**Finance Dashboard Project Documentation**

**1. Project Overview** The Finance Dashboard is a comprehensive tool designed to visualize financial data, track expenses, income, and savings, and offer insights into financial health over time. Built in Power BI, this dashboard leverages multiple visualization techniques and DAX (Data Analysis Expressions) functions to create dynamic, user-friendly reports.

**2. Features and Components**

* **Home Page:** A central hub summarizing key financial metrics.
* **Expense Tracking:** A line chart showing expenses over time, categorized by components like rent, groceries, and leisure.
* **Income and Savings Cards:** Visual KPIs that summarize monthly income, savings, and expense percentages.
* **Interactive Filters:** Year-wise filters (2021-2024) and a global selection option to narrow down data views.
* **Pie Charts:** Breakdown of expense and savings components for quick comparisons.
* **Tabular View:** A table displaying monthly expenses and income, with total calculations.

**3. Data Model and Fields**

* **Tables:** The model includes tables for expenses, income, and a date table for time intelligence.
* **Key Fields:**
  + Expense, Expense %, Income, Savings, Savings %, Date, Component
  + Calculated fields: Monthly\_Growth, Income Change, Expense\_Monthly

**4. DAX Functions (Intermediate Level)** Below are some DAX functions that power the dashboard’s interactivity and calculations:

* **Total Expenses:**

TotalExpense = SUM(Expense[Amount])

* **Monthly Savings:**

MonthlySavings = CALCULATE( SUM(Income[Amount]) - SUM(Expense[Amount]) DATESMTD(Date[Date]))

* **Expense Percentage:**

ExpensePct = DIVIDE( SUM(Expense[Amount]), SUM(Income[Amount]), 0 ) \* 100

* **Year-over-Year Income Growth:**

YoYIncomeGrowth = CALCULATE( SUM(Income[Amount]), SAMEPERIODLASTYEAR(Date[Date]))

* **Savings Ratio:**

SavingsRatio =

DIVIDE(SUM(Savings[Amount]), SUM(Income[Amount]),0) \* 100

**5. Insights and Benefits** This dashboard enables users to:

* Monitor financial performance across years.
* Visualize spending patterns and identify areas to save.
* Track savings progress and income growth.
* Perform time-based comparisons to inform budgeting decisions.

**6. Future Enhancements**

* Incorporate forecasting with advanced DAX techniques.
* Add custom tooltips for deeper insights on hover.
* Integrate external data sources for more comprehensive analysis.