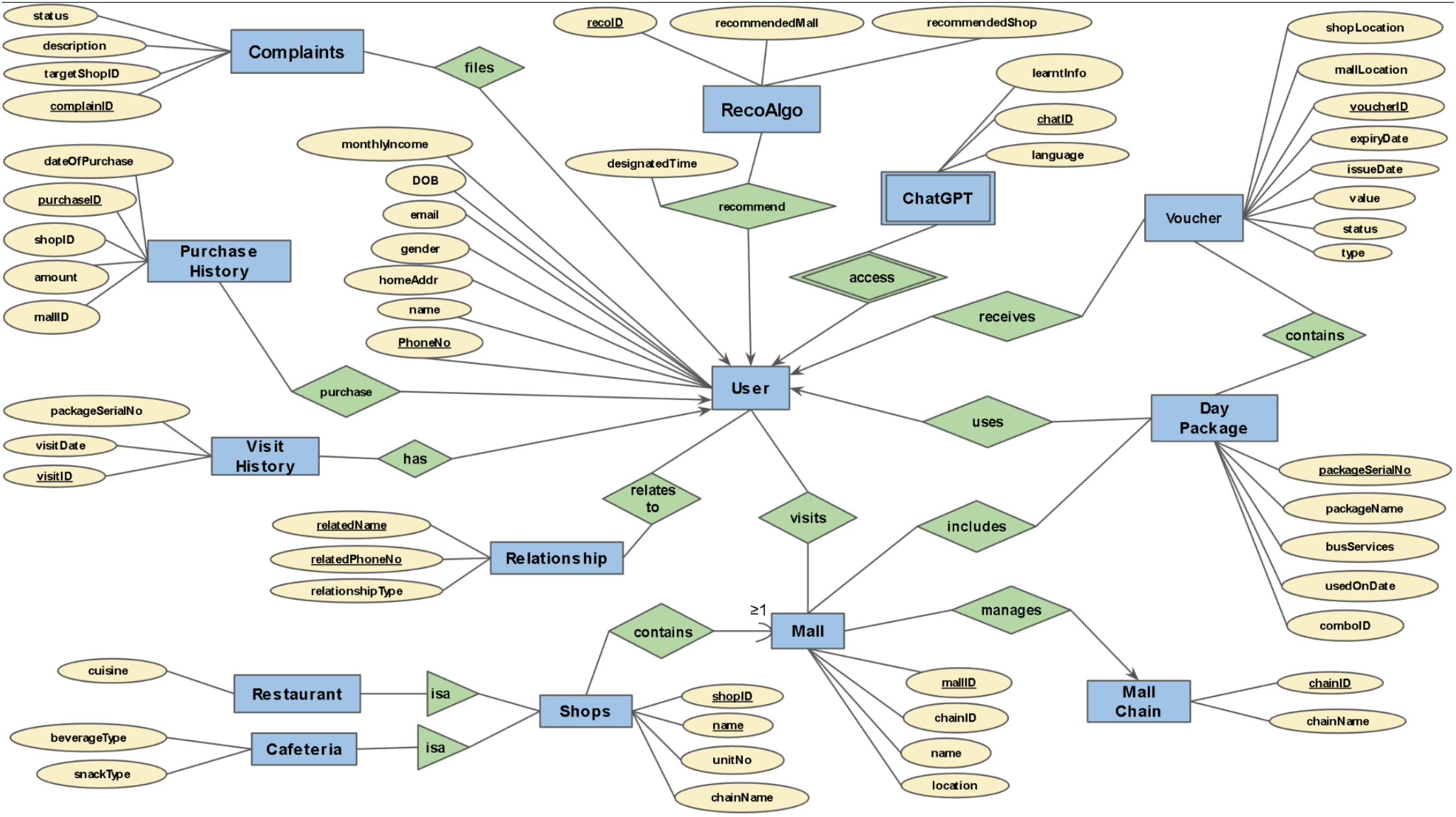
status
description
targetShopID
complainID
Complaints
files
recoID
recommendedMall
recommendedShop
RecoAlgo
learntInfo
chatID
language
ChatGPT
shopLocation
mallLocation
voucherID
expiryDate
issueDate
value
status
type
Voucher
monthlyIncome
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email
gender
homeAddr
name
PhoneNo
designatedTime
recommend
dateOfPurchase
purchaseID
shopID
amount
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Purchase History
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access
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User
packageSerialNo
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Visit History
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comboID
relates to
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includes
relatedName
relatedPhoneNo
relationshipType
Relationship
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Mall
manages
cuisine
Restaurant
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Shops
shopID
name
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chainName
mallID
chainID
name
location
Mall Chain
chainID
chainName

Assumptions

- Every User of the App must have a phone number
- A mall building is still considered a mall if it has one or more shops in it
- AI/ML techniques is assumed to query the entire database of each User to come up with a single recommendation for shop and mall for a user each time
- A User need not know insights/correlation of his own information with malls and shops as per the AI/ML technique.
- The most popular recommendations are the malls that appear the most within the recoAlgo table (number of times a mall/shop is recommended and not some 5-star tiered system).
- No other information of chain malls are known apart from the chain's name (hence no Mall Chain entity)
- learntInfo (under ChatGPT) stores the user's preferences that ChatGPT has learnt during its conversation with the User

Query

- Query 1: Use Day Package. Check each packageSerialNo for users who use the package with family members. Based on the corresponding packagename, return the most popular package.
- Query 2: Use PurchaseHistory. Check for relationships with family (50% or more of the total History), check packageSerialNo if any and return.
- Query 3: Use RecoAlgo entity, check recommended malls attribute and see the mall that’s recommended the most.
- Query 4: Use visit history in user to filter 5 or more visits in December 2023, of these users find their total amount spent from purchase history and return youngest user based on DOB.
- Query 5: Use Purchase History entity, check all malls and shops that a particular user visited. Use Mall entity, mallID and Shop entity, shopID to check which shops and malls are not visited.
- Query 6: Use 'Amount' in Purchase History entity, check highest 3 total earnings.