Tab 1

Midterm Exam Report

FinanSiswa: Smart Student Budgeting & Savings Tracker

Mobile Programming

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1. Project Title

FinanSiswa: Smart Student Budgeting & Savings Tracker

This title was chosen because it reflects the project's primary goal: to provide a smart budgeting app and savings tracker specifically designed for college students. The name "FinanSiswa" is a combination of the words "Finansial" and "Siswa," making it easy to remember and relevant to the target audience.

2. Background

College students are a demographic group in transition toward financial independence. Many of them, especially those living away from home, are managing their personal finances fully for the first time. Limited income, which typically comes from pocket money, scholarships, or part-time jobs, must be carefully allocated for various needs such as accommodation, food, transportation, academic and organizational needs.

A common problem is a lack of ability to track expenses and plan a budget, which can lead to financial difficulties before the end of the month. Furthermore, many students lack basic knowledge about the importance of saving and how to manage money wisely.

Therefore, the development of the "FinanSiswa" mobile app is crucial and necessary. This app is designed to be a practical solution that functions not only as a financial record-keeping tool but also as a personal financial assistant for students. With customized features like city-based budget presets and educational content, "FinanSiswa" aims to help students develop healthy and organized financial habits from an early age.

3. Scope

To ensure that the project can be completed properly within the time available, the following functional and technological limitations are set:

A. What will be implemented in this project:
- Daily income and expense transaction recording functionality with a category system.
- Features for creating savings targets and monitoring progress towards achieving them.
- Preparation *template*or a monthly budget preset that can be adjusted based on the estimated cost of living in several major cities in Indonesia.
- A module containing educational content in the form of short articles or blogs about financial management tips for beginners.
- Simple financial report display in the form of summary and visual graphs.

B. What will not be implemented in this project:
- Automatic data integration and synchronization with bank accounts or services *e-wallet*.
- Features related to investments, such as stocks, mutual funds, or cryptocurrencies.
- Function for recording accounts receivable and payable between users.
- Support for transactions with foreign currencies.

● System login or complex user registration; the application will focus on storing data locally on the device.

4. General Features

General features will be available across all platforms of FinanSiswa:

1. **Monthly Budget Management**
   ● Users can set and manage budgets by category.
   ● Includes a "Budget Preset" feature tailored to specific cities (e.g., Bandung), providing cost-of-living–based recommendations.
   ● Visual indicator showing how much of the budget has been used (e.g., "Terpakai Rp 0.0 (0%)").
2. **Savings Goals (Target Tabungan)**
   ● Users can create and track multiple savings targets (e.g., "Trip ke Bali").
   ● Each target displays the amount saved, remaining amount, and progress percentage.
   ● Option to add funds directly toward a goal.
3. **Transaction Tracking**
   ● Ability to add income and expense transactions.
   ● Dashboard displays Total Balance, Income, and Expenses in real time.
4. **Financial Reports & Insights**
   ● Summary of total monthly expenses and average daily spending.
   ● Comparison with previous month (e.g., "8% dari bulan lalu").
   ● Visual or textual feedback on spending behavior (e.g., "Bagus! Pengeluaranmu masih terkontrol bulan ini.").
5. **Financial Education (Edukasi Keuangan)**
   ● Access to quick tips and featured articles on smart money management.
   ● Includes practical advice like the 50/30/20 rule and the importance of emergency funds.
6. **Onboarding Guidance**
   ● Welcome screen prompting users to select their city to receive personalized budget recommendations.

Selamat Datang di FinanSiswa

Kelola keuanganmu dengan mudah. Mulai dengan memilih kotamu untuk mendapatkan rekomendasi budget.

Jakarta
Rp 3.000.000 - Rp 4.500.000/bulan

Bandung
Rp 2.000.000 - Rp 3.000.000/bulan

Yogyakarta
Rp 1.800.000 - Rp 2.500.000/bulan

Surabaya
Rp 2.500.000 - Rp 3.500.000/bulan

Lewati & Atur Sendiri

Total Saldo
Rp 0.0

↗ **Pemasukan**

RP 0.0

↘ **Pengeluaran**

RP 0.0

⊕

Tambah Transaksi

◎

Target Tabungan

💳

Budget

Budget Bulanan   0%

Rp 0.0 dari 0.0

🎉 Bagus! Pengeluaranmu masih terkontrol bulan ini.

