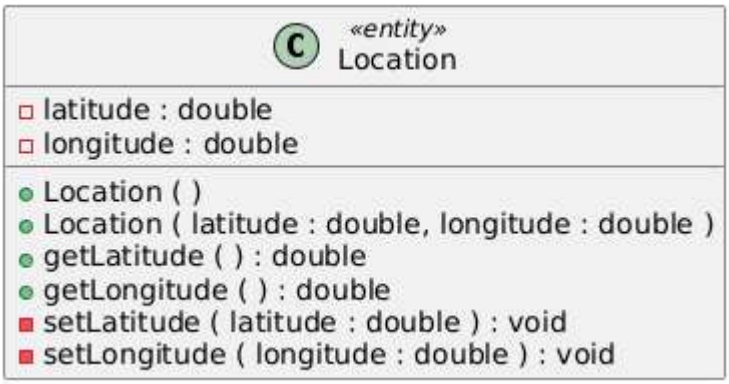
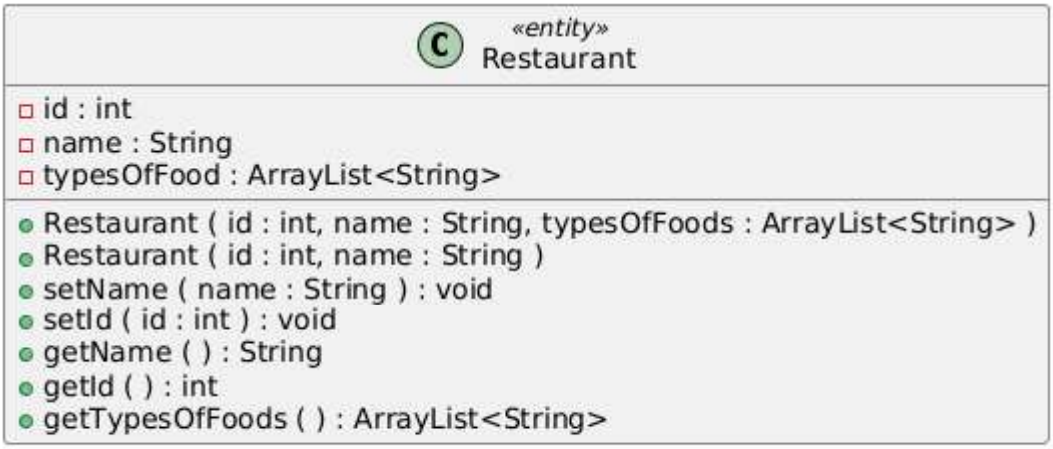
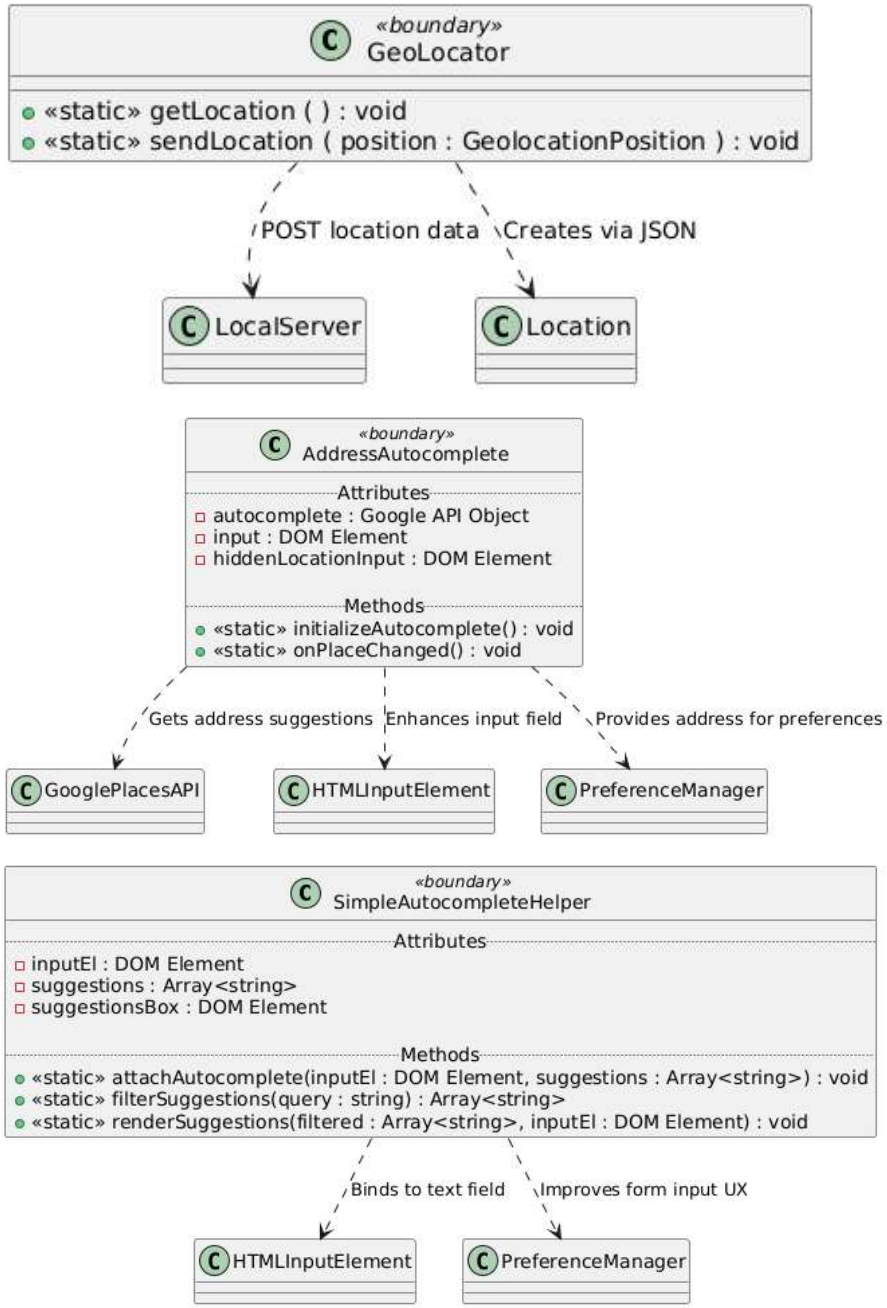
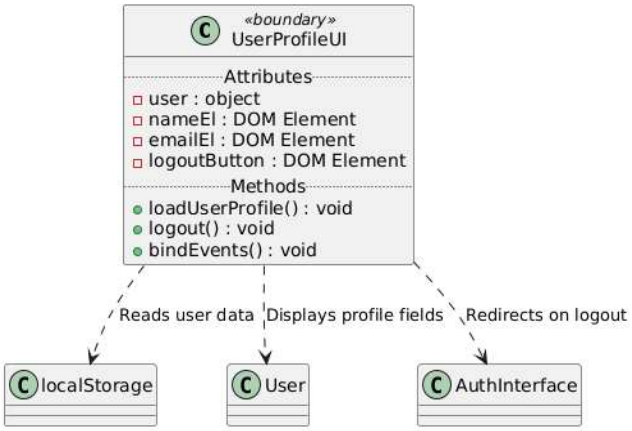

