generates personalized financial recommendations. Key features include budget tracking, custom goal-setting, real-time alerts, and personalized spending insights, making budgeting accessible and intuitive.

Value Proposition:

BudgetWise combines user-friendly financial management with AI-driven insights,

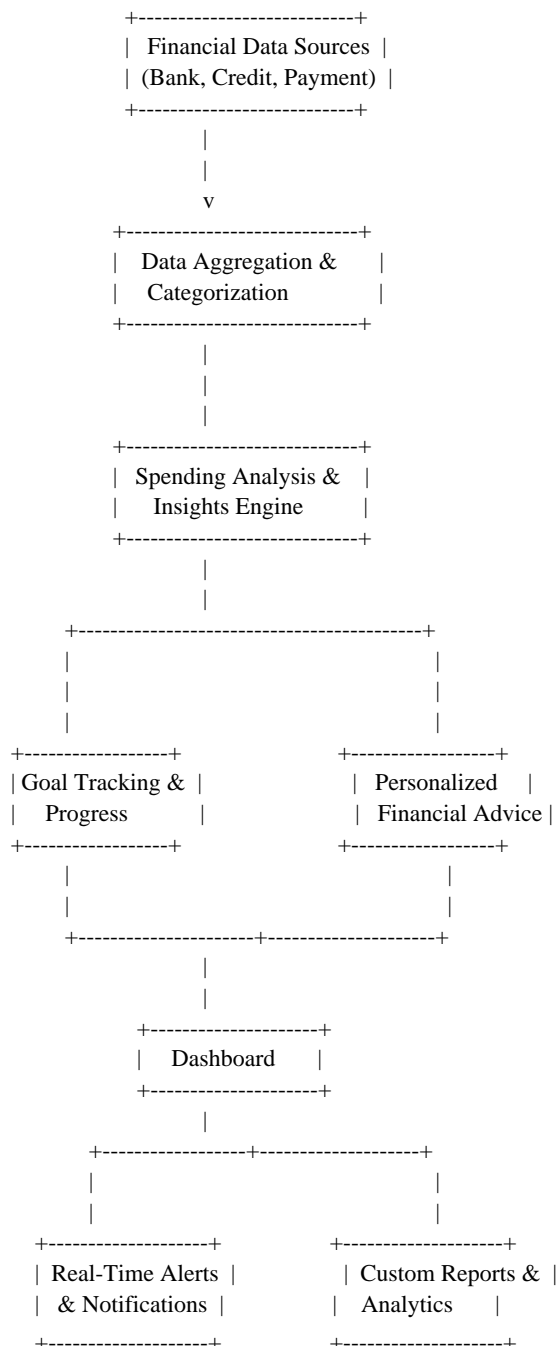
empowering users to make informed spending decisions, reach savings goals, and improve financial well-being.

12. Final Product Prototype (Abstract) with Schematic Diagram

Prototype Abstract:

The BudgetWise prototype is a mobile app that connects to users' bank accounts, credit cards, and payment platforms, aggregating data for real-time expense tracking, budgeting, and financial advice. A dashboard provides spending summaries, goal progress, and AI-driven recommendations. Through interactive goal tracking, users can visualize financial health improvements over time. The app's prototype includes spending analysis, budget notifications, and goal tracking.

Schematic Diagram:



13. Product Details

How Does It Work?

- **Data Aggregation:** Connects to financial accounts (bank, credit cards, etc.) and aggregates transaction data.
- **Spending Analysis and Categorization:** Automatically categorizes spending, providing users with a clear view of their financial patterns.
- **Personalized Insights and Alerts:** AI analyzes spending and provides custom recommendations and alerts to help users stay within budget.

Data Sources:

- Bank account transactions, credit cards, digital wallets, and manually entered cash expenses.

Algorithms, Frameworks, and Software:

- **NLP and Machine Learning:** Uses NLP for transaction categorization and machine learning models for personalized recommendations.
- **Frameworks:** TensorFlow/PyTorch for ML models, Django/Flask for backend, React Native for mobile app, and Scikit-Learn for data analysis.
- **Cloud Infrastructure:** AWS or Google Cloud for data storage and processing.

Team Required:

- **Data Scientists:** For building recommendation models and spending analysis algorithms.
- **Backend Developers:** Handle data integration, API development, and security.
- **Frontend Developers:** Develop the mobile app interface for a smooth user experience.
- **UI/UX Designer:** Ensure the app is user-friendly and intuitive.
- **Compliance Consultant:** Ensure regulatory compliance with data privacy laws.

Cost:

- **Initial Development:** Covers expenses for app design, development of AI and machine learning models, compliance with data protection regulations, and user interface/user experience (UI/UX) design.
- **Monthly Maintenance:** Includes cloud hosting, API costs for data integration, regular updates, and ongoing improvements to AI models.

Conclusion

BudgetWise offers a unique approach to personal finance by combining real-time budgeting with AI-driven insights tailored to individual spending habits. The app addresses the gaps in current personal finance tools by providing actionable advice, spending alerts, and goal tracking, empowering users to improve their financial health. Backed by competitive research, regulatory compliance, and a scalable development strategy,

BudgetWise is positioned to be a valuable tool for users seeking a proactive, accessible approach to personal finance.

