

CompPart
#string mName #double mPrice #string mManufacturer #int mPower #int mPerformanceIndex #int mPartType #string mCompatibility #int mSortType
+setName(string): void +setPrice(double): void +setManufacturer(string): void +setPower(int): void +setPerformanceIndex(int): void +setCompatibility(string): void +setSortType(int): void +getName(): string +getPrice(): int +getManufacturer(): string +getPower(): int +getPerformanceIndex(): int +getCompatibility(): string +getSortType(): int

HashedDatabaseHandler
-HashedDictionary<string, CompPart> dict -int loadFactor +int sumOfIndex +int largest +ofstream file
+getDict(): HashedDictionary<string, CompPart> +normalize(string): static string +add(CompPart): void +calculateLoadFactor(): static void +getLoadFactor(): static int +getLongestList(): static int +getAverageNodes(): static double +writeHashToFile(std::string): static void

BSTHandler
-BinarySearchTree<CompPart> priceBST -BinarySearchTree<CompPart> performanceBST -int priceLoadFactor -int performanceLoadFactor +SinglyLinkedList<CompPart> list +int typePart +double budget +ostream file
+add(CompPart): void +remove(CompPart): bool +calculateFactor(): void +getPriceLoadFactor(): int +getPerformanceLoadFactor():int +getListByPrice(int, double): SinglyLinkedList +getListByPerformance(int, double): SinglyLinkedList +displayListByPrice(int): void +displayListByPerformace(int): void +displayListByPriceIndented(): void +displayListByPerformanceIndented(): void +displayListByPrice(): void +displayListByPerformance(): void +updateFile(string): void

HashedDictionary
-HashedEntry<KeyType, ItemType> hashTable -size_t itemCount -size_t hashTableSize -size_t DEFAULT_SIZE -int loadFactor
-getHashIndex(int): size_t -getHashIndex(string): size_t -isPrime(size_t): bool +clear(): void +isEmpty(): void +getNumberOfItems(): size_t +getSize(): size_t +getLoadFactor(): int +add(KeyType, ItemType): bool +remove(KeyType): bool +getItem(KeyType): ItemType +contains(KeyType):bool +traverse(visit(ItemType), size_t): void +traverseIndex(visit(ItemType), size_t): void