«entity»
Location
latitude : double
longitude : double
Location ( )
Location (latitude : double, longitude : double)
getLatitude ( ) : double
getLongitude ( ) : double
setLatitude (latitude : double) : void
setLongitude (longitude : double) : void

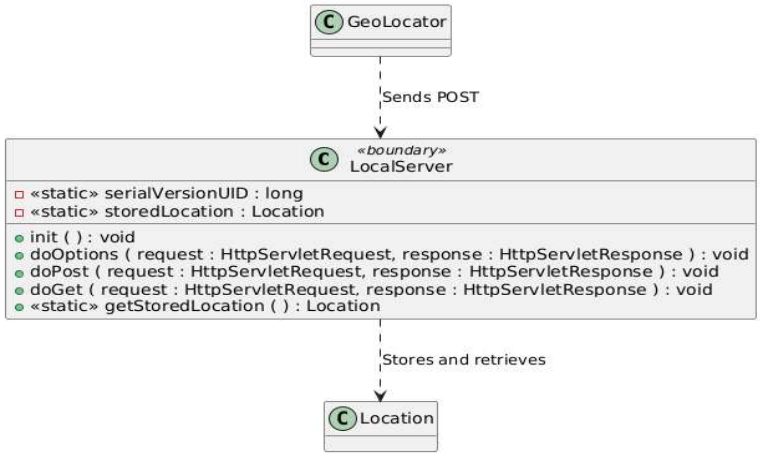
«entity»
User
id : int
firstName : String
lastName : String
email : String
password : String
tripID : int
favourites : ArrayList<String>
searchHistory : String[]
preferences : Map<String, Object>
User (id : int, firstName : String, lastName : String, email : String, password : String, radius : float, searchHistory : String[], tripID : int)
User (id : int, firstName : String, lastName : String, email : String, password : String, tripID : int)
getId ( ) : int
getTripID ( ) : int
getEmail ( ) : String
getPassword ( ) : String
getFirstName ( ) : String
getLastName ( ) : String
getFavourites ( ) : List<String>
getPreferences ( ) : Map<String, Object>
setID (id : int) : void
setTripID (tripID : int) : void
setEmail (email : String) : void
setPassword (password : String) : void
setFirstName (firstName : String) : void
setLastName (lastName : String) : void
removeFavourites (restaurant : String, favourites : ArrayList<String>) : void
addToFavourites (restaurant : String, favourites : ArrayList<String>) : void
updateSearchHistory (history : String[]) : String[]
addToSearchHistory (restaurant : String, history : String[]) : void
viewSearchHistory ( ) : String[]
clearSearchHistory ( ) : String[]
updatePreferences (priceRange : String, radius : String, cuisine : List<String>) : void

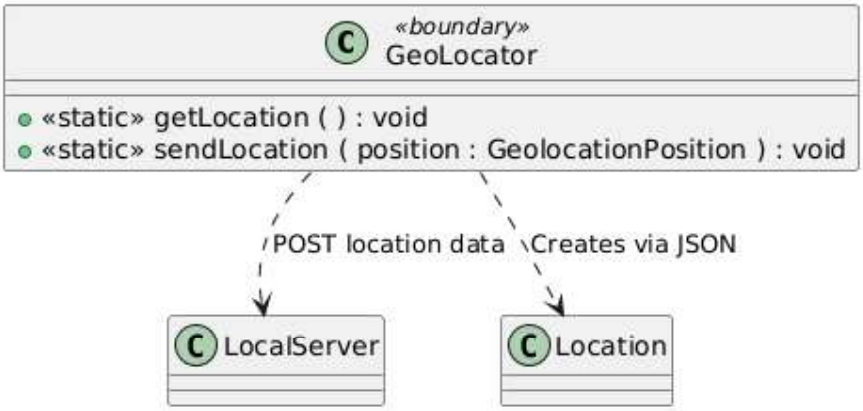

«entity»
Restaurant
id : int
name : String
typesOfFood : ArrayList<String>
Restaurant (id : int, name : String, typesOfFoods : ArrayList<String>)
Restaurant (id : int, name : String)
setName (name : String) : void
setId (id : int) : void
getName ( ) : String
getId ( ) : int
getTypesOfFoods ( ) : ArrayList<String>

