Class key

-**Attributes** (all private, marked with -).
-**Methods** (all public, marked with +).

Insurance Record Class

-age: int
-sex: string
- bmi: float
- children: int
- smoker: string
- region: string
- charges: float

+ getAge(): int
+ setAge(age: int): void
+ getSex(): string
+ setSex(sex: string): void
+ getBmi(): float
+ setBmi(bmi: float): void
+ getChildren(): int
+ setChildren(children: int): void
+ isSmoker(): bool
+ setSmoker(smoker: string): void
+ getRegion(): string
+ setRegion(region: string): void
+ getCharges(): float
+ setCharges(charges: float): void
+ toString(): string

Driver Class

+ main(args: String[]): void
+ loadData(fileName: String): List<InsuranceRecord>
+ displayMenu(): void
+ processUserChoice(choice: int, records: List<InsuranceRecord>): void
+ printSummaryStatistics(records: List<InsuranceRecord>): void
+ showHistograms(records: List<InsuranceRecord>): void
+ runHypothesisTests(records: List<InsuranceRecord>): void
+ performRegression(records: List<InsuranceRecord>): void

Stats Calc Class

+count(records: List<InsuranceRecord>): int
+mean(records: List<InsuranceRecord>, attr: String): float
+stdDev(records: List<InsuranceRecord>, attr: String): float +min(records: List<InsuranceRecord>, attr: String): float
+max(records: List<InsuranceRecord>, attr: String): float
+percentile(records: List<InsuranceRecord>, attr: String, p: float): float
+ horizontalHistogram(records: List<InsuranceRecord>, attr: String): void
+ verticalHistogram(records: List<InsuranceRecord>, attr: String): void
+ countByChildren(records: List<InsuranceRecord>): Map<int, int>
+ smokerHistogram(records: List<InsuranceRecord>): void
+ isRegionFair(records: List<InsuranceRecord>): bool
+ testHypotheses(records: List<InsuranceRecord>): void
+ linearRegression(records: List<InsuranceRecord>, xAttr: String, yAttr: String): void