PERSONALIZED FINANCIAL PLANNING PLATFORM

NAME:- BISHWARUP BISWAS

DATE:- 2nd APRIL, 2024

Abstract

The ever-growing complexity of personal finance necessitates innovative tools to empower individuals and bridge the financial literacy gap. This paper proposes the development of an initial prototype for an AI-powered financial planning platform, aiming to democratize financial planning and foster financial well-being.

The core functionality hinges on a machine learning model trained on a robust dataset of financial information. This model, likely a decision tree due to its interpretability and efficiency in handling mixed data, will analyze user-provided data points like income, expenses, debts, financial goals, and risk tolerance. By leveraging this data, the platform will generate personalized recommendations tailored to each user's unique financial situation. These recommendations may encompass budgeting strategies to optimize spending habits and identify areas for cost-cutting. Additionally, the platform could suggest realistic savings targets and timelines for achieving financial goals, considering the user's income and overall financial landscape.

To prioritize user trust and transparency, the platform will employ interpretable models like decision trees. This allows users to understand the rationale behind the recommendations, fostering a sense of control and informed decision-making. Furthermore, the platform will adhere to stringent data security practices, employing encryption and secure data management protocols to safeguard user privacy.

Cloud-based deployment offers a scalable and cost-effective foundation for the platform. This approach allows for continuous learning and improvement through model retraining with anonymized user data. As more users interact with the platform, the model will be periodically updated with this anonymized data, enabling it to adapt to evolving financial trends and user needs. This iterative process ensures the platform remains relevant and delivers increasingly accurate and personalized recommendations over time.

1. PROBLEM STATEMENT:

Millions of individuals and small businesses across the globe struggle with effectively managing their finances. This often leads to suboptimal savings habits, uninformed investment decisions, and ultimately, a lack of financial security and preparedness. The root of this problem lies in the inaccessibility of personalized financial planning. Traditional financial advisors can be expensive, often catering to high-net-worth clients. This leaves a significant gap in the market for individuals and small businesses who lack the resources for such services.

Individuals:

- Young professionals struggle to manage student loan debt while saving for future goals like homeownership or retirement.
- Families grapple with budgeting for multiple expenses and planning for their children's education.
- Individuals nearing retirement face uncertainties about their nest egg's sufficiency and navigating complex withdrawal strategies.
- Many individuals lack basic financial literacy, making it difficult to make informed decisions about saving, investing, and managing debt.

Small Businesses:

- Business owners often lack the financial expertise to manage cash flow effectively, create accurate financial forecasts, or plan for their own and their employees' retirement.
- Securing funding for growth or emergencies can be a challenge without a clear financial roadmap.
- Small businesses may struggle to manage debt effectively, hindering their growth potential.

The consequences of these challenges are significant. Individuals may fall short of their financial goals, experience unnecessary stress, and face financial insecurity in retirement. Small businesses may struggle to grow, become vulnerable to economic downturns, and ultimately fail.

2. CUSTOMER/ BUSINESS/ MARKET NEED ASSESEMENT:

2.1) Customer Need:

Individuals and small businesses face a common challenge - navigating the intricate complexities of financial management. Customers require a holistic approach that addresses all pillars of their financial well-being, encompassing budgeting, saving, investing, and debt management strategies. However, many individuals lack the financial literacy or confidence to navigate these complexities independently. They seek personalized guidance in the form of recommendations tailored to their unique financial situation, risk tolerance, and long-term goals. Beyond mere recommendations, actionable insights are crucial. Simply understanding their financial health is insufficient. Users need clear, actionable steps and automated tools to implement their financial plans. This could include features like automated savings transfers, debt repayment schedules, and bill pay reminders.

Accessibility and affordability are paramount concerns for customers. Traditional financial advisors often come with a significant cost barrier, leaving many individuals and small businesses without access to professional financial guidance. Customers seek a user-friendly and cost-effective solution that fits their budget. Security and data privacy are non-negotiable. Financial data is highly sensitive, and customers require a platform that prioritizes their security.