Target Tabungan

✈️ **Trip ke Bali**
Rp 0.0 / Rp 0.0   0%

🏠
Beranda

↗
Laporan

◎
Target

💳
Budget

📖
Belajar

Laporan Keuangan
Analisa pola pengeluaranmu

Total Pengeluaran
Rp 0.0

8% dari bulan lalu

Rata-rata Harian
Rp 0.0

8% dari bulan lalu

Pengeluaran per Kategori

- 🟠 Makanan 42%
- 🔵 Transportasi 14%
- 🔴 Hiburan 10%
- ⚫ Lainnya 18%
- 🟣 Akademik 12%
- 🟢 Kesehatan 4%

Beranda | Laporan | Target | Budget | Belajar

Tren Pengeluaran

Mingguan	Bulanan
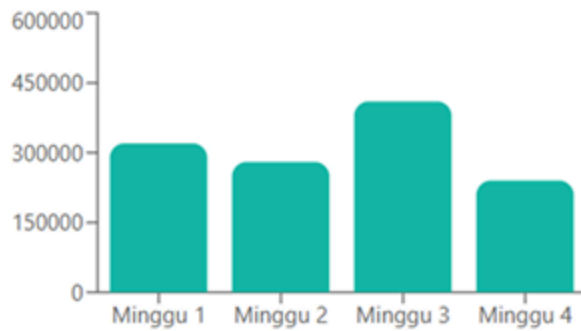
📊 Insight Bulan Ini

🍜 Kamu menghabiskan **20% lebih banyak** untuk makanan dibanding budget. Coba masak lebih sering di kos!

💰 **Hebat!** Kamu berhasil menghemat Rp 120K untuk transportasi dengan naik angkot.

📈 Pengeluaran minggu ke-3 melonjak. Sepertinya ada pengeluaran tidak terduga.

Hari Paling Boros

Sabtu
Rata-rata Rp 85K per Sabtu 🛍️

Beranda	Laporan	Target	Budget	Belajar

Target Tabungan

Wujudkan impianmu dengan menabung

⊕ **Buat Target Baru**

✈️ **Trip ke Bali**
Bulan Tahun

0%

Rp 0.0   Rp 0.0

SIsa: Rp 0.0   + Tambah Dana

✈️ **Trip ke Bali**
Bulan Tahun

0%

Rp 0.0   Rp 0.0

SIsa: Rp 0.0   + Tambah Dana

Kenapa Harus Punya Target?
Target tabungan membantumu tetap
termotivasi dan fokus menabung. Mulai
dengan target kecil!

Beranda   Laporan   Target   Budget   Belajar

Budget Bulanan

Kelola pengeluaranmu per kategori

Total Budget
RP 0.0

Terpakai Rp 0.0 (0%)

Gunakan Budget Preset
Budget disesuaikan untuk kota Bandung

Kategori Budget   ✎ Edit

Makanan & Minuman   65%
Rp 520.000 / Rp 800.000

Transportasi   60%
Rp 180.000 / Rp 300.000

Akademik   75%
Rp 150.000 / Rp 200.000

9:30

Transportasi
Rp 180.000 / Rp 300.000   **60%**

Akademik
Rp 150.000 / Rp 200.000   **75%**

Hiburan
Rp 120.000 / Rp 200.000   **60%**

Kesehatan
Rp 50.000 / Rp 150.000   **33%**

Lainnya
Rp 230.000 / Rp 350.000   **66%**

💡 **Tips Budget**

- Gunakan aturan 50/30/20: 50% kebutuhan, 30% keinginan, 20% tabungan
- Review budget setiap minggu untuk tetap on track
- Sisihkan budget untuk dana darurat

Beranda   Laporan   Target   Budget   Belajar

Mindset Uang • 5 menit

Jebakan Lifestyle Inflation

Baru dapat uang lebih, langsung upgrade gaya hidup? Hati-hati!...

📖 Istilah Keuangan

Cash Flow

Aliran masuk dan keluar uang. Kalau cash flow positif, artinya pemasukan lebih besar dari pengeluaran.

Passive Income

Uang yang kamu dapat tanpa harus bekerja aktif, seperti dari investasi atau royalti.

Emergency Fund

Dana darurat untuk keperluan tak terduga. Idealnya 3-6 bulan pengeluaran.

Mulai Hari Ini!

Literasi keuangan adalah investasi terbaik untuk masa depanmu

Financial Freedom   **Smart Money**   **Student Life**

Edukasi Keuangan
Belajar kelola uang dengan cerdas

Tips Cepat

Catat Setiap Hari

Kebiasaan kecil ini akan mengubah hidupmu

Review Mingguan

Cek progress budget setiap minggu

Pisahkan Rekening

Jangan campur uang belanja & tabungan

Mulai dari Kecil

Target kecil lebih mudah dicapai

Artikel Pilihan

Tips Hemat • 3 menit

5 Cara Hemat Makan di Kampus
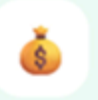Mahasiswa sering kesulitan mengatur budget makan. Berikut tips praktisnya...

Tips Hemat • 3 menit

5 Cara Hemat Makan di Kampus

Mahasiswa sering kesulitan mengatur budget makan. Berikut tips praktisnya...

