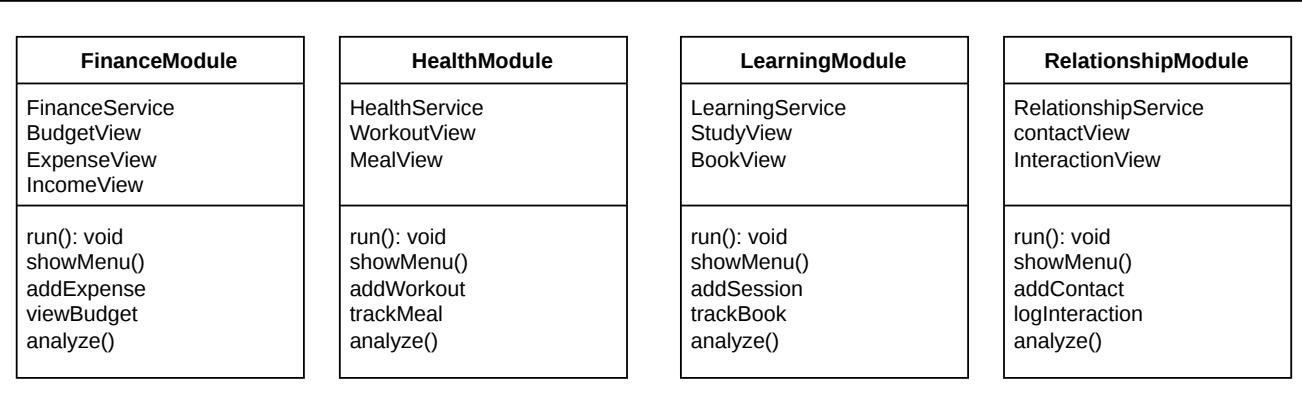


Main

```
Scanner scanner
boolean running
FinanceModule financeModule
HealthModule healthModule
LearningModule learningModule
RelationshipModule relationshipModule
DashboardService dashboardService
CsvManager csvManager
```

```
main(String[] args): void
initialize(): void
showMainMenu(): void
handleChoice(int): void
loadAllData(): void
saveAllData(): void
exit(): void
```

MODULES LAYER



VIEWS LAYER

FINANCE VIEWS

BudgetView	ExpenseView	IncomeView
+ display() + showProgress() + showAlert() + printBarChart	+ display() + showList() showSummary() + printCategory	+ display() + showList() + showSummary() + printSource

HEALTH VIEWS

WorkoutView
+ display()
+ showHistory()
+ showCalendar()
+ printStats()

MealView
+ display()
+ showMealPlan()
+ showNutrition()
+ printMealType()

SleepView
+ display()
+ showQuality()
+ showtrend()
+ printHours()

MoodView
+ display()
+ showMoodChart()
+ showCorrelation()

LEARNING VIEWS

StudyView
+ display()
+ showProgress()
+ showFocus()
+ printDuration

BookView
+ display()
+ showReadingList()
+ showStats()

SkillView
+ display()
+ showLevel()
+ showProgress()
+ showMilestone

RELATIONSHIP VIEWS

ContactView
+ display()
+ showList()
+ showDetails()
+ printContact

InteractionView
+ display()
+ showHistory()
+ showFrequency
+ printType

DASHBOARD VIEWS

DashboardView
+ showLifeOverview()
+ showBalanceScore()
+ showCorrelations()
+ showTrends()

ChartView
+ showBarChart()
+ showPieChart()
+ showLineChart()
+ showHeatMap()

SummaryView
+ showDaily()
+ showWeekly()
+ showMonthly()
+ showYearly()

ThemeView
+ applyTheme()
+ getColorPalette

DASHBOARD INTEGRATION LAYER

DashboardService

FinanceService financeService
HealthService healthService
LearningService learningService
RelationshipService relationshipService
PatternAnalyzer patternAnalyzer

showLifeOverview(): void
calculateLifeBalanceScore(): int
findCorrelations(): Map<String, Double>
generateWeeklyReport(): String
generateMonthlyReport(): String
showTrends(): void
exportAllData(): void

SERVICE LAYER

FinanceService

List<Expense>
List<Income>
List<Budget>

addExpense()
getMonthlySpending()
calculateSavingsRate()
predictNextMonth()
getBudgetStatus()
findSpendingPatterns()

HealthService

List<Workout>
List<Meal>
List<Sleep>
List<Mood>

addWorkout()
getWorkoutsThisWeek()
calculateAverageSleep()
trackWeightProgress()
suggestWorkout()

LearningService

List<StudySession>
List<Book>
List<Skill>

addSession()
getStudyHours()
caluclateComprehension()
identifyWeakSpots()
recommendNextTopic()