Boundary and Control Class Diagram

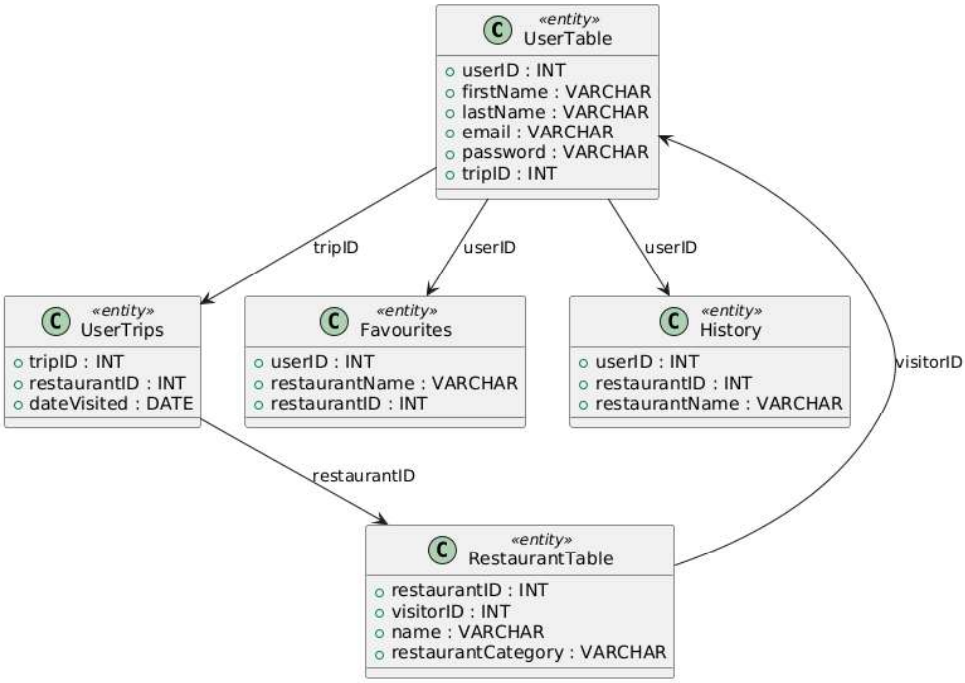








Database Interaction Class Diagram



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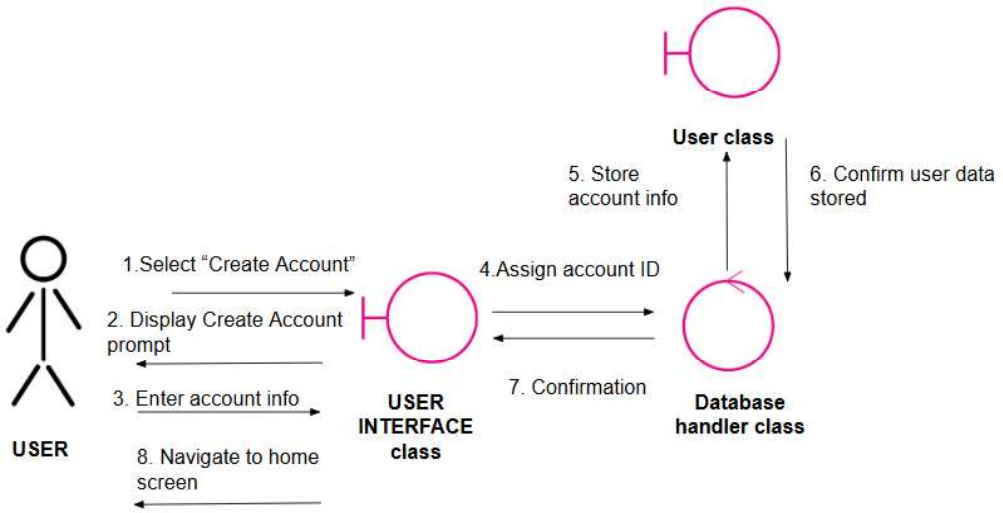
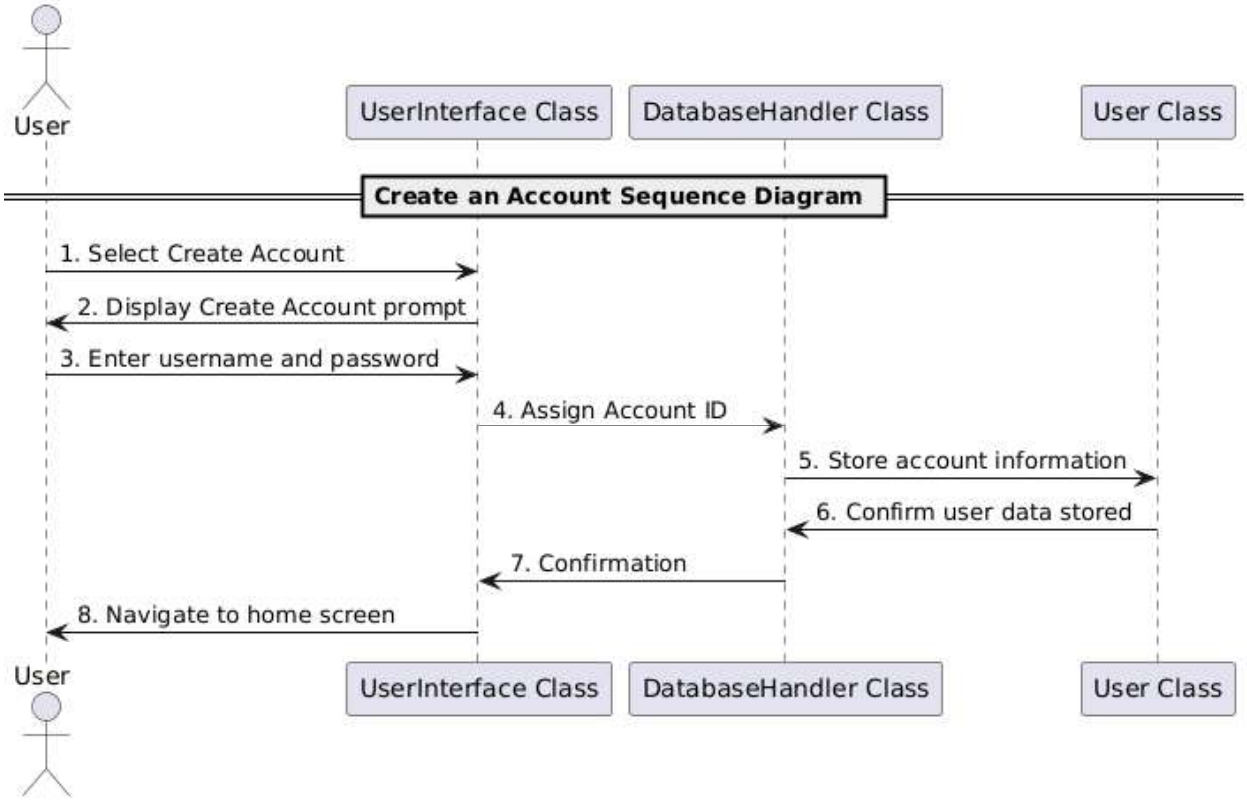
6. Interaction Modeling

