```mermaid
flowchart TB
    LoginMenu["Login Menu"]
    AccessDB(["Access DB to pull Usergroup ID"])
    Checks{"Checks user login credentials and usergroup id"}
    MainMenu["Main Menu"]
    NewCustomer["New Customer"]
    ConnectDB(["Connect to DB and create a new customer in the Customers table"])
    ValidateForum{"Validate forum fields ensuring no fields are missing."}
    Products["Products"]
    ValidateForumFields{"Validate forum fields"}
    ConnectDB2(["Connect to DB create products Products table"])
    ProcessTransaction["Process Transaction"]
    ViewModify["View/Modify/Transactions"]
    ExitApp["Exit application"]
    LoadsDatagrid(["Loads datagridview with products table contents"])
    SelectCustomer["Select customer record and select products from datagridview"]
    ForumListbox["forum with listbox containing all customers returns selected customer"]
    PaymentType{"User selects payment type"}
    LoadsCards(["Loads all cards available for selected customer"])
    SelectCard["User selects card to use to process payment"]
    ValidateFields{"Validate fields and return applicable errors"}
    AddTransaction(["Add transaction to transaction table."])

    LoginMenu --> AccessDB
    AccessDB --> Checks
    Checks -->|Invalid user credentials| LoginMenu
    Checks --> MainMenu
    MainMenu <--> NewCustomer
    ConnectDB --> NewCustomer
    NewCustomer <--> ValidateForum
    MainMenu <--> Products
    ValidateForumFields --> Products
    MainMenu <--> ProcessTransaction
    MainMenu --> ViewModify
    MainMenu --> ExitApp
    ProcessTransaction --> LoadsDatagrid
    LoadsDatagrid --> SelectCustomer
    ForumListbox <--> SelectCustomer
    SelectCustomer --> PaymentType
    PaymentType -->|Card Selected| LoadsCards
    PaymentType -->|Cash Selected| ValidateFields
    LoadsCards --> SelectCard
    ValidateFields --> AddTransaction
    SelectCard --> AddTransaction
    AddTransaction --> ProcessTransaction
```

Login Menu → **Access DB to pull Usergroup ID** → **Checks user login credentials and usergroup id**

- Invalid user credentials → Login Menu
- → Main Menu

Main Menu connects to:
- New Customer (Connect to DB and create a new customer in the Customers table / Validate forum fields ensuring no fields are missing.)
- Products (Validate forum fields / Connect to DB create products Products table)
- Process Transaction
- View/Modify/Transactions
- Exit application

Process Transaction → Loads datagridview with products table contents → Select customer record and select products from datagridview (forum with listbox containing all customers returns selected customer) → User selects payment type

- Card Selected → Loads all cards available for selected customer → User selects card to use to process payment
- Cash Selected → Validate fields and return applicable errors

→ Add transaction to transaction table.

Connect
DB and
create a
new
product in
products
table