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| Project name | Simple Warehouse Management System (SWMS) |

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| 1. Short project description (Business needs and system features) |
| **Simple Warehouse Management System (SWMS)** is asoftware application to support and optimize warehouse functionality. The system will be developed as a **MVC** using **Tkinter** as front-end, and **JSON file persistence** technologies. Also, we will be using **cryptography** for the user’s password encryption.  The main user roles are:  • **Operator** – can manage the warehouses, purchase and sell products.  • **Administrator** – can manage/edit **users**, as well as **warehouses, products, suppliers, clients**. |

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| 1. Main Use Cases / Scenarios | | |
| **Use case name** | **Brief Descriptions** | **Actors Involved** |
| * 1. **User Management** | Create new user with username, password, type and status.  Delete users or edit their username, password, type and status. | Administrator |
| * 1. **Warehouse Management** | Create new warehouse with name, capacity, type and status.  Delete warehouse or edit their name, capacity, type and status. | Administrator |
| * 1. **Product Management** | Create new product with name, type, buy price, sell price, quantity and assigned warehouse.  Delete product or edit its name, type, buy price, sell price, quantity and assigned warehouse. | Administrator |
| * 1. **Manage Suppliers** | Create new supplier with name, IBAN, phone and status.  Delete supplier or edit his name, IBAN, phone and status. | Administrator |
| * 1. **Manage Clients** | Create new client with name, IBAN, phone and status.  Delete client or edit his name, IBAN, phone and status. | Administrator |
| * 1. **View and Manage Warehouse** | View current stocks per warehouse and add/remove assets from/to warehouses. | All Users |
| * 1. **Purchases** | Purchase new products from suppliers. | All Users |
| * 1. **Sales** | Sell products to clients. | All Users |

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| 1. Main Views | | |
| **View name** | **Brief Descriptions** | |
| * 1. **Manage Users, Warehouses, Products, Suppliers, Clients** | Administrators can create/modify/delete users. | Administrator |
| * 1. **View and Manage Warehouse** | The Users can view current stocks per warehouse and manage them. | All Users |
| * 1. **Purchases** | Users can purchase new products from suppliers. | All Users |
| * 1. **Sales** | Users can sell products to clients. | All Users |
| * 1. **Transactions** | Users can view transactions (purchases & sales) history. | All Users |

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| 1. Main Entities | |
| **Entity name** | **Operations with them** |
| * 1. **User** | Create, Modify, Delete, Login, Logout. |
| * 1. **Warehouse** | Create, Modify, Delete, Store different products. |
| * 1. **Product** | Create, Modify, Delete, Move products from one warehouse to another. |
| * 1. **Transaction** | Create, Modify, Delete, Preview. |
| * 1. **Supplier** | Create, Modify, Delete, Operators buy products from them. |
| * 1. **Client** | Create, Modify, Delete, Operators sell products to them. |