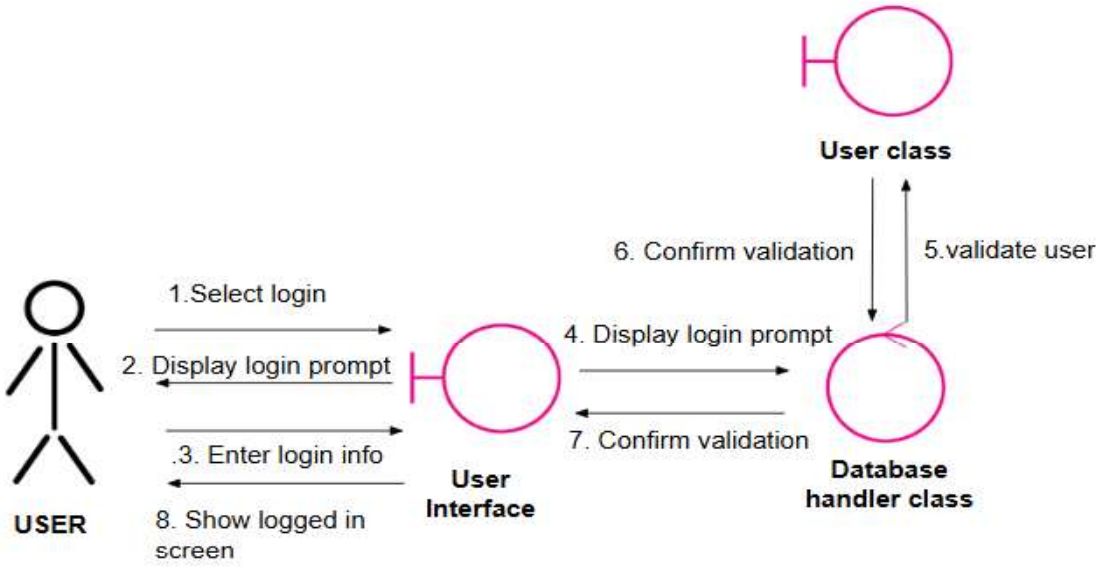
6.1 Communication and Sequence Diagrams:

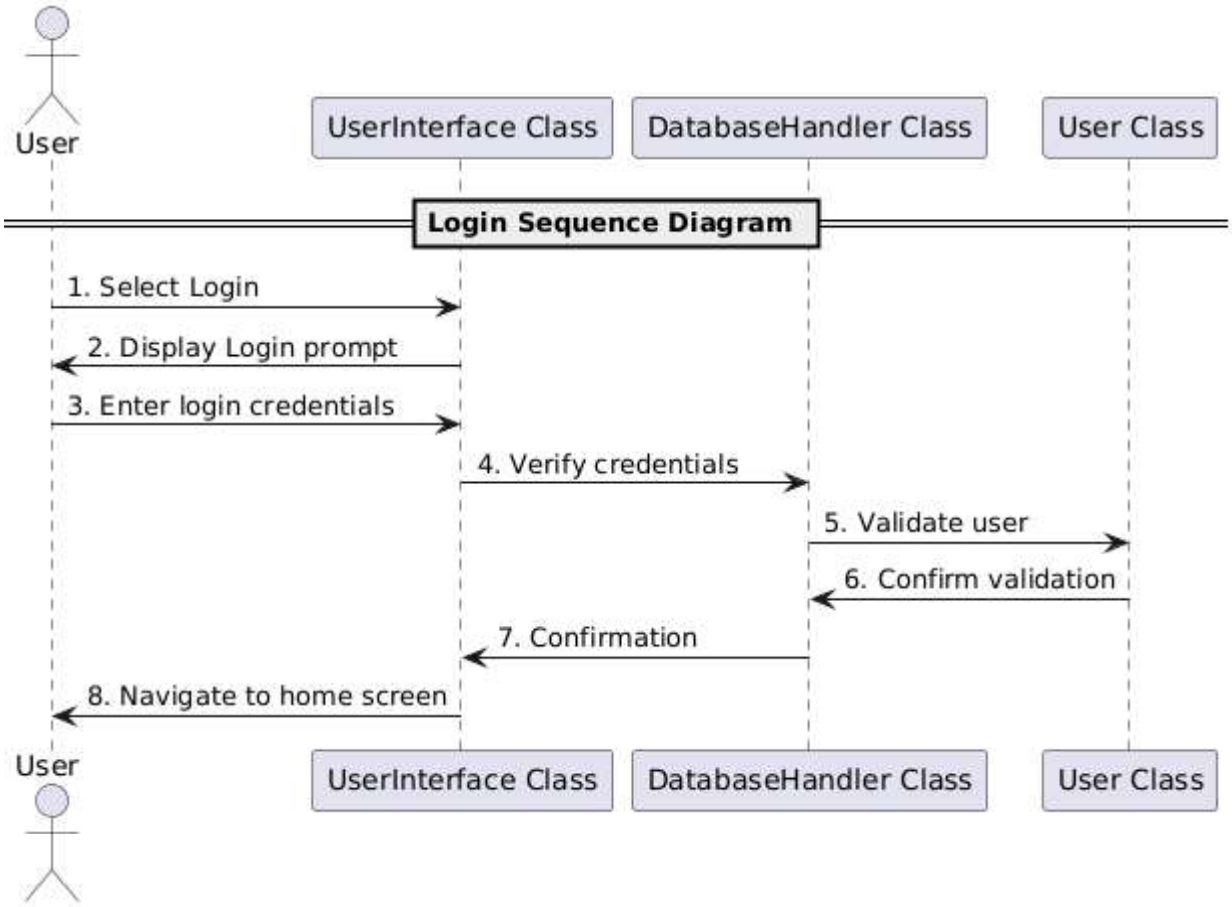
2.0:Create an account


User class
5. Store account info
6. Confirm user data stored
1.Select "Create Account"
4.Assign account ID
2. Display Create Account prompt
7. Confirmation
3. Enter account info
USER
USER INTERFACE class
Database handler class
8. Navigate to home screen

