**CHAPTER 4**

**SYSTEM MODELING**

**4.1 Database Design**

**[Table 2: Registration]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| FIELD | DATATYPE | SIZE | CONSTRAINTS | DESCRIPTION |
| email\_id | Varchar2 | 30 | Primary key | User mail ID |
| firstname | Varchar2 | 15 |  | User first name |
| lastname | Varchar2 | 15 |  | User last name |
| password | Password | 10 |  | User password |
| dob | Date | 8 |  | Birth date of user |
| address | Varchar2 | Max |  | User address |
| pincode | Number | 6 |  | User pincode |
| isactive | Boolean | 1 |  | Checks whether the user is active |
| type | Varchar2 | 6 |  | User type |
| phone\_no | Number | 10 |  | User phone number |

**[Table 3: Product]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| FIELD | DATATYPE | SIZE | CONSTRAINTS | DESCRIPTION |
| product\_id | Number | 10 | Primary key | Product ID |
| price | Number | Max |  | Price |
| quantity | Number | Max |  | Quantity of product |
| weight | Number | Max |  | Weight of product |
| product\_name | Varchar2 | 15 |  | Name of product |
| rating | Varchar2 | 10 |  | Product rating |
| review | Varchar2 | 50 |  | Product review |
| image | Varchar2 | 30 |  | Imageof product |
| discount | Number | Max |  | Product discount |
| category | Varchar2 | 50 |  | Product category |
| cart\_id | Number | 10 | Foreign key | Cart ID of customer |

**[Table 4: Cart]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| FIELD | DATATYPE | SIZE | CONSTRAINTS | DESCRIPTION |
| cart\_id | Number | 10 | Primary key | Cart ID of customer |
| product\_id | Number | 10 | Foreign key | Product ID |
| email\_id | Varchar2 | 30 |  | User mail ID |
| total\_amount | Number | Max |  | Product amount |

**[Table 5: Payment]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| FIELD | DATATYPE | SIZE | CONSTRAINTS | DESCRIPTION |
| payment\_id | Number | 10 | Primary key | Payment ID |
| cart\_id | Number | 10 | Foreign key | Cart ID of customer |
| order\_id | Number | 10 | Foreign key | Order ID of product |
| product\_id | Number | 10 | Foreign key | Product ID |

**[Table 6: Order]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| FIELD | DATATYPE | SIZE | CONSTRAINTS | DESCRIPTION |
| order\_id | Number | 10 | Primary key | Order ID of product |
| product\_id | Number | 10 | Foreign key | Product ID |
| email\_id | Varchar2 | 30 | Foreign key | User mail ID |
| order\_date | Date | 8 |  | Order date |

**[Table 7: Return]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| FIELD | DATATYPE | SIZE | CONSTRAINTS | DESCRIPTION |
| return\_id | Number | 10 | Primary key | Return ID |
| order\_id | Number | 10 | Foreign key | Order ID of product |
| product\_id | Number | 10 | Foreign key | Product ID |

**[Table 8: Admin]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| FIELD | DATATYPE | SIZE | CONSTRAINTS | DESCRIPTION |
| admin\_id | Number | 10 | Primary key | ID of admin |
| email\_id | Varchar2 | 30 | Foreign key | Admin mail ID |
| password | Password | 10 |  | Password |
| admin\_name | Varchar2 | 20 |  | Name of admin |

**[Table 9: Category]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| FIELD | DATATYPE | SIZE | CONSTRAINTS | DESCRIPTION |
| category\_id | Number | 10 | Primary key | ID of category |
| category\_name | Varchar2 | 20 |  | Name of category |
| product\_id | Number | 10 | Foreign key | ID of product |