

AI-Powered Investment Advisor (Offline) - Budget Bee

This feature provides investment suggestions based on past spending habits.

It works offline using a basic rule-based AI logic or TensorFlow Lite model.

Step 1: Define Investment Model (rule-based example)

```
// investment_advisor.dart
```

```
class InvestmentAdvisor {  
  static String getAdvice(double totalIncome, double totalExpense) {  
    double savings = totalIncome - totalExpense;  
    double savingsRate = savings / totalIncome;  
  
    if (savingsRate >= 0.3) {  
      return "You are saving well. Consider investing in mutual funds or government bonds.";  
    } else if (savingsRate >= 0.1) {  
      return "You can save more. Try SIPs or recurring deposits.";  
    } else {  
      return "Focus on reducing expenses. Avoid risky investments.";  
    }  
  }  
}
```

Step 2: Use in Home Screen or Advisor Screen

```
// Example usage:
```

```
double income = 50000;
```

```
double expense = 42000;
```

```
String advice = InvestmentAdvisor.getAdvice(income, expense);
```

```
print(advice);
```

Optional Step: Upgrade to TensorFlow Lite

For smarter suggestions, create a TFLite model and use the `tflite_flutter` plugin.

Model inputs:

- Monthly income
- Expense categories
- Savings rate

Model output:

- Risk profile
- Suggested investment type

Flutter TFLite Integration (Outline)

1. Convert a trained model to `.tflite`
2. Add `tflite_flutter` in `pubspec.yaml`
3. Load model using Interpreter and provide inputs
4. Show predictions in UI