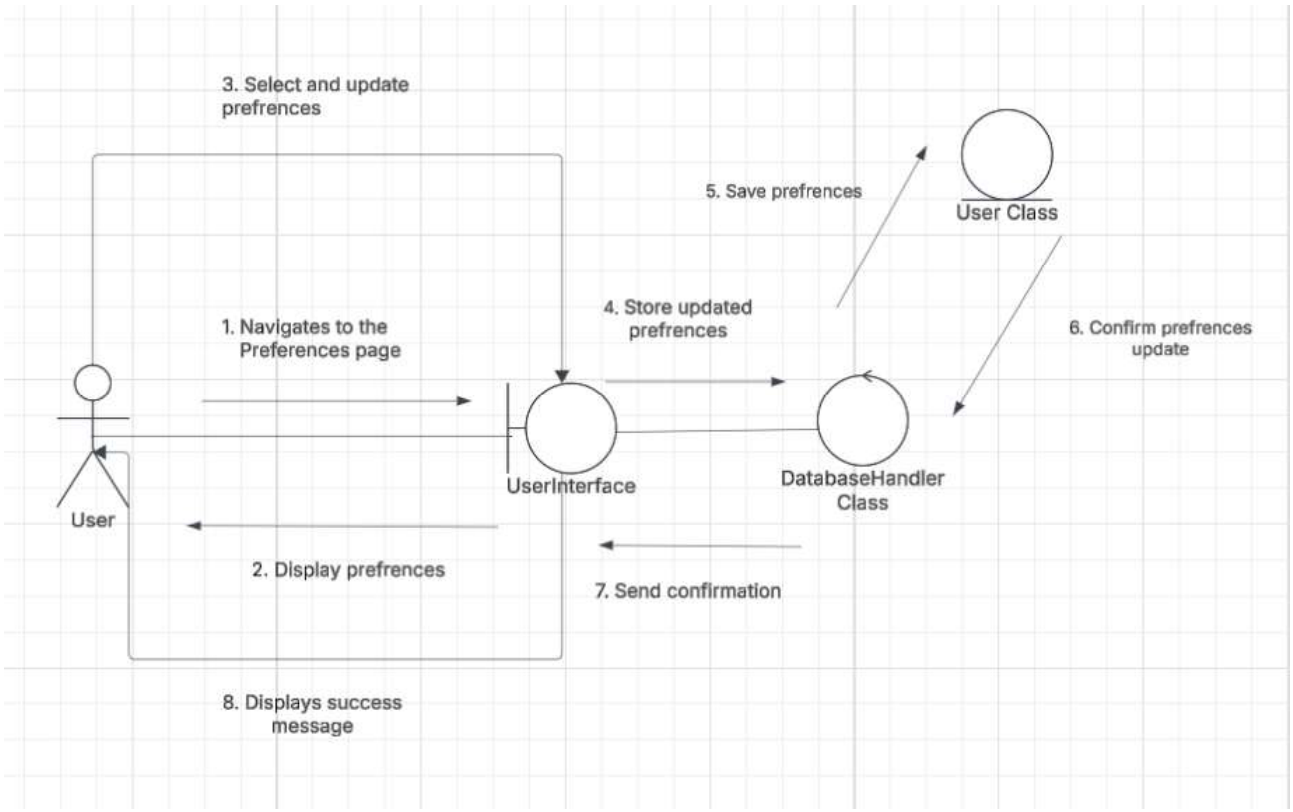

User
UserInterface Class
DatabaseHandler Class
User Class
Create an Account Sequence Diagram
1. Select Create Account
2. Display Create Account prompt
3. Enter username and password
4. Assign Account ID
5. Store account information
6. Confirm user data stored
7. Confirmation
8. Navigate to home screen
User
UserInterface Class
DatabaseHandler Class
User Class

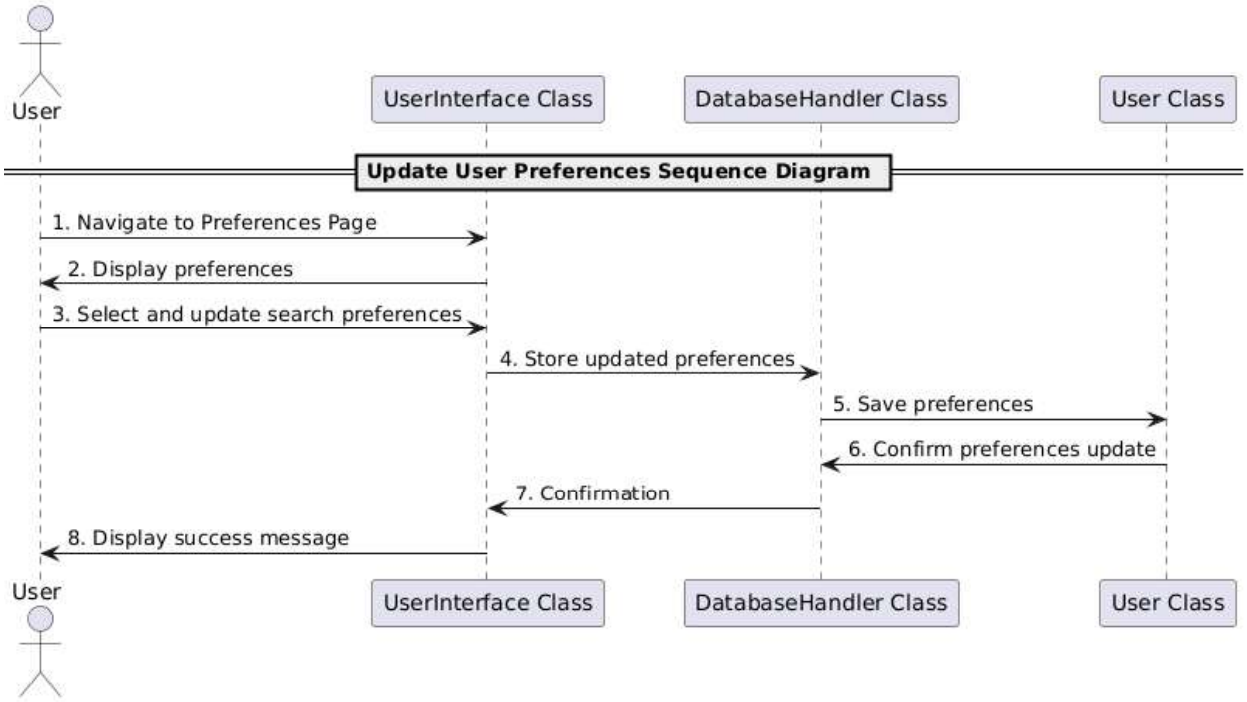
2.1:Login


User class
6. Confirm validation
5.validate user
1.Select login
2. Display login prompt
4. Display login prompt
.3. Enter login info
7. Confirm validation
USER
User Interface
Database handler class
8. Show logged in screen


User
UserInterface Class
DatabaseHandler Class
User Class
Login Sequence Diagram
1. Select Login
2. Display Login prompt
3. Enter login credentials
4. Verify credentials
5. Validate user
6. Confirm validation
7. Confirmation
8. Navigate to home screen
User
UserInterface Class
DatabaseHandler Class
User Class