Finally, customers value ease of use. The platform should be intuitive and user-friendly, regardless of the user's technical background. Additionally, some users may require access to human financial advisors for complex scenarios. Offering a hybrid approach combining AI automation with human expertise can cater to diverse customer needs.

2.2) Business Need:

Businesses operating in the financial services industry face several key needs. Expanding reach and accessibility beyond the traditional high-net-worth clientele is critical. An AI-powered platform can provide a scalable solution capable of reaching a broader demographic of individuals and small businesses at an affordable price point.

Enhancing user experience is crucial for customer acquisition and retention. A user-friendly and intuitive platform, ideally delivered through a mobile app, fosters user adoption and engagement across all technical backgrounds.

Another key business need is streamlining financial management. Integrating AI automation for tasks like budgeting, savings transfers, and bill payments can significantly improve user efficiency.

Optimizing investment opportunities for customers presents a valuable business opportunity. By analyzing user data and financial goals, the platform can recommend suitable investment options tailored to their risk tolerance and potential returns. This fosters better asset allocation for users and potentially higher revenue streams for the business.

Addressing data security concerns is paramount for building trust. Utilizing robust encryption protocols and adhering to relevant regulations is essential. Furthermore,

leveraging AI to understand user behaviour and preferences allows for continuous platform improvement and personalized marketing strategies.

2.3) Market Need:

The market for personalized financial planning solutions is experiencing significant growth driven by several key factors. Rising financial complexity necessitates expert guidance to navigate intricate financial products and investment options. Furthermore, there's an increased financial awareness across all demographics, with individuals and businesses taking a more proactive approach to managing their finances.

Demand for accessibility is a major market driver. The high cost and limited availability of traditional financial advisors leave a significant market gap. Affordable and convenient solutions accessible through mobile apps and online platforms are in high demand. This aligns perfectly with the growing trend of digital adoption. Consumers are increasingly comfortable managing finances digitally and seek user-friendly platforms that integrate seamlessly with their existing financial tools.

Finally, the global market for robo-advisors, a subset of AI-powered financial planning solutions, is experiencing significant growth. This surge reflects the increasing demand for automated and algorithm-driven financial advice.

3. REVISED NEEDS STATEMENT AND TARGET SPECIFICATIONS

The design problem involves creating a personalized financial planning platform powered by AI algorithms to address the diverse financial needs and priorities of individuals and small businesses. The platform must offer tailored financial guidance and recommendations, enhance user experience through intuitive design, and ensure data security and privacy.

Target Specifications:

1. **Personalization:** The platform must utilize AI algorithms to provide personalized financial advice and recommendations tailored to each user's unique financial goals, preferences, and circumstances.
2. **User Experience:** The platform should feature a user-friendly interface with intuitive navigation, interactive tools, and customizable dashboards to enhance user experience and drive engagement.
3. **Data Security:** Robust measures must be implemented to protect users' sensitive financial information, including encryption, multi-factor authentication, and regular security audits.
4. **Scalability:** The platform should be scalable to accommodate growing user base and evolving business needs, with minimal downtime and performance degradation.

5. **Compliance:** Compliance with regulatory standards and industry best practices for financial services must be ensured, with ongoing monitoring and updates to reflect changes in regulations.

Design Criteria:

- **Personalization Accuracy:** The accuracy of personalized financial advice and recommendations generated by AI algorithms will be measured through user feedback and comparison with industry benchmarks.
- **User Engagement:** User engagement metrics such as session duration, frequency of logins, and completion rates of financial planning tasks will be tracked to evaluate the effectiveness of the user experience design.
- **Data Security Compliance:** Compliance with data security standards such as GDPR, CCPA, and industry-specific regulations will be assessed through regular audits and compliance checks.
- **System Performance:** System performance metrics including uptime, response time, and scalability will be monitored to ensure optimal performance and reliability.
- **Regulatory Compliance:** Compliance with regulatory requirements will be evaluated through regular audits and assessments conducted by legal and compliance teams.

Justification and Metrics:

- The specifications were derived from customer requirements identified through market research, user surveys, and feedback from stakeholders.
- Benchmarks and industry standards were used to validate the specifications and ensure alignment with best practices and industry norms.
- Customer validation was conducted through focus groups, user interviews, and prototype testing to gather feedback and refine the specifications based on user needs and preferences.