RelationshipService

List<Contact>
List<Interactions>

addContact()
logInteraction()
getContactsByFrequency()
calculateStrength()
suggestFollowups()

PatternAnalyzer

List<?> data

findTrends()
calculateCorrelation()
predictNext()
identifyAnomalies()

MODEL LAYER

Expense	Income	Budget	Workout	Meal
<ul style="list-style-type: none"> - String: id - double: amount - Category: category - Localdate: date - String description 	<ul style="list-style-type: none"> - String: id - double: amount - String source - LocalDate date - boolean recur 	<ul style="list-style-type: none"> - String: id - String: name - double: limit - double spent - String period 	<ul style="list-style-type: none"> - String: id - String: exercise - int: duration - int sets - int reps - LocalDate date 	<ul style="list-style-type: none"> - String: id - String: name - int: calories - MealType type - LocalDateTime date
Sleep	StudySession	Measurement	Mood	Book
<ul style="list-style-type: none"> - String: id - double: hours - int: quality - LocalDate date - String notes 	<ul style="list-style-type: none"> - String: id - String subject - String: topic - int duration - int comprehension - LocalDateTime 	<ul style="list-style-type: none"> - String: id - double: weight - double: bodyFat - LocalDate date 	<ul style="list-style-type: none"> - String: id - MoodType: mood - int: energy - int stress - LocalDateTime 	<ul style="list-style-type: none"> - String: id - String :title - String: author - int pages - int pagesRead - int rating - LocalDate start - Localdate finish
Contact	Skill		Interaction	
<ul style="list-style-type: none"> - String: id - String name - String: email - String phone - LocalDate Birthday - String category 	<ul style="list-style-type: none"> - String: id - String: name - int: level - int hours 		<ul style="list-style-type: none"> - String: id - String: interaction - InteractionType: type - LocalDateTime - String notes 	

ENUMS LAYER

CategoryType	MealType	MoodType	Priority
FOOD	BREAKFAST	HAPPY	LOW
TRANSPORT	LUNCH	SAD	MEDIUM
ENTERTAINment	DINNER	ANGRY	HIGH
UTILITIES	SNACK	TIRED	CRITICAL
SHOPPING		STRESSED	
HEALTH		ENERGETIC	
EDUCATION		CALM	
SAVINGS			
PaymentMethod	InteractionType	WeekDay	Domain
CASH	CALL	MONDAY	FINANCE
CREDIT_CARD	TEXT	TUESDAY	HEALTH
DEBIT_CARD	EMAIL	WEDNESDAY	LEARNING
BANK_TRANSFER	MEETING	THURSDAY	RELATIONSHIP
	SOCIAL	FRIDAY	
	GIFT	SATURDAY	
		SUNDAY	

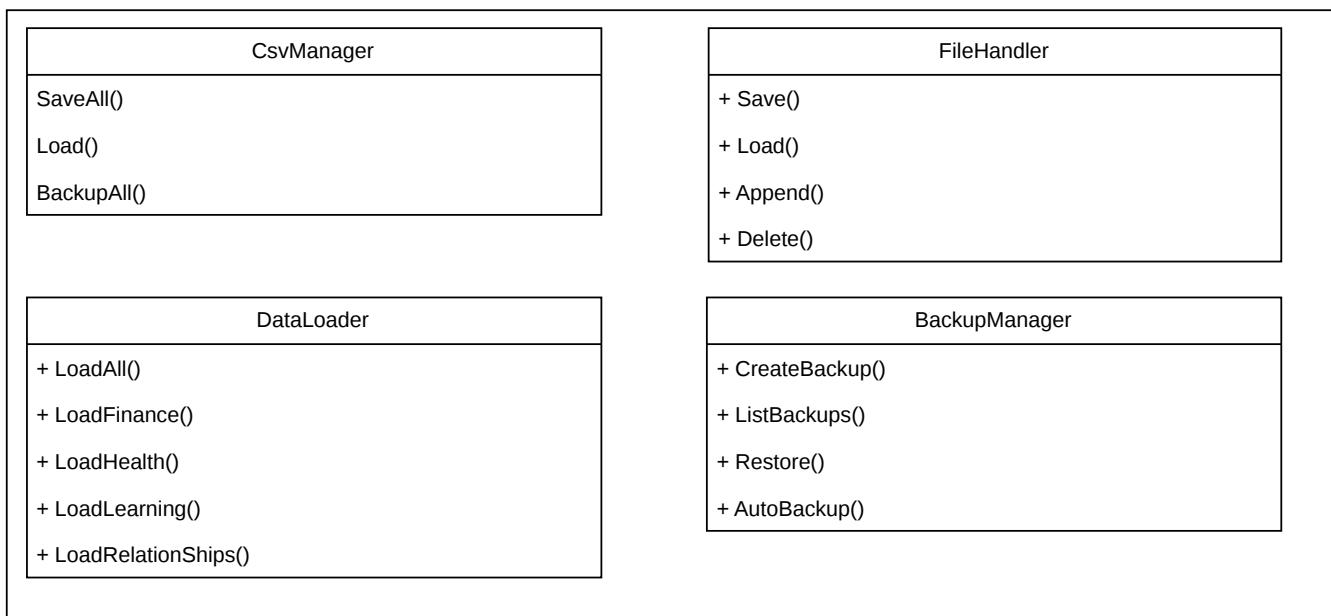
TEST LAYER (JUnit)

