Users

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| --- | --- | --- | --- | --- | --- |
| Name | Description | Data Type | Constraint | Null Value | Remarks |
| userID | User identifier | int | Primary Key | No | Unique identifier, auto-generated |
| userName | Name of the user | varchar(255) |  | No |  |
| loginID | A unique alpha-numeric code used for logging in to the system | varchar(255) |  | No |  |
| password | The user’s password to assist in authentication of the logging in process. | varchar(255) |  | No |  |
| contactNumber | User’s contact number that includes the country/ area code. | varchar(20) |  | No | Eg. +6591234567 |
| balance | The total current amount that contains in the user’s account. | money |  | No | Default amount : 0 |
| accountNumber | An identifier for an account | char(10) |  | No | Always 10 digit. Unique identifier, auto generated. |
| limitDay | The limit that the user sets for the amount that the account is able to spend daily. | money |  | Yes |  |
| limitWeek | The limit that the user sets for the amount that the account is able to spend weekly. | money |  | Yes | Default limitDay x 7 (if limitDay != null) |
| limitMonth | The limit that the user sets for the amount that the account is able to spend monthly | money |  | Yes | Default limitDay x number of days in that month (if limitDay != null) |
| faceid | An alternate solution for authentication instead of loginID and password. | varchar(255) |  | Yes | Bit64 code (auto- generated) |
| digitalToken | An authentication key to allow the user to transfer money out of his/her account (only here because it is a banking feature) | char(20) |  | Yes | Bit64 code (auto-generated) |

Cards

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| --- | --- | --- | --- | --- | --- |
| Name | Description | Data Type | Constraint | Null Value | Remarks |
| cardID | Card identifier | int | Primary Key | No | Unique identifier auto generated. |
| userID | User identifier to each card | int | Foreign Key -> Users (userID) | No |  |
| cardNumber | An identifier for a card that matches with the account when making payment (with cvv and expdate) | char(16) |  | No | 16 digit, auto generated. |
| cVV | An identifier for a card that matches with the account when making payment (with cardNumber and expDate) | char(3) |  | No | 3 digit, auto generated. |
| expDate | An identifier for a card that matches with the account when making payment (with cardNumber and cVV) | datetime |  | No | 01/MM/YY |
| cardType | The type of card | varchar(16) |  | No | Debit / Credit  Frank card etc (follow OCBC) |
| billingAddress | The address of the user that the card is associated with. | varchar(255) |  | No | Local address |

ActivityHistory

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| --- | --- | --- | --- | --- | --- |
| Name | Description | Data Type | Constraint | Null Value | Remarks |
| recordID | Unique identifier for record of activity of a user performed on the OCBC application | int | Primary Key | No | Unique identifier, auto-generated.  Only for login users. |
| activityTime | The initial time recorded that the activity was performed. | datetime |  | No | dd/MM/yyyy hh:mm:ss |
| description | A small description of the activity performed by the user. | varchar(255) |  | No |  |
| userID | Identifier of the user that performed the action. | int | Foreign Key -> Users(userID) | No |  |

TransactionHistory

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Description | Data Type | Constraint | Null Value | Remarks |
| recordID | Unique identifier for record of transaction performed by the user. | int | Primary Key | No | Unique identifier, auto generated. |
| transactionTime | The initial time recorded that the activity was performed. | datetime |  | No | dd/MM/yy hh:mm:ss |
| description | A small descrition of the transaction performed by the user. | varchar(255) |  | No |  |
| senderID | Identifier of the user that transferred. | int | Foreign Key -> Users(userID) | Yes |  |
| receiverID | Identifier of the user that received. | int | Foreign Key -> Users(userID) | No |  |
| amount | The amount that the transaction took place. | money |  | No |  |
| status | Status of transfer | char(1) | Values : 1 – transaction completed  2 – transaction pending  3 – transaction failed | No | Default value : 2 |

SpecialNeeds

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| --- | --- | --- | --- | --- | --- |
| Name | Description | Data Type | Constraint | Null Value | Remarks |
| recordID | Unique identifier for record of the users with special needs. | int | Primary Key | No | Unique identifier, auto generated. |
| userID | Identifier of the user with special needs. | int | Foreign Key -> Users(userID) | No |  |
| helperID | Identifier of the helper who will be associated with the user with special needs (userID). | int | Foreign Key -> Users(userID) | Yes |  |
| type | The type of special needs. | varchar(255) | Values : 1 – minor ASD  2 – mid ASD  3 – servere ASD  4 – Learning Disabled | No | No default value. |