4. EXTERNAL SEARCH

The resources I used to research about the product and Information taken to make this prototype are:

- https://mobidev-biz.medium.com/how-to-build-an-ai-powered-financial-assistant-app-9fe846483433
- https://www.knowledgehut.com/blog/data-science/data-science-for-finance
- https://www.packtpub.com/article-hub/build-an-ai-based-personal-financial-advisor-with-langchain
- https://hqsoftwarelab.com/blog/ai-and-ml-in-financial-planning-apps/
- https://iabac.org/blog/how-ai-is-transforming-financial-planning
- https://www.signitysolutions.com/tech-insights/smart-financial-planning-with-ai
- https://www.signitysolutions.com/tech-insights/ai-driven-personal-finance-advisors
- https://www.signitysolutions.com/tech-insights/smart-financial-planning-with-ai
- https://www.sciencedirect.com/science/article/abs/pii/S1544612323012394
- https://azure.microsoft.com/en-us/products/machine-learning
- https://www.consumerfinance.gov/
- https://www.nefe.org/

5. BENCHMARKING

S.no.	Performance Metric	Without AI Assistance	With AI Assistance
1	Accuracy of Recommendations	Recommendations are based on basic rules or historical trends, may lack precision and relevance to individual circumstances	Recommendations are derived from sophisticated AI algorithms, leveraging vast amounts of data to provide highly accurate and personalized insights tailored to individual goals and preferences
2	Personalization	Financial advice and recommendations are generic, not tailored to individual needs or circumstances	Offers highly personalized financial advice and recommendations based on individual financial goals, risk tolerance, and current financial situation, providing a customized experience for each user
3	User Engagement	Users may find the process cumbersome or lack motivation to engage due to generic advice and lack of personalization	Users are more likely to engage with the platform due to the tailored recommendations, interactive tools, and personalized insights that resonate with their financial goals and interests
4	Time Efficiency	Manual processes require significant time and effort to gather and analyse financial data, resulting in delays in decision-making	Automated algorithms streamline data collection, analysis, and decision-making, saving users time and effort by providing real-time insights and recommendations
5	Data Security	Basic security measures may be in place, but data may be vulnerable to breaches or unauthorized access due to manual processes and limited encryption	Robust security protocols, including encryption, multi-factor authentication, and regular security audits, ensure the protection of sensitive financial data against cyber threats and breaches
6	Compliance	Compliance checks are performed manually, increasing the risk of errors or oversight in meeting regulatory requirements	Automated compliance monitoring ensures adherence to regulatory standards, with alerts and notifications for any deviations or non-compliance issues
7	Decision Making Speed	Decision-making is relatively slow due to manual data analysis and limited insights, leading to delays in taking	Rapid insights and real-time recommendations enable users to make informed decisions quickly, capitalizing

		action on financial goals or opportunities	on market trends or adjusting financial strategies as needed
8	Predictive Analysis	Limited historical data analysis restricts the ability to forecast future trends or anticipate potential financial risks or opportunities	Advanced predictive techniques analyse historical data, market trends, and user behaviour patterns to provide predictive insights for future financial outcomes
9	Scalability	Limited scalability due to manual processes and resource constraints	Scalable architecture accommodates growth and demand

6. BUSINESS OPPORTUNITY

The integration of AI algorithms into personalized financial planning presents a significant business opportunity for financial service providers. By leveraging AI technology, firms can enhance their offerings, improve customer experience, and drive business growth. Below are key aspects of the business opportunity associated with AI-assisted financial planning:

1. Market Demand: There is a growing demand for personalized financial planning solutions among individuals and small businesses. As consumers seek more tailored and efficient financial services, firms that offer AI-powered solutions can capitalize on this trend and gain a competitive edge in the market.
2. Competitive Advantage: AI-assisted financial planning provides a competitive advantage by offering highly accurate, personalized recommendations and insights. Firms that adopt AI technology can differentiate themselves from competitors and attract customers seeking more sophisticated and effective financial solutions.
3. Revenue Generation: AI-assisted financial planning opens up new revenue streams for financial service providers. By offering premium features and services powered by AI algorithms, firms can introduce subscription-based models, premium tiers, or value-added services, generating additional revenue and increasing profitability.
4. Cost Efficiency: While implementing AI technology may require initial investment, it can lead to long-term cost savings and operational efficiencies. AI algorithms automate repetitive tasks, streamline processes, and improve productivity, allowing firms to optimize resource allocation and reduce overhead costs.
5. Scalability and Growth: AI-assisted financial planning platforms offer scalability and flexibility to accommodate growing user demand and expand service offerings. As the user base grows, firms can scale their operations, add new features, and enter new markets, driving business growth and maximizing market share.
6. Customer Retention and Loyalty: Providing personalized financial planning services enhances customer satisfaction and loyalty. By delivering tailored recommendations and insights that meet individual needs and goals, firms can build stronger relationships with customers, increase retention rates, and foster long-term loyalty and advocacy.
7. Risk Management and Compliance: AI technology can improve risk management and compliance by automating compliance checks, detecting fraudulent activities, and ensuring adherence to regulatory standards. Firms that prioritize data security and compliance build trust with customers and mitigate reputational and regulatory risks.

7. CONCEPT GENERATION

8.1) Problem Clarification

To gain a deep understanding of user needs related to financial planning, I researched information available online and gathered data by:

- **Online User Reviews:** Reviewing existing financial planning apps and websites on platforms like Google Play Store or Apple App Store can reveal user pain points and desired functionalities. Identifying frequently mentioned frustrations or limitations can guide concept generation towards addressing unmet user needs.
- **Financial Literacy Blogs and Articles:** Financial literacy blogs and articles often explore user challenges related to budgeting, saving, and achieving financial goals. Analyzing these resources can provide valuable insights into the target audience's financial anxieties and aspirations.
- **Financial Planning Forums and Communities:** Online forums and communities dedicated to personal finance can offer a glimpse into user discussions and questions. By analyzing these interactions, I was able to identify common themes and challenges users face when navigating their financial landscape.
- **Trend Analysis:** By analyzing current trends in financial technology (FinTech), we can identify emerging solutions and user preferences. For instance, the growing popularity of chatbots suggests users might find a conversational AI interface within the financial planning platform helpful or engaging.
- **Competitive Analysis:** Researching existing financial planning tools will reveal established functionalities and potential areas for differentiation. This analysis can inspire innovative concepts that surpass current offerings by addressing unmet user needs or leveraging advancements in technology.

8. FINAL PRODUCT

Here, we'll explore data acquisition and preparation, machine learning model selection and training, and the generation of personalized recommendations – all crucial steps in building a user-centric and data-driven financial planning assistant.

Data Acquisition and Preparation: Building the Foundation

The success of any machine learning model hinges on the quality and relevance of its training data. For the MVP, I employed a two-pronged approach to data acquisition:

1. **Synthetic Data Generation:**
    - To jumpstart the training process, we'll leverage libraries like Faker to generate realistic but anonymized user data encompassing:
        - User demographics (age, location)
        - Income and expense information
        - Debt details (amounts, interest rates)
        - Financial goals (type, target amount)
        - Risk tolerance profiles

    This synthetic data provides a controlled environment for initial model training and ensures user privacy is maintained from the outset.

2. **Public Dataset Integration:**
    - We'll explore and integrate publicly available datasets on personal finance from sources like the Federal Reserve Economic Data. Public datasets can provide valuable insights into historical trends on interest rates, inflation, and economic indicators. This data enriches the AI model's understanding of financial markets and allows it to factor in broader economic contexts when generating recommendations. For instance, the model could consider historical inflation rates when suggesting savings targets to account for potential purchasing power erosion over time.

