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| Project Name | Simple Warehouse Management System (SWMS) |
| 1. Short project description (Business needs and system features) | |
| Simple Warehouse Management System (SWMS) is a software 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. | Administrators |
| * 1. **Warehouse Management** | Create new warehouse with name, capacity, type and status.  Delete warehouse or edit their name, capacity, type and status. | Administrators |
| * 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. | Administrators |
| * 1. **Suppliers Management** | Create new supplier with name, IBAN, phone and status.  Delete supplier or edit his name, IBAN, phone and status. | Administrators |
| * 1. **Clients Management** | Create new client with name, IBAN, phone and status.  Delete client or edit his name, IBAN, phone and status. | Administrators |
| * 1. **View and Manage**   **Warehouses** | 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. | AllUsers |
| * 1. Invoices | Create invoice for purchase or sale | All Users |

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| 1. Main Views | | |
| **View name** | **Brief Descriptions** | **Actors Involved** |
| * 1. **Home** | Presents some information about the program and buttons to access the other views. | All Users |
| * 1. **Manage Users,**   **Warehouses,**  **Products,**  **Suppliers, Clients** | Provides ability to create/modify/delete users, warehouses, products, suppliers, clients. | Administrators |
| * 1. **View and Manage**   **Warehouse** | Presents warehouses stocks and give the ability to manage them. | All Users |
| * 1. **Purchases** | Provides ability to purchase new products from suppliers. | All Users |
| * 1. **Sales** | Provides ability to sell products to clients. | All Users |
| * 1. Transactions | Presents existing transactions (purchases & sales) history.  Generate Invoice for desired transaction. | 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 and Move products from one warehouse to another. |
| * 1. **Supplier** | Create, Modify, Delete, Operators buy products from them. |
| * 1. Client | Create, Modify, Delete, Operators sell products to them. |