Mindset Uang • 4 menit

Kenapa Kamu Harus 'Bayar Diri Sendiri Dulu'

Konsep pay yourself first adalah kunci membangun kekayaan sejak muda...

Budget • 5 menit

Cara Stick ke Budget Tanpa Stress

Budget bukan tentang membatasi diri, tapi tentang membuat prioritas...

Pemasukan • 6 menit

Side Hustle untuk Mahasiswa

Cari uang tambahan sambil kuliah? Ini pilihan yang cocok untuk mahasiswa...

Tabungan • 4 menit

Dana Darurat: Berapa yang Cukup?

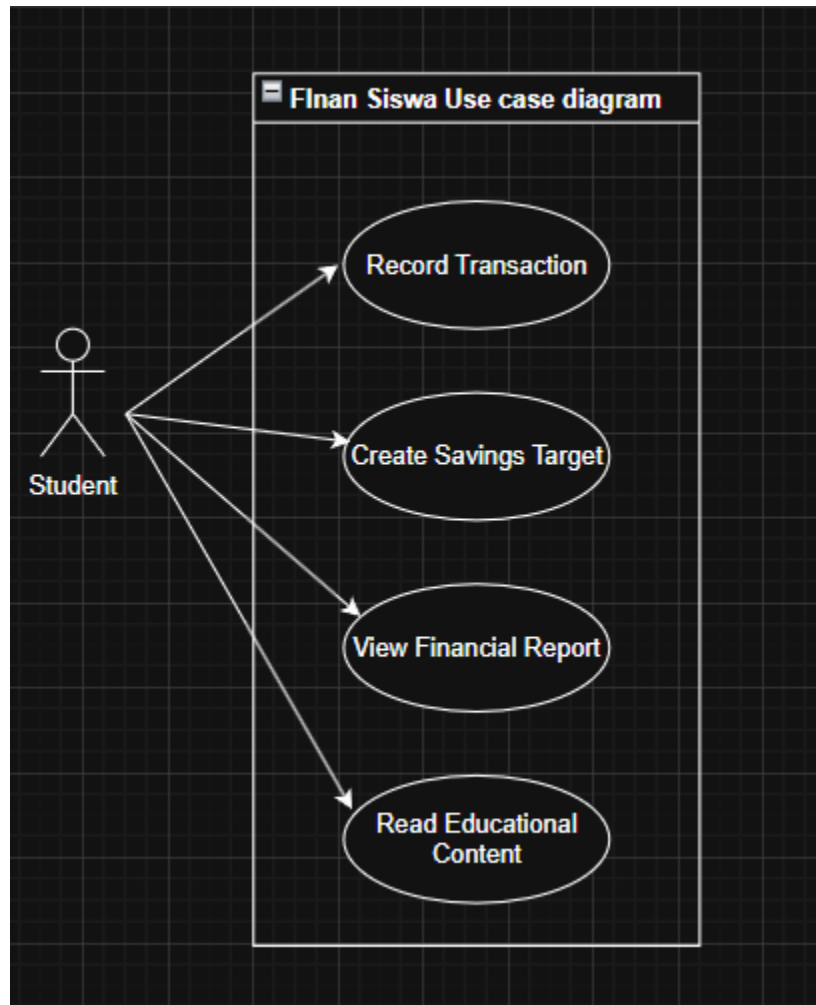Dana darurat itu penting, tapi berapa sih yang ideal untuk mahasiswa?...

