

Budget Management Application - Dart Code

```
import 'dart:io';

void main() {
  BudgetApp app = BudgetApp();
  app.run();
}

class BudgetApp {
  List<Map<String, double>> incomeList = [];
  List<Map<String, double>> expenseList = [];

  void run() {
    print('=== Budget Management Application ===');
    bool running = true;

    while (running) {
      print('\n■■■■■ ■■■■:');
      print('1) ■■■■■ ■■■■ (Add Income)');
      print('2) ■■■■■ ■■■■■ (Add Expense)');
      print('3) ■■■■ ■■■■■■ (View Summary)');
      print('4) ■■■■ (Exit)');

      stdout.write('■■■■■ ■■■■ ■■■■■■: ');
      String? choice = stdin.readLineSync();

      if (choice == null) {
        print('■■■■■ ■■■■ ■■■■.');
        continue;
      }

      if (choice == '1') {
        addIncome();
      } else if (choice == '2') {
        addExpense();
      } else if (choice == '3') {
        viewSummary();
      } else if (choice == '4') {
        print('■■■■■ ■■ ■■■■■■■■. ■■ ■■■■■■■■!');
        running = false;
      } else {
        print('■■■■■ ■■■■ ■■■■■■. ■■■■■■ ■■■■■■■■ ■■ 1 ■■■■ 4.');
```

```

}

double? _readPositiveDouble(String prompt) {
    while (true) {
        stdout.write(prompt);
        String? input = stdin.readLineSync();
        if (input == null) {
            print('■■■■■ ■■■ ■■■■. ');
            return null;
        }

        double? value = double.tryParse(input);
        if (value == null) {
            print('■■■■■ ■■■■ ■■■ ■■■■. ');
        } else if (value < 0) {
            print('■■■■■ ■■ ■■■■ ■■ ■■■■ ■■■■■■. ■■■■ ■■■■ ■■■■ ■■ ■■■■. ');
        } else {
            return value;
        }
    }
}

void viewSummary() {
    double totalIncome = 0;
    double totalExpenses = 0;

    print('\n--- Income List ---');
    if (incomeList.isEmpty) {
        print('■■ ■■■■ ■■■■■■ ■■■. ');
    } else {
        for (var entry in incomeList) {
            entry.forEach((desc, amt) {
                print('- $desc : ${amt.toStringAsFixed(2)}');
                totalIncome += amt;
            });
        }
    }

    print('\n--- Expense List ---');
    if (expenseList.isEmpty) {
        print('■■ ■■■■ ■■■■■■. ');
    } else {
        for (var entry in expenseList) {
            entry.forEach((desc, amt) {
                print('- $desc : ${amt.toStringAsFixed(2)}');
                totalExpenses += amt;
            });
        }
    }

    double net = totalIncome - totalExpenses;
    print('\n--- Summary ---');
    print('Total Income: ${totalIncome.toStringAsFixed(2)}');
    print('Total Expenses: ${totalExpenses.toStringAsFixed(2)}');

    if (net >= 0) {
        print('Your net profit is ${net.toStringAsFixed(2)}');
    } else {
        print('Your net loss is ${(-net).toStringAsFixed(2)}');
    }

    double tax = net > 0 ? (net * 0.15) : 0.0;
    if (tax > 0) {
        print('Tax to pay (15% of profit): ${tax.toStringAsFixed(2)}');
    } else {
        print('No tax (no profit). ');
    }
    print('--- End Summary ---');
}
}

```