FinanceTest	HealthTest	LearningTest	RelationshipTest
TestAddExpense() TestCalculateSavingsRate() TestPredictNextMonth() TestBudgetStatus() TestFindPatterns()	TestAddWorkout() TestGetWorkoutThisWeek() TestAverageSleep() TestTrackWeight() TestSuggestedWorkout()	testAddSession() TestCalulateComprehension() TestIdentifyWeakSpots() TestRecommendedNextTopic	TestAddContact() TestLogInteraction() TestCalculateStrength() TestgetFollowUps()
ServiceTest	ModelTest	Dashboardtest	PersistenceTest
TestServiceIntegration() TestDataFlow() TestErrorHandling()	testExpenseCreation() TestWorkoutValidation() TestStudySession() TestContactCreation()	TestLifeBalanceScore() TestFindCorrelations() TestWeeklyReport()	TestSaveLoad() TestBackupRestore() TestFileNotFound() TestCorruptData()
ValidatorTest			
TestValidateAmount() TestValidateDate() TestValidateEmail()			

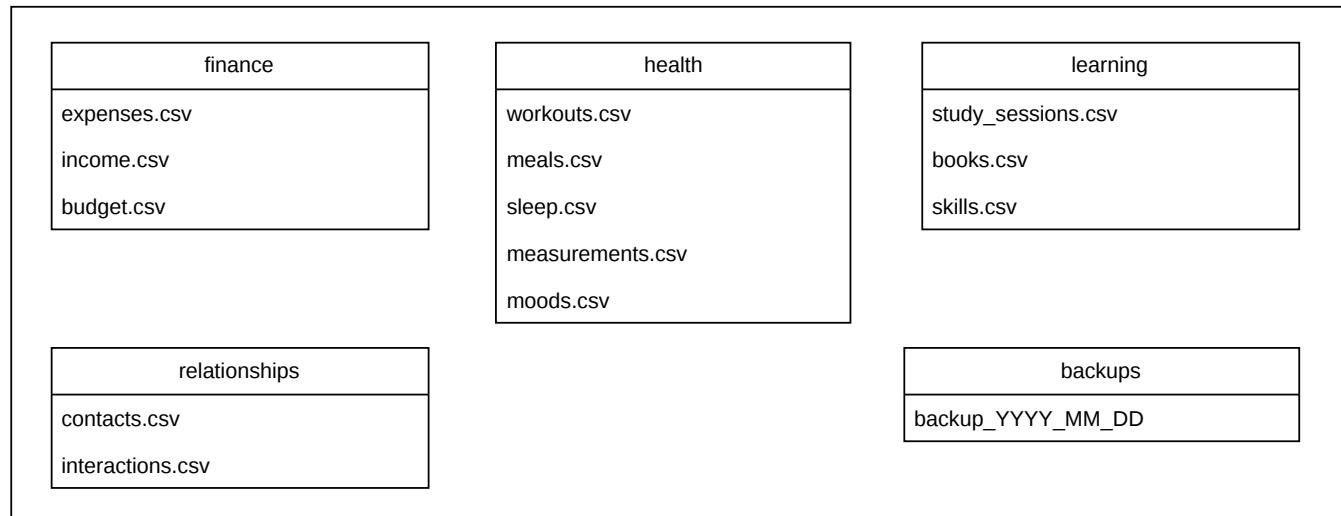
UTILS LAYER

ConsoleColors	ConsoleTheme	Validatiotor
RED GREEN BLUE YELLOW ORANGE PURPLE CYAN WHITE BLACK RESET	+ TITLE + SUCCESS + ERROR + WARNING + format()	ValidationFinance ValidationHealth ValidationLearning ValidationRelationship

PERSISTENCE LAYER



DATA LAYER



EXCEPTIONS LAYER

