# Mail Database Project

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### **Main Entities**

- User (Mailroom Employee)
- Package
- Database
- Database Tables
- $\bullet \ Application/System$
- Email
- $\bullet$  Cadet

# Attributes

### User

- Username
- Password
- Access Priviledge

# Package

- Tracking Number
- Addressee
- Address

# Database

- Name
- $\bullet$  Filepath
- Sqlite3 Connection
- Sqlite3 Cursor
- Tables

# Table

- Properties
- Name

# Email

- Addressee
- Subject
- Content

# ${\bf System}$

• GUI state

# Cadet

- Name
- $\bullet$  Email
- Box Number
- $\bullet$  Graduation Date

# Relationships

A single database will contain several tables. A single table will contain several Cadets. A single table will contain several packages. A single table will contain several users. A single cadet can be associated with several packages. A single cadet can receive several emails. A single package can be associated with several emails. A single application can be associated with several users. A single application is associated with at least 3 database tables.

### Constraints

???

# Domain Model

# Class Diagram

#### User

Username : string Password : string AccessPrivilege : string

### Package

TrackingNumber : stringAddressee : stringAddress : string

#### Database

Name: stringFilepath: stringSQLite3ConnectionSQLite3CursorTables: Table[]

### Table

- Properties : string - Name : string

- Cadets : Cadet[] - Packages : Package[] - Users : User[]

### Email

Addressee : stringSubject : stringContent : string

### System

- GUIState :  $\operatorname{string}$ 

- Users : User[] - Databases : Database[] - Tables : Table[]

### Cadet

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Name: stringEmail: stringBoxNumber: stringGraduationDate: date

- Packages : Package[] - Emails : Email[]