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| --- | --- | --- | --- |
| No | Class Name | Nouns | Verbs |
| 1 | User | username, fullname, email, password,  contact no, present address | sign in, sign out, account recovery, send notification, view cash details, cash management |
| 2 | Admin | back up question and answer, investment | adds/removes/edits salesperson, supplier and shareholder, manages product, manages maintenance expenditure, invests/withdraws/views cash, views transaction information, views customer information, grants/rejects permission, receives notification, pays salary, views loan table |
| 3 | Sign Up | username, fullname, email, password,  contact no, present address, permanent address, back up question and answer, date of recruitment, NID, date of birth, investment | data entry,validity check |
| 4 | Sign In | user name,password | match data,record login time |
| 5 | Sign Out | N/A | check running process, store last logout time |
| 6 | Account Recovery | N/A | ask questions, matches answer, sends confirmation code |
| 7 | System/interface | N/A | automate processes, communicate with actors |
| 8 | Authentication | N/A | select actions |
| 9 | Salesperson | spusername, spfullname, spemail, sppassword,spcontact no, sppresent address, spNID,sp date of recruitment, spsalary, spdate of birth | account recovery, sign in, sign out, manage customers, creates/views transaction information, manages product, notifies admin, sends request to suppliers, manages loan table, manages cash details |
| 10 | Shareholder | shusername, shfullname, shemail, shpassword, shcontact no, shpresent address, shNID,sp join date, sh investment | account recovery, sign in, sign out, invest cash, views cash details, withdraw cash |
| 11 | Validity Check | N/A | validity check |
| 12 | Database | N/A | stores/provides information |
| 13 | Product | product name, product id, product type, component, company name, cost price, selling price, manufacturing date, expiry date | N/A |
| 14 | Company | company name, company email, company number, company address | N/A |
| 15 | Supplier | supplier name, supplier address, supplier contact no, supplier joining date, supplier company name | receives notification |
| 16 | Product Transaction | transaction id, product name, product id, quantity, date, username of salesperson | N/A |
| 17 | Maintenance expenditure | exp. transaction id, exp. product name, exp. product id, exp. quantity, exp. date, exp. exp. username of salesperson, remarks | N/A |
| 18 | Notification | notification type, notification message, senders user name | N/A |
| 19 | Customer | customer name, customer NID, customer contact no, customer address, customer due amount | N/A |
| 20 | Alert | type, message, senders user name, receivers user name | N/A |
| 21 | Record | record id, record type, date of occurrence, amount, remarks | N/A |
| 22 | Graph | graph type, time span, profit, sale frequency, cash details, product group | N/A |
| 23 | Cash Details | assets, debtor’s amount, creditor’s amount, profit | N/A |