Data Preprocessing and Cleaning: Ensuring Model Accuracy

Once acquired, all data sources will undergo rigorous cleaning and preprocessing steps to ensure the model is trained on high-quality information. This may involve:

- **Missing Value Imputation:** Techniques like mean/median imputation or K-Nearest Neighbours (KNN) will address missing values within the data that could impede the model's learning process.
- **Outlier Detection and Removal:** Anomaly detection algorithms will identify and remove outliers that deviate significantly from the norm. These outliers could skew the training process and lead to inaccurate recommendations.
- **Feature Engineering:** New features may be derived from existing data points to provide a richer representation for the AI model. For example, a "debt-to-income ratio" feature can be calculated from income and debt data to provide a more comprehensive picture of a user's financial health. Additionally, features like "percentage of income spent on housing" or "average monthly discretionary spending" can be derived to offer a more granular view of a user's financial landscape.

By meticulously cleaning and preparing the data, we can ensure the AI model is trained on a robust and accurate foundation, ultimately leading to more reliable and personalized recommendations for our users.

Machine Learning Model Selection and Training:

For the MVP stage, with its focus on basic budgeting and savings recommendations, a well-suited machine learning model is the **decision tree**. Here's why decision trees are a good fit:

- **Interpretability:** Decision trees are known for their transparency. The model's decision-making process is visualized as a tree structure, making it easier to understand the rationale behind the AI's recommendations. This fosters user trust and allows for further refinement based on user feedback. Unlike "black-box" models, decision trees allow us to explain why a certain budgeting strategy or savings target is suggested for a particular user profile.
- **Mixed-Data Capability:** Financial data often encompasses numerical values (income, expenses) and categorical data (risk tolerance). Decision trees excel at handling both data types, making them suitable for analyzing user profiles effectively. They can consider factors like a user's income level, spending habits, and risk tolerance to generate appropriate budgeting categories or suggest savings goals that align with their financial situation.

Training the Model:

The pre-processed data will be split into three distinct sets:

- **Training Set:** This set constitutes the bulk of the data and is used to train the decision tree model. The model learns by identifying patterns and relationships within the training data. By analyzing numerous user profiles with varying financial situations and goals, the model learns to identify commonalities and develop decision-making rules for generating personalized recommendations.
- **Validation Set:** A smaller set used to fine-tune the model's hyperparameters (settings that control its behaviour). By evaluating the model's performance on the validation set, we can adjust these hyperparameters to optimize its accuracy and prevent overfitting . This ensures the model doesn't simply regurgitate patterns from the training data but can effectively analyze new user profiles and provide relevant recommendations.
- **Test Set:** his final set is used to assess the model's generalizability and performance on unseen data. The model's performance on the test set provides a realistic picture of how well it will translate to real-world user scenarios. Metrics like accuracy, precision, and recall will be used to evaluate the model's effectiveness in generating accurate and relevant recommendations.

Generating Personalized Recommendations:

Once trained, the decision tree model will be integrated into the MVP platform. Here's how it will generate personalized recommendations for users:

1. **User Input:** During onboarding, users will provide their financial data points through an interactive interface. This data will encompass income, expenses, debts, financial goals, and risk tolerance.

2. **Data Preprocessing:** The user's data will undergo the same cleaning and preprocessing steps as the training data to ensure compatibility with the model.
3. **Model Inference:** The pre-processed user data will be fed into the trained decision tree model. The model will traverse its decision tree structure based on the user's specific data points, ultimately generating personalized recommendations.
4. **Recommendation Delivery:** The platform will translate the model's output into actionable recommendations for the user. These may include:
    - **Budgeting Strategies:** The platform might suggest specific budgeting categories (e.g., groceries, transportation, entertainment) based on the user's income and expense patterns. Additionally, it could recommend tools or apps to facilitate budget tracking and monitoring.
    - **Savings Goals and Targets:** Considering the user's income, expenses, and financial goals, the model might suggest realistic savings targets and timelines for achieving them. This empowers users to set achievable goals and track progress towards financial objectives.