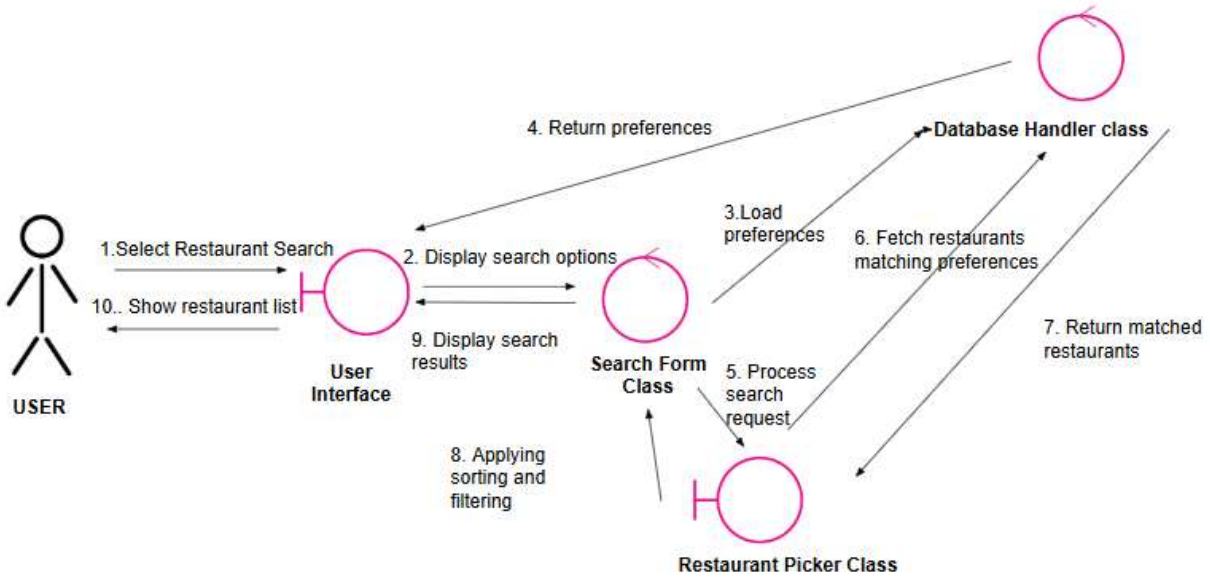
2.2:Update user preference

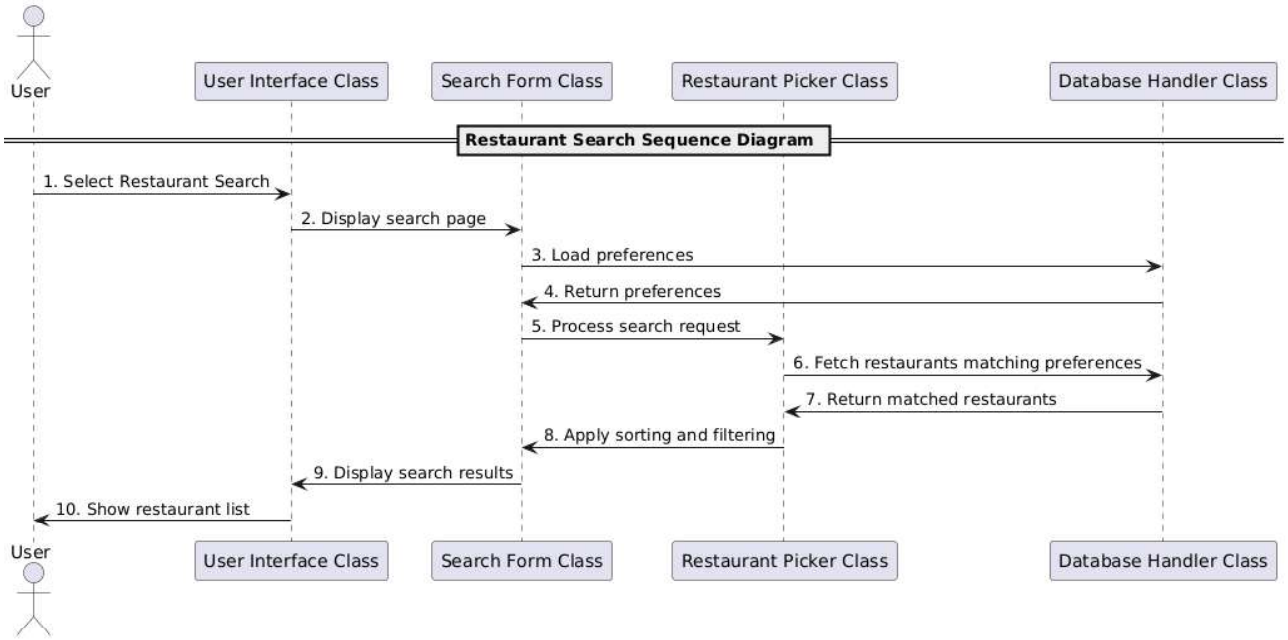




2.3:Restaurant Search

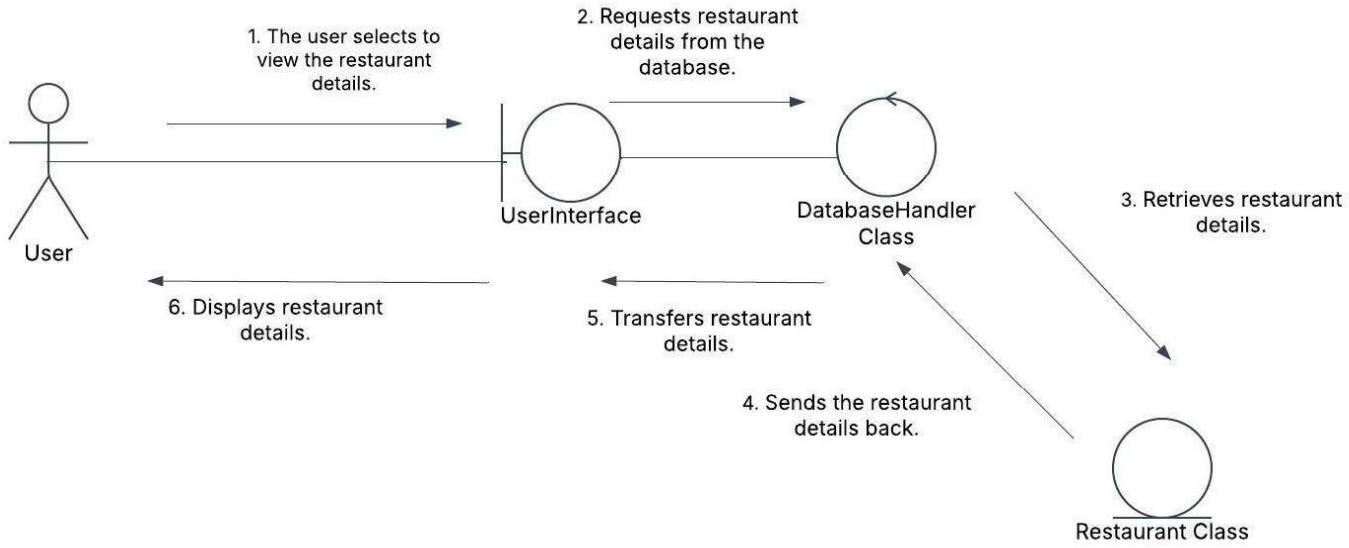
