# <<interface>> Password

- + generateSecurePassword(password: String, salt: String): String
- + getSalt(): String
- + hash(password: char[], salt: byte[]): byte[]
- + verifyUserPassword(providedPassword: String, securePassword: String, salt: String): boolean

# <<interface>> Database

- + connect(): Connection
- + execute(sql: String, conn: Connection): void
- + close(conn: Connection): void
- + create\_tables(): void
- + create\_person\_entry(person: Person): void
- + create\_contract\_entry(contract: Vertrag, person\_id: String): void
- + get\_person\_by\_id(id: String): BasicPerson
- + get\_contract\_by\_id(id: String): void
- + update\_person\_by\_id(id: String, entry: String, value: String): void
- + update\_person\_by\_id(id: String, entry: String, value: long): void
- + update\_person\_by\_id(id: String, entry: String, value: int): void
- + delete\_person\_by\_id(id: String): void
- + update\_password\_by\_id(id: String, password: String): void
- + check\_id(id: String): boolean
- + check\_Login(id: String, providedPassword: String): boolean
- + check\_order\_number(orderNumber: String): boolean

#### implementation

### PasswordService

- ALPHABET: String {readOnly}
- ITERATIONS: int {readOnly}
- KEY\_LENGTH: int {readOnly}
- LENGTH: int {readOnly}
- RANDOM: Random {readOnly}
- + generateSecurePassword(password: String, salt: String): String
- + getSalt(): String
- + hash(password: char[], salt: byte[]): byte[]
- + verifyUserPassword(providedPassword: String, securePassword: String, salt: String): boolean

### SQLiteService

- + URL: String {readOnly}
- + connect(): Connection
- + execute(sql: String, conn: Connection): void
- + close(conn: Connection): void
- + create\_tables(): void
- + create\_person\_entry(person: Person): void
- + create\_contract\_entry(contract: Vertrag, person\_id: String): void
- + get\_person\_by\_id(id: String): BasicPerson
- + get\_contract\_by\_id(id: String): void
- + update\_person\_by\_id(id: String, entry: String, value: String): void
- + update\_person\_by\_id(id: String, entry: String, value: long): void
- + update\_person\_by\_id(id: String, entry: String, value: int): void
- + delete\_person\_by\_id(id: String): void
- + update\_password\_by\_id(id: String, password: String): void
- + check\_id(id: String): boolean
- + check\_Login(id: String, providedPassword: String): boolean
- + check\_order\_number(orderNumber: String): boolean