ER Model Description

Entities:

- **Credentials- Entity that manages the credentials of user accounts.**

  - **<u>username</u>** - Primary key of the entity; it represents the username of each user account
  - password - User account's password

- **Account - Entity that manages all the user accounts registered on the application. It holds information related to each user.**

  - **<u>aid</u>** - Primary key of the entity; it represents a unique id for each account.
  - **afirst** - User's first name
  - **alast** - User's last name
  - **email** - User's email
  - **{phone}** - User's phone numbers associated to an account

- **Address - Entity that establishes an account as an administrator's account.**

  - **<u>addId</u>** - Primary key of the entity. It represents a unique id for the addresses.
  - **street** - Address street
  - **number** - Address number
  - **unit** - Address unit
  - **zipcode** - Address zipcode

- **City - Entity that establishes all the cities where transactions can take place. It also serves to establish all the cities possible that users can designate as their current city.**

  - **<u>cname</u>** - Primary key of the entity. It represents the name of the city

- **Region - Entity for managing the regions in which suppliers are able to supply resources and requesters are able to request resources.**

  - **<u>rname</u>** - Unique name for each region

- **Supplier- Entity that establishes an account as a supplier account.**

  - **<u>sid</u>** - Primary key of the entity. It references the id of the user's account on the Account entity.

- **Administrator - Entity that establishes an account as an administrator's account.**

  - **aid** - Primary key of the entity. It references the id of the user's account on the Account entity.

- **Requester - Entity that establishes an account as a requester account.**

  - **rid** - Primary key of the entity. It references the id of the user's account on the Account entity.

- **Resource - Entity to handle the resources within the application. Suppliers can supply these resource. Each resource can be identified and browsed by several attributes.**

  - **rsid** - Unique id for each resource
  - **rsname** - Name identifier for each resource
  - **rdescription** - Description for each resource
  - **r_changed_date** - Date on which the resource was last updated

- **Keyword - Entity that establishes an account as an administrator's account.**

  - **kid** - Primary key of the entity. It represents a unique id for each keyword.

- **Transaction - Entity to handle the transactions within the application. This transaction contains it information and is related to the supplier, requester, resource and bank_account of the transaction.**

  - **tid** - Unique id for each transaction
  - **tprice** - price supplier ask for the transaction
  - **tqty** - quantity of resource involved in the transaction
  - **tdate** - date the transaction was executed
  - **tstatus** - status of the given transactions

- **Order_Info - Entity to handle the orders within the application This order contain the information that came as a result of all the transactions related to it.**
  - **oid** - unique id for each order
  - **odate -** date for the order actual status
  - **oprice -** price for the total order
  - **ostatus -** status of the order

- **Payment - Entity to handle the payment method used to pay an order**
  - **payid -** unique id for the payment

- **Cash - Entity to handle the cash payments**
  - <u>**cashid**</u> **-** unique id for the cash payment

- **Credit_Card - Entity to handle the credit cards type payments**
  - <u>**cid**</u> **-** unique id for the credit card payment
  - **card_number -** credit card number
  - **security_code -** credit card security code
  - **ccname -** credit card name
  - **exp_date -** credit card expiration date

- **Bank_Account - Entity to handle the suppliers bank accounts**
  - <u>**bid**</u> **-** unique bank account id
  - **routing -** routing number
  - **accountNumber -** account number for the bank account
  - **BankName -** bank name

Relationships

- **Supplies - Relationship between supplier and resource. It is created when a supplier supply a resource. This is useful in order to find who supply a resource or what supply a supplier.**

  - **rqty** - quantity of the supply
  - **rprice** - price of the supply
  - **r_supply_date** - date the resource was supplied