Restaurant Search Communication Diagram

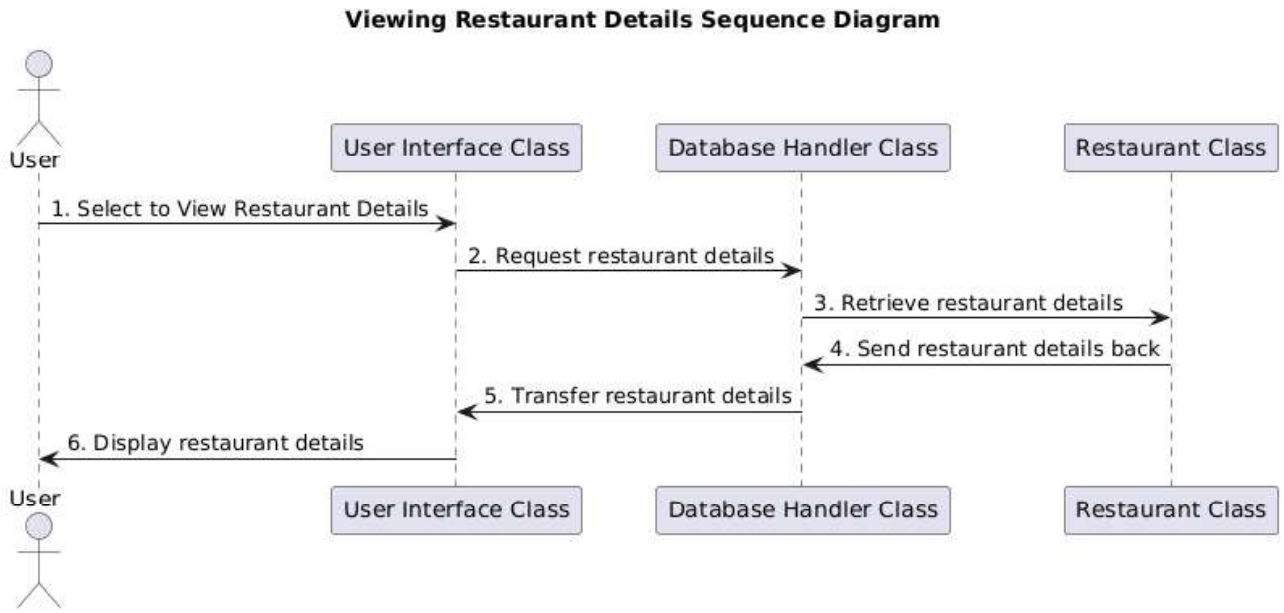




2.4:View restaurant details

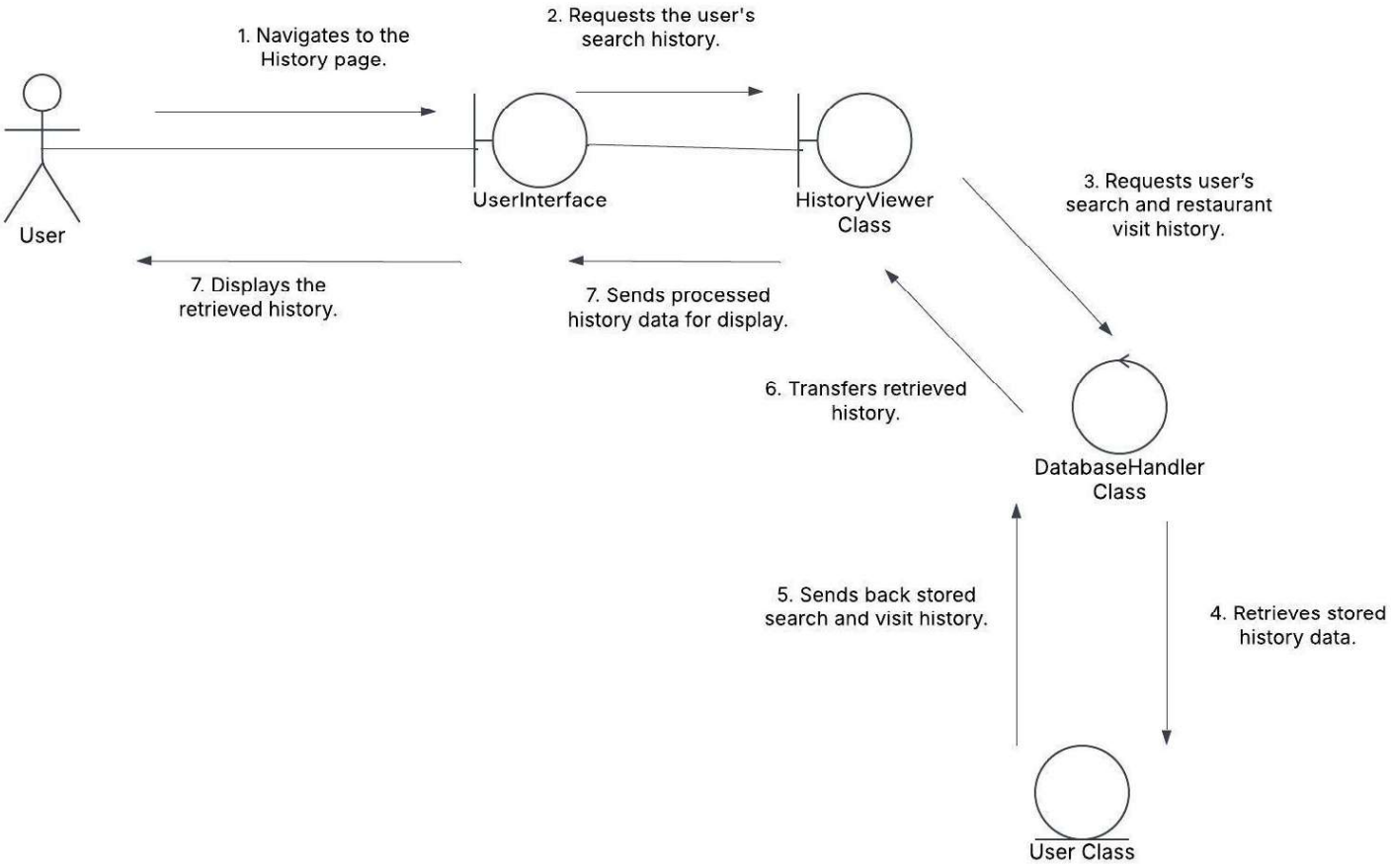
Viewing Restaurant Details Communication Diagram