Code Implementation

```
[1]: import pandas as pd
import numpy as np

# Set seed for reproducibility
np.random.seed(42)

# Number of records
n_records = 1000

# Create synthetic data for BudgetWise
data = {
    'User_ID': np.arange(1, n_records + 1),
    'Income': np.random.normal(5000, 1000, n_records).round(2), # Monthly income in dollars
    'Rent': np.random.normal(1500, 300, n_records).round(2),
    'Groceries': np.random.normal(300, 100, n_records).round(2),
    'Utilities': np.random.normal(200, 50, n_records).round(2),
    'Entertainment': np.random.normal(200, 80, n_records).round(2),
    'Savings': np.random.normal(500, 200, n_records).round(2),
    'Loan_Payment': np.random.choice([0, 300, 500], n_records), # Loan payments, if any
    'Monthly_Budget_Limit': np.random.normal(3000, 500, n_records).round(2), # Custom budget limit
}

# Calculate total monthly expenses
data['Total_Expenses'] = (
    data['Rent'] + data['Groceries'] + data['Utilities'] +
    data['Entertainment'] + data['Loan_Payment'] + data['Savings']
).round(2)

# Determine if the user exceeded their budget
data['Exceeded_Budget'] = np.where(data['Total_Expenses'] > data['Monthly_Budget_Limit'], 1, 0)

# Create DataFrame
df = pd.DataFrame(data)

# Save to CSV
df.to_csv("budgetwise_synthetic_data.csv", index=False)
```

```
print("Synthetic BudgetWise dataset created!")
df.head()
```

Synthetic BudgetWise dataset created!

```
[1]:
```

	User_ID	Income	Rent	Groceries	Utilities	Entertainment	Savings	Loan_Payment	Monthly_Budget_Limit	Total_Expenses	Exceeded_Budget
0	1	5496.71	1919.81	232.48	104.61	130.92	415.25	300	2388.39	3103.07	1
1	2	4861.74	1777.39	285.55	156.98	197.50	409.32	0	3712.31	2826.74	0
2	3	5647.69	1517.89	220.76	179.32	201.44	140.87	500	3775.62	2760.28	0
3	4	6523.03	1305.92	269.20	294.38	237.81	433.98	300	3441.14	2841.29	0
4	5	4765.85	1709.47	110.64	227.83	90.65	646.57	500	2619.21	3285.16	1

```
[3]: import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.ensemble import RandomForestClassifier
from sklearn.metrics import accuracy_score, classification_report

# Load the dataset
df = pd.read_csv("budgetwise_synthetic_data.csv")

# Features and target variable
X = df[['Income', 'Rent', 'Groceries', 'Utilities', 'Entertainment', 'Savings', 'Loan_Payment']]
y = df['Exceeded_Budget']

# Train-test split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.3, random_state=42)

# Initialize and train a RandomForest Classifier
model = RandomForestClassifier(n_estimators=100, random_state=42)
model.fit(X_train, y_train)

# Predictions
y_pred = model.predict(X_test)

# Evaluation
accuracy = accuracy_score(y_test, y_pred)
report = classification_report(y_test, y_pred)

print("Model Accuracy:", accuracy)
print("Classification Report:\n", report)
```

```
# Add a message for each user based on the budget outcome
X_test = X_test.reset_index(drop=True)
budget_test = df[['Monthly_Budget_Limit', 'Total_Expenses']].iloc[y_test.index].reset_index(drop=True)
predictions = pd.DataFrame({'Exceeded_Budget': y_pred, 'Budget_Limit': budget_test['Monthly_Budget_Limit'], 'Total_Expenses': budget_test['Total_Expenses']})

# Add custom messages
def budget_message(row):
    if row['Exceeded_Budget'] == 1:
        excess_amount = row['Total_Expenses'] - row['Budget_Limit']
        return f"You have exceeded your budget by ${excess_amount:.2f}. Consider reviewing your expenses."
    else:
        remaining_amount = row['Budget_Limit'] - row['Total_Expenses']
        return f"You are within your budget! You have ${remaining_amount:.2f} left for savings or other expenses."

predictions['Message'] = predictions.apply(budget_message, axis=1)

# Display a sample of custom messages
print("\nSample Budget Messages:")
print(predictions[['Total_Expenses', 'Budget_Limit', 'Message']].head(10))
```

Model Accuracy: 0.7033333333333334

Classification Report:

	precision	recall	f1-score	support
0	0.65	0.78	0.71	139
1	0.77	0.64	0.70	161
accuracy			0.70	300
macro avg	0.71	0.71	0.70	300
weighted avg	0.71	0.70	0.70	300

Sample Budget Messages:

	Total_Expenses	Budget_Limit \
0	3302.14	3161.25
1	2991.05	2685.48
2	3083.61	2041.33
3	3567.17	3542.61
4	3190.90	2984.24
5	3209.47	1967.35
6	3176.60	2804.80
7	2004.06	2187.25
8	3150.13	2765.33
9	3206.04	2510.85

Message

0 You have exceeded your budget by \$140.89. Cons...
1 You are within your budget! You have \$-305.57 ...
2 You have exceeded your budget by \$1042.28. Con...
3 You have exceeded your budget by \$24.56. Consi...
4 You have exceeded your budget by \$206.66. Cons...
5 You have exceeded your budget by \$1242.12. Con...
6 You have exceeded your budget by \$371.80. Cons...
7 You are within your budget! You have \$183.19 l...
8 You are within your budget! You have \$-384.80 ...
9 You have exceeded your budget by \$695.19. Cons...