CI/CD:

The MVP serves as the initial foundation, and the data science aspect will be an ongoing process. As users interact with the platform, their anonymized data will be collected. This data will be used to further refine the decision tree model and enhance its accuracy over time. Here's how:

- **Cloud-based Model Repository:** The trained decision tree model will be stored in a version-controlled repository hosted on a cloud platform like Amazon Web Services (AWS) Sage Maker or Microsoft Azure Machine Learning. This ensures secure storage, easy access, and facilitates model versioning for rollback capabilities if necessary.
- **Automated Retraining Pipelines:** We'll develop automated retraining pipelines that will periodically retrieve anonymized user data from the platform's cloud-based data store. These pipelines will then leverage cloud computing resources to retrain the model on the latest data. This approach streamlines the retraining process and ensures the model stays current with evolving user trends and financial landscapes, leading to more relevant and personalized recommendations.

A/B Testing with Cloud and Deployment Technologies:

- **Cloud Feature Stores:** Cloud-based feature stores like Amazon Feature Store or Azure Feature Flag Service can be utilized to manage different recommendation strategies and user interface elements. These feature stores provide a centralized repository for managing and deploying different feature variations, facilitating A/B testing.
- **Deployment Automation Tools:** Tools like AWS Code Deploy or Azure DevOps can be employed to automate the deployment of different platform versions with varying features. This allows for efficient A/B testing by seamlessly deploying different versions of the platform to specific user segments.
- **Cloud Monitoring and Analytics:** Cloud platforms offer robust monitoring and analytics services that can track user engagement with different features and their impact on key metrics. By analysing this data, we can determine which recommendation strategies and user interface elements resonate most effectively with users.

