**AI-Based Personal Budget Manager Proposal**

**1. Identification of Project Team Members**

**Team Members:**

1. Lelgo Isaac – SCT211-0074/2022
2. Favian Imbera – SCT211-0022/2021
3. Ian Karanja – SCT211-0461/2022
4. Dalvin Calvin – SCT211-0452/2022
5. Alfred Kahenya – SCT211-0023/2021
6. Samuel Ruoti – SCT211-0542/2022

**Roles Assigned:**

* **Project Lead:** Lelgo Isaac
* **AI/ML Developer:** Ian Karanja
* **Backend Developer:** Dalvin Calvin
* **Frontend Developer:** Alfred Kahenya
* **UI/UX Designer:** Favian Imbera
* **Database Administrator:** Samuel Ruoti

**Commitment Evidence:**

* Signed consent and meeting minutes (To be attached).
* Team contract outlining responsibilities and deadlines.

**2. Problem Statement & Justification**

**Problem Statement:** Managing personal finances is challenging, especially when handling multiple transactions, savings goals, and expenses. Many individuals struggle with overspending, poor savings habits, and disorganized financial records.

**Justification:** The project addresses key financial management challenges by providing a smart, automated solution that:

* Reduces manual effort in tracking expenses.
* Enhances financial decision-making through AI-driven insights.
* Encourages better savings habits by prioritizing essential expenses.
* Provides real-time financial monitoring and alerts.

**Supporting Data & Research:**

* Studies show that **60% of individuals** lack structured financial planning.
* Mobile money platforms like **M-Pesa** dominate financial transactions in Kenya, making automated tracking essential.
* AI-powered insights can improve budgeting by **30-40%**, according to financial research studies.

**3. Commercial Viability & Revenue Model**

**Target Users:**

* University students
* Young professionals
* Entrepreneurs
* General M-Pesa users

**Revenue Model:**

1. **Freemium Model** – Basic features free; premium subscription for advanced analytics.
2. **One-time purchase** – Lifetime access to premium features.
3. **Partnerships with financial institutions** – Revenue from referral programs.
4. **Advertisements** – Monetization via targeted financial ads.

**Competitor Analysis & Differentiation:**

* **Existing Competitors:** Bank mobile apps, manual budgeting tools.
* **Our Differentiation:** AI-driven insights, automatic categorization via M-Pesa API, user-friendly UI, personalized financial recommendations.

**4. Go-To-Market Strategy**

**Marketing Approach:**

* Digital marketing via social media and influencer partnerships.
* SEO optimization and Google Ads for visibility.
* Campus activations and financial literacy workshops.

**User Acquisition Strategy:**

* Free trial for the first **3 months** to encourage adoption.
* Referral incentives for early adopters.
* Collaborations with financial advisors and fintech communities.

**Pilot Testing Plan:**

* Beta version testing with approximately **100 users** for feedback.
* Iterative improvements based on user experience and feedback.

**Customer Support & Feedback Mechanisms:**

* App rating and targeted user feedback.
* Monthly user surveys for product enhancements.

**5. Resources Required**

**Human Resources:**

* Developers (AI/ML, Backend, Frontend)
* UI/UX Designers
* Project Managers
* Marketing Team

**Software & Hardware Requirements:**

* Programming Languages:  MERN stack, Python
* **Frameworks & Libraries:** RESTAPI, React Native
* **APIs:** M-Pesa API, OpenAI API
* **Database:** Mongodb
* **Cloud Services:** AWS
* **Other Tools:** GitHub organization and projects

**External Partnerships & Funding:**

* Seeking support from fintech accelerators.
* Potential funding from financial institutions.
* Grants from technology innovation programs.

**6. Methodology**

**Development Approach:**

* Agile Development (2-week sprint cycles, continuous integration).
* DevOps practices (CI/CD, automated testing, and deployment).
* Lean Software Development (Rapid prototyping and user feedback).

**Step-by-Step Development Plan (10 Weeks):**

1. Research and Requirement Gathering (Week 1)
2. UI/UX Design and Wireframing (Week 2)
3. Backend and AI Model Development (Weeks 3-5)
4. Frontend Development and API Integration (Weeks 6-7)
5. Testing and Debugging (Week 8)
6. Beta Testing and User Feedback Implementation (Week 9)
7. Final Deployment and Market Launch (Week 10)

**Progress Measurement:**

* Weekly sprint reviews.

**7. Key Question Addressed: Building a Commercialized Product.**

**Business Problem Solved:**

* Lack of structured personal financial management.
* Need for automated and AI-driven budgeting solutions.

**Target Market:**

* **Primary Market:** M-Pesa users in Kenya.
* **Secondary Market:** Other mobile money users in Africa.

**Monetization Strategy:**

* Subscription-based model.
* One-time purchase for all premium features
* Advertisements and financial partnerships.

**Growth Strategy:**

* Partnerships with financial institutions.
* Expansion to other mobile money platforms like Airtel Money.
* Scaling through AI improvements and expanded features.

**Product Roadmap:**

1. **Phase 1:** Launch in Kenya with M-Pesa API integration.
2. **Phase 2:** Add AI-enhanced budgeting and predictive analytics.
3. **Phase 3:** Expand to other financial institutions like banks with mobile money integrations.
4. **Phase 4:** Introduce business budgeting features.

**8. Conclusion**

The AI-Based Personal Budget Manager is designed to simplify financial management through AI-driven insights and automation. By integrating the M-Pesa API, it offers users real-time tracking, categorization, and recommendations to enhance their financial well-being. With a structured go-to-market strategy and revenue model, this project is not only viable but also scalable, addressing a significant gap in financial literacy and management.

**Next Steps:**

* Finalizing MVP development.
* Conducting pilot testing with initial users.
* Refining marketing and monetization strategies for launch.