5. Use Case Diagram

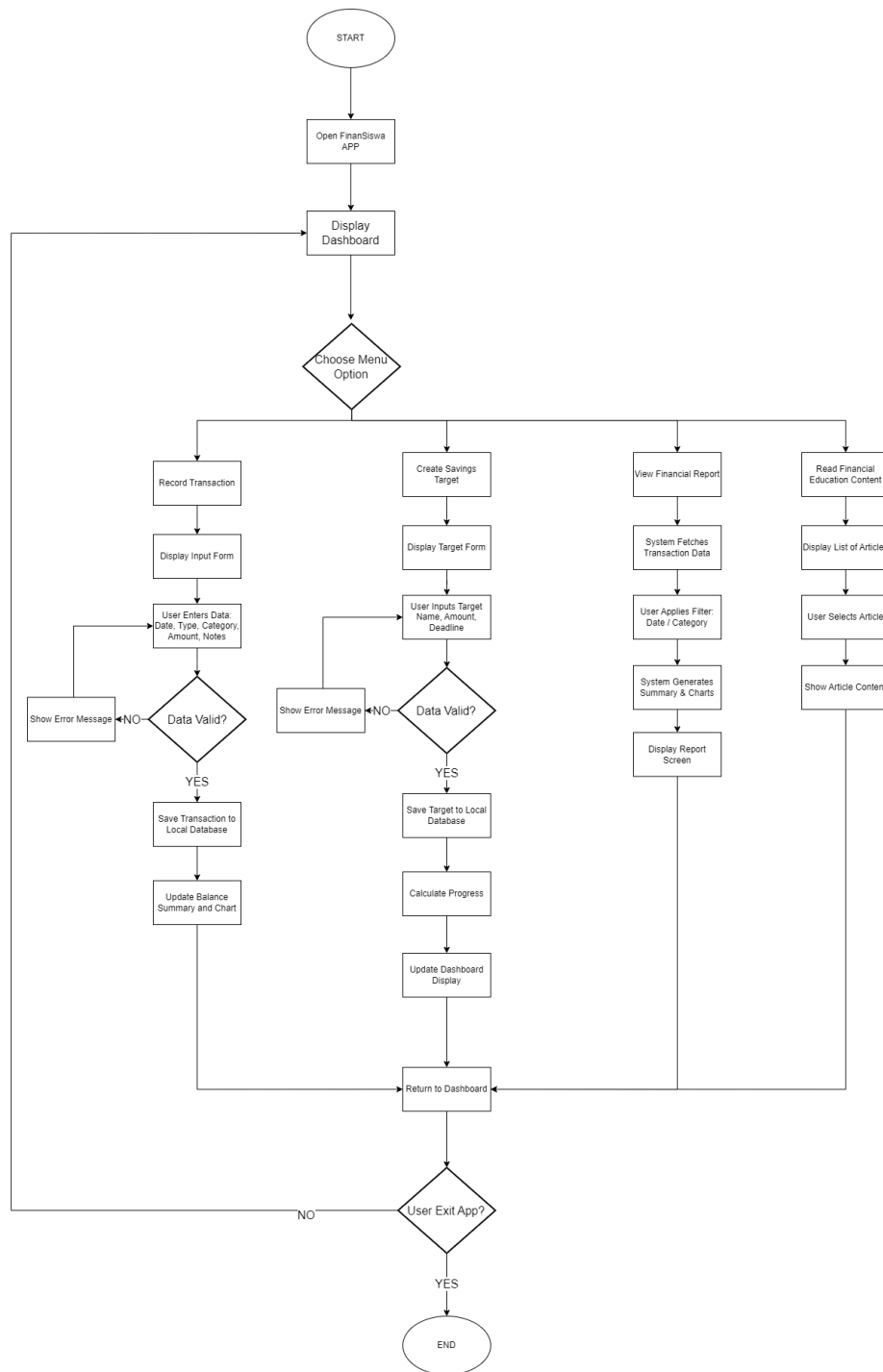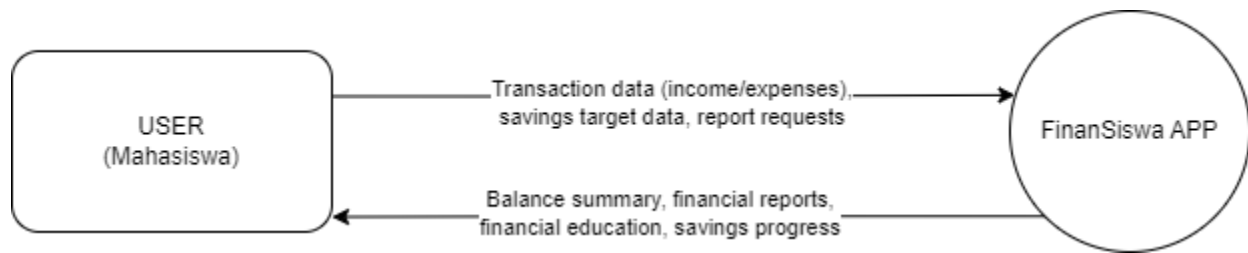FInan Siswa Use case diagram

Student

Record Transaction

Create Savings Target

View Financial Report

Read Educational Content

6. Activity Diagram

START

Open FinanSiswa APP

Display Dashboard

Choose Menu Option

Record Transaction
- Display Input Form
- User Enters Data: Date, Type, Category, Amount, Notes
- Data Valid? — NO → Show Error Message
- YES
- Save Transaction to Local Database
- Update Balance Summary and Chart

Create Savings Target
- Display Target Form
- User Inputs Target Name, Amount, Deadline
- Data Valid? — NO → Show Error Message
- YES
- Save Target to Local Database
- Calculate Progress
- Update Dashboard Display

View Financial Report
- System Fetches Transaction Data
- User Applies Filter: Date / Category
- System Generates Summary & Charts
- Display Report Screen

Read Financial Education Content
- Display List of Articles
- User Selects Article
- Show Article Content

Return to Dashboard

User Exit App? — NO → Display Dashboard

YES

END

7. DFD

DFD LVL 0

DFD LVL 1