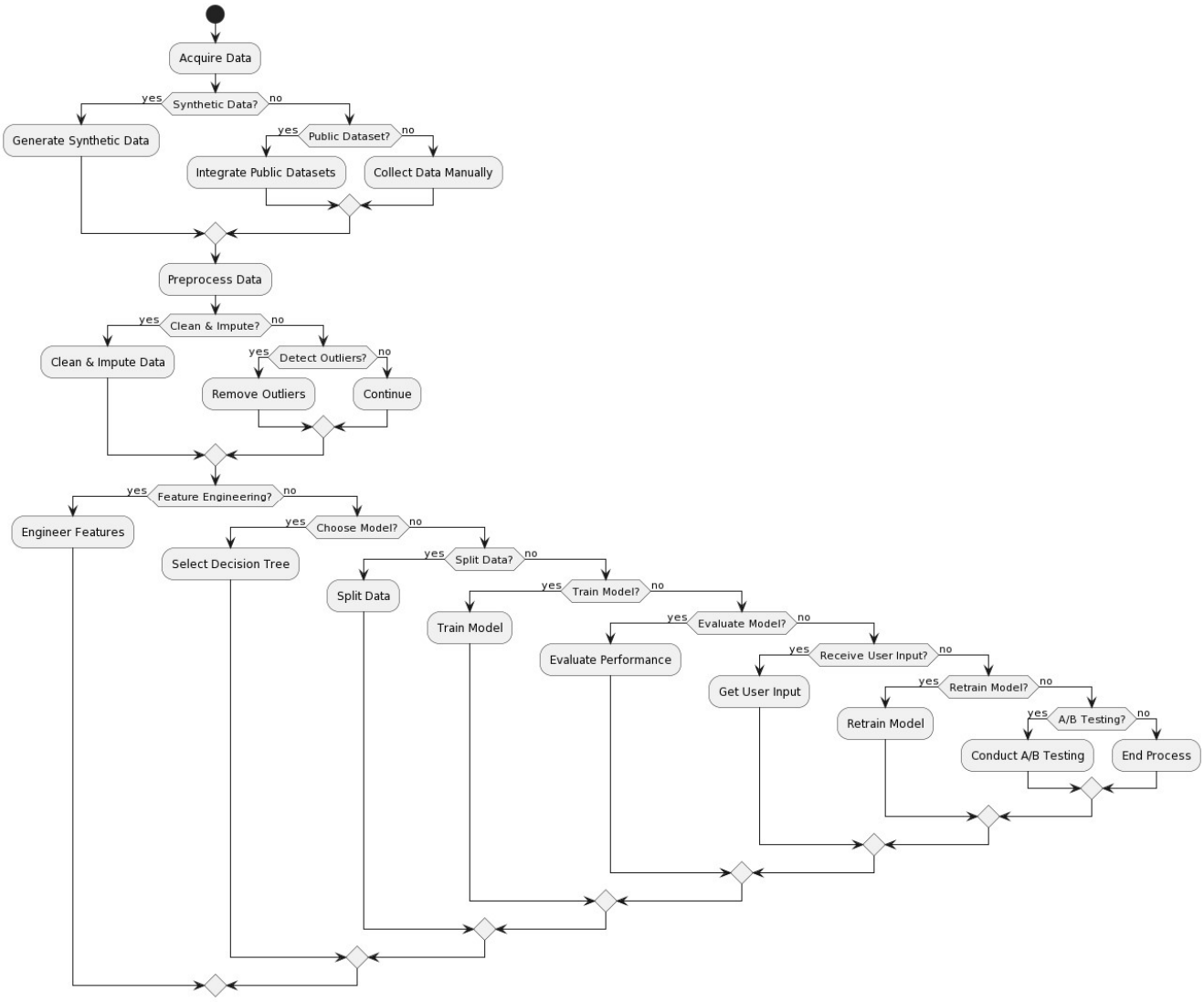

Fig: Flowchart of the process

Once the Minimum Viable Product (MVP) is developed, it will be deployed on a website, making it readily accessible to users.

Website Deployment:

1. **Cloud Hosting:** A cloud platform like Amazon Web Services (AWS) or Microsoft Azure will be chosen for website hosting. Cloud platforms offer scalability, reliability, and robust security features to ensure a smooth user experience.
2. **Backend Development:** The backend logic of the platform, which handles data processing, model execution, and interaction with the database, will be deployed on the chosen cloud platform. This may involve using serverless technologies like AWS Lambda or Azure Functions for cost-efficiency and scalability.
3. **Frontend Development:** The user interface (UI) of the platform, which users interact with directly, will be built using web development frameworks like React or Angular. These frameworks provide a user-friendly and responsive interface that adapts seamlessly to different devices (desktops, tablets, smartphones).

4. **API Integration:** The backend and frontend will be connected through a secure API (Application Programming Interface) that facilitates data exchange and ensures smooth interaction between the user interface and the core functionalities of the platform.

User Experience:

1. **User Onboarding:** Users will visit the website and create an account through a secure registration process. This will involve setting up a username and password, ensuring user privacy and data security.
2. **Interactive Profile Creation:** The platform will guide users through an interactive process to establish their financial profile. This may involve inputting data points like income, expenses, debts, financial goals (e.g., saving for a down payment, retirement planning), and risk tolerance (conservative, moderate, aggressive). The platform will use a user-friendly interface to collect this data efficiently.
3. **AI-powered Analysis and Recommendations:** Once the user profile is established, the platform will leverage the cloud-deployed decision tree model to analyze the user's data. Based on this analysis, the platform will generate personalized recommendations tailored to the user's unique financial situation. These recommendations may encompass:
    - **Budgeting Strategies:** The platform might suggest specific budgeting categories or recommend tools to facilitate budget tracking and monitoring.
    - **Savings Goals and Targets:** Considering the user's income, expenses, and financial goals, the model might suggest realistic savings targets and timelines for achieving them.
4. **Actionable Insights and Goal Tracking:** The platform will provide users with actionable insights to empower them to take control of their finances. This may include:
    - **Educational Resources:** Access to curated educational resources on budgeting, saving, and financial literacy, empowering users to make informed financial decisions.
    - **Basic Goal Tracking:** Users can set basic financial goals and track progress towards them. The platform might provide a simple visualization tool to depict progress over time, keeping users motivated and engaged in achieving their financial objectives.
5. **Secure Data Management:** The platform will prioritize user privacy and data security. Industry-standard security protocols like encryption will be employed to safeguard user data. Additionally, users will have control over their data and can choose to share anonymized information for platform improvement, ensuring the model remains relevant to user needs.

Continuous Improvement:

User feedback will be actively solicited through various methods, including surveys, app store reviews, and in-app feedback mechanisms. This feedback will be used to refine the platform's functionalities, improve the accuracy of the AI model through retraining, and ensure the user experience remains positive and engaging.