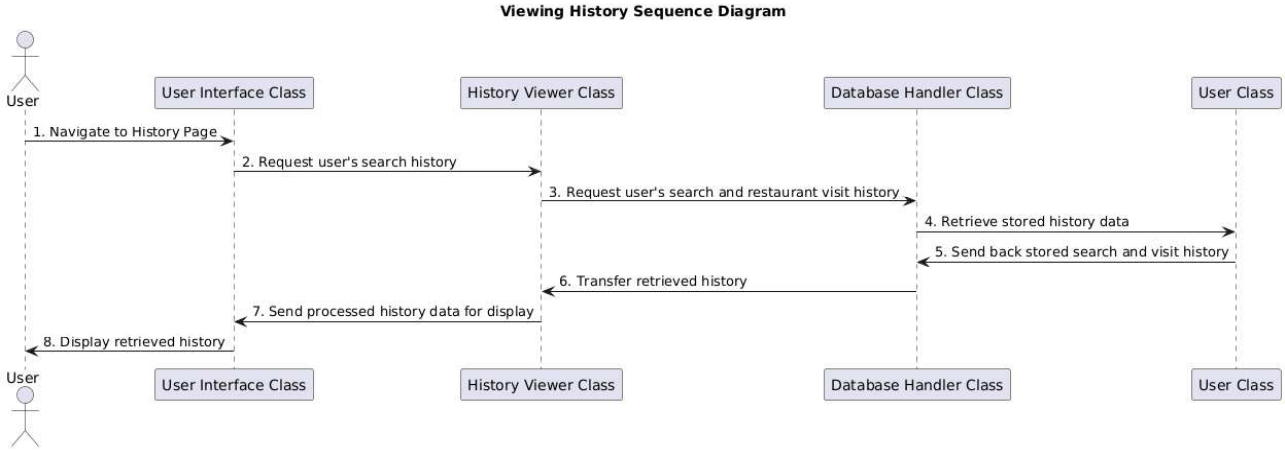


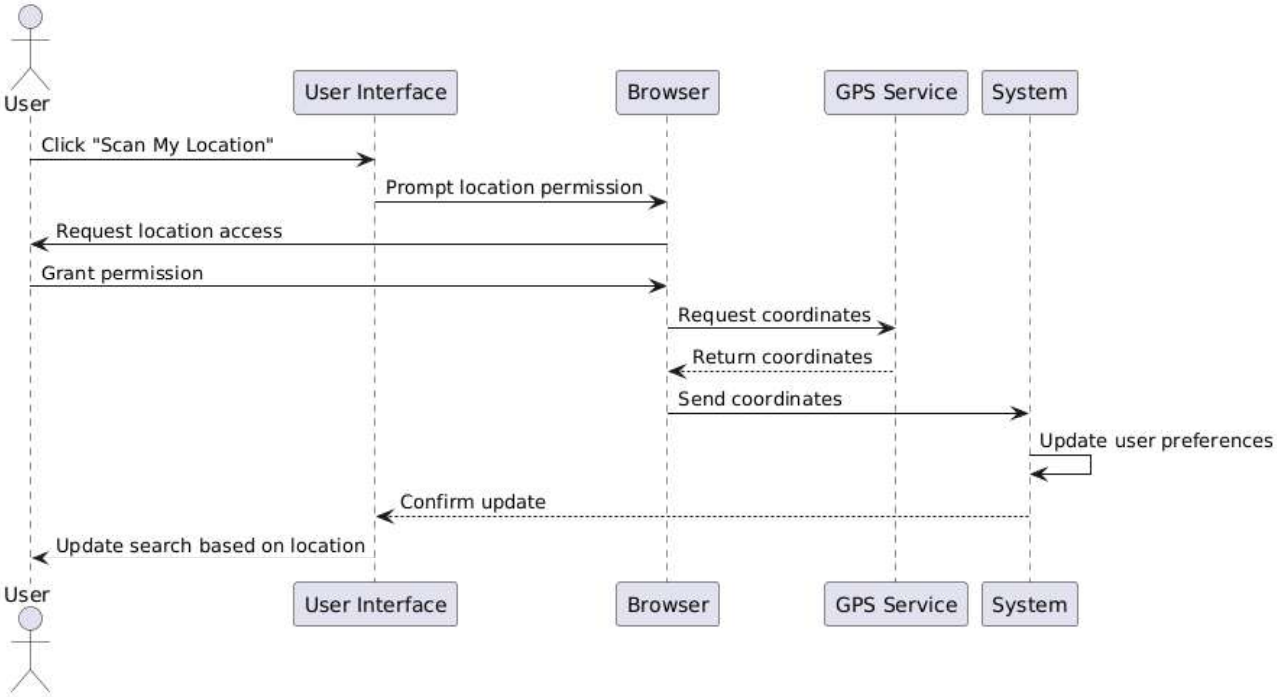


2.5: Viewing History

Viewing History Communication Diagram


1. Navigates to the History page.
2. Requests the user's search history.
User
UserInterface
HistoryViewer Class
3. Requests user's search and restaurant visit history.
7. Displays the retrieved history.
7. Sends processed history data for display.
6. Transfers retrieved history.
DatabaseHandler Class
5. Sends back stored search and visit history.
4. Retrieves stored history data.
User Class


Viewing History Sequence Diagram
User
User Interface Class
History Viewer Class
Database Handler Class
User Class
1. Navigate to History Page
2. Request user's search history
3. Request user's search and restaurant visit history
4. Retrieve stored history data
5. Send back stored search and visit history
6. Transfer retrieved history
7. Send processed history data for display
8. Display retrieved history
User
User Interface Class
History Viewer Class
Database Handler Class
User Class

2.5: Viewing History

Viewing History Communication Diagram