1. **Requirements Linkage Traceability Matrix**

In the project, we have a partial list of requirements below:

1. **User Registration and Authentication**
   1. The system shall allow users to register with their personal information, including name, email, and password.
   2. Users must authenticate themselves with their registered email and password before accessing the system.
   3. The system shall store user registration information securely.
2. **Browse and Search Food Items**
   1. Users should be able to browse and search for food items on the platform.
   2. The system shall provide a search bar for users to enter keywords and filter food items by category, price, and other relevant attributes.
   3. The system shall display a list of food items with details, including name, price, description, and images.
3. **Order Placement and Payment**
   1. Users should be able to add food items to their cart and place orders.
   2. The system shall calculate the total order amount, including taxes and delivery fees, if applicable.
   3. Users shall be able to make online payments through various payment methods, such as credit cards or digital wallets.
4. **Order Tracking and History**
   1. Users should be able to track the status of their orders, from order placement to delivery.
   2. The system shall maintain a history of users' previous orders, including order details, dates, and payment information.
   3. Users can view their order history and reorder previous orders.

The Requirements Linkage Traceability Matrix is illustrated as below:

\*R.ID: Requirement ID

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| R.ID | 1 | 1.1 | 1.2 | 1.3 | 2 | 2.1 | 2.2 | 2.3 | 3 | 3.1 | 3.2 | 3.3 | 4 | 4.1 | 4.2 | 4.3 |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.2 |  | R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | U |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.2 |  |  |  |  |  | R |  |  |  |  |  |  |  |  |  |  |
| 2.3 |  |  |  |  |  |  | R |  |  |  |  |  |  |  |  |  |
| 3 | U |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.2 |  |  |  |  |  |  |  |  |  | R |  |  |  |  |  |  |
| 3.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | U |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R |  |

The simplified table after eliminating the blank entries:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| R.ID | 1 | 1.1 | 2.1 | 2.2 | 3.1 | 4.2 |
| 1.2 |  | R |  |  |  |  |
| 2 | U |  |  |  |  |  |
| 2.2 |  |  | R |  |  |  |
| 2.3 |  |  |  | R |  |  |
| 3 | U |  |  |  |  |  |
| 3.2 |  |  |  |  | R |  |
| 4 | U |  |  |  |  |  |
| 4.3 |  |  |  |  |  | R |

1. **Requirements Source Traceability Matrix**
2. **Requirements Stakeholder Traceability Matrix**