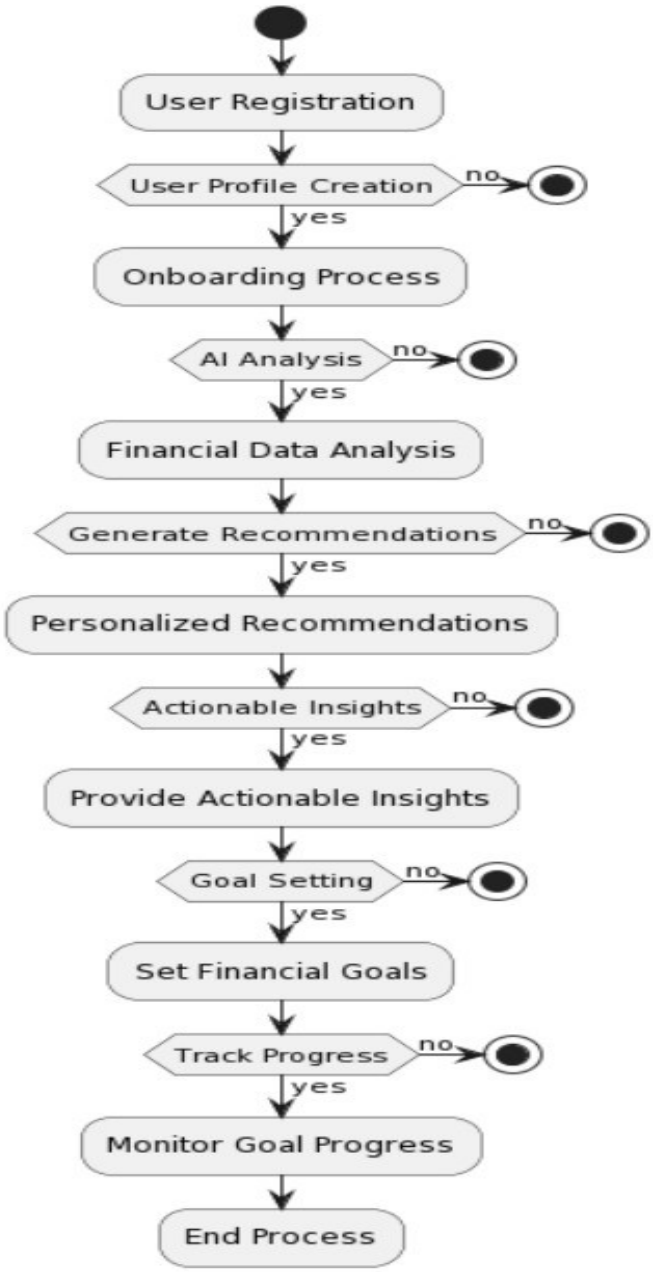

Fig: Flowchart of the User Experience part

9. CONCLUSION

In conclusion, the development of our AI-powered financial planning platform's Minimum Viable Product (MVP) represents a significant step towards democratizing access to personalized financial guidance. By leveraging synthetic and public datasets, we ensure the model's training on robust and diverse data, laying a solid foundation for accurate and relevant recommendations. Through meticulous data preprocessing and cleaning, we guarantee the model's accuracy and effectiveness in generating personalized insights.

The selection of decision tree models for the MVP aligns with our goal of transparency and interpretability, enabling users to understand the rationale behind each recommendation. The iterative process of model training, validation, and testing ensures continual improvement, ensuring the platform remains relevant and responsive to user needs.

By integrating cloud-based technologies for model storage, automated retraining pipelines, and deployment automation, we establish a dynamic framework for continuous improvement and scalability. This data-driven approach, coupled with A/B testing capabilities, enables us to refine the platform's user experience iteratively.

Overall, our data-driven MVP lays the groundwork for a user-centric financial planning assistant that empowers individuals to make informed decisions and achieve their financial goals. As we move forward, we remain committed to refining and enhancing the platform to deliver even greater value to our users.