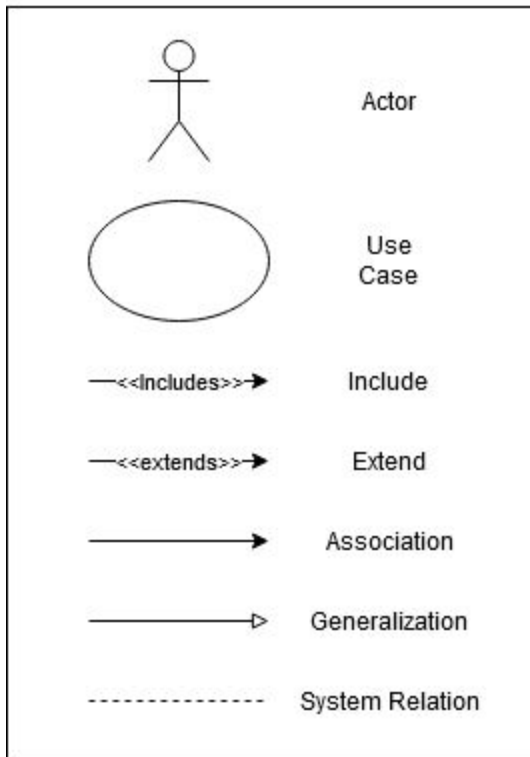
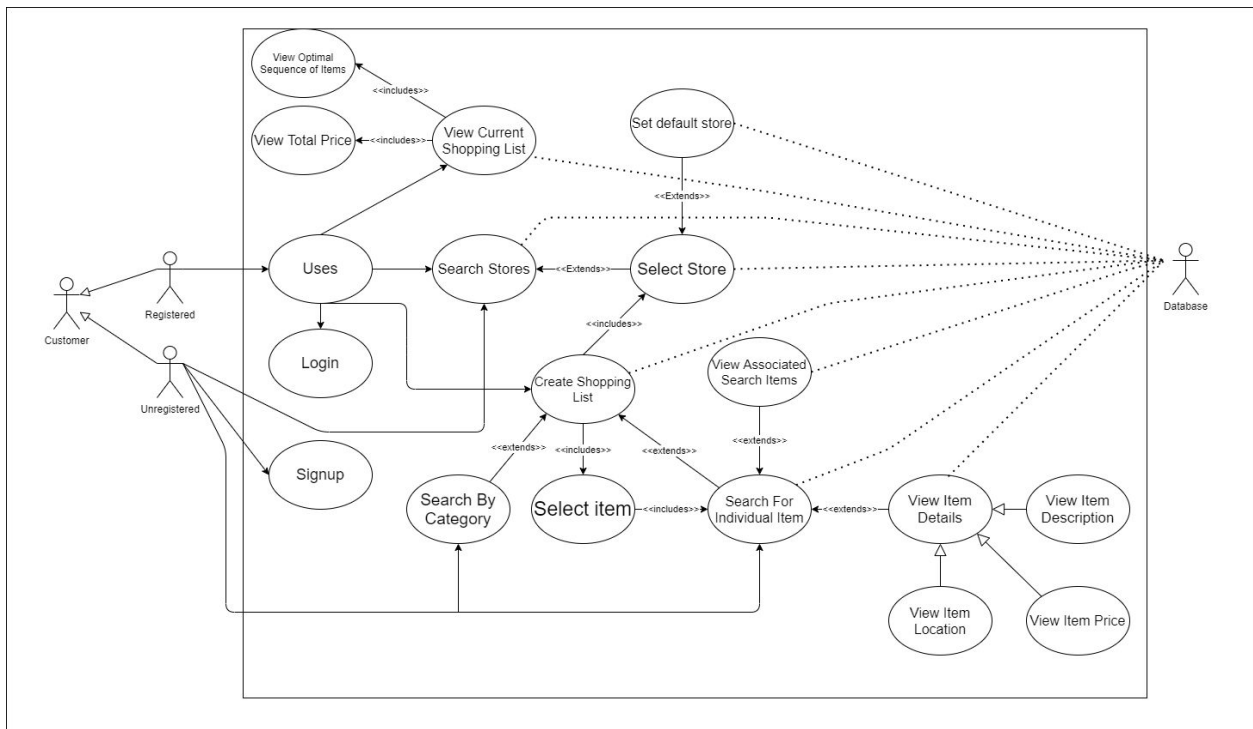


Use case diagram

LEGEND



Customer Use Case Diagram



Use Case Name: Sign up and Login

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: User

Stakeholders and Interests:

- User: Wants to register (sign-up) for a new account and login using their credentials.

Preconditions: User is able to successfully connect to the web smart shoppers system.

Success Guarantee:

- Users can sign up for a new account and login using their credentials.

Main Success Scenario:

1. The user successfully connects to the web smart shoppers system.
2. Unregistered users will sign up for a new account using their email and by setting a password.
3. Registered users can use their credentials to login.

Extensions:

- 2a. The email entered to register is already in use.
 1. The system displays an error message.
- 2b. Invalid email address entered to sign up.
 1. The system displays an error message.
- 3a. The email entered does not exist in the system.
 1. The system displays an error message.
- 3b. The password entered is incorrect.
 1. The system displays an error message.

Use Case Name: Search Stores

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: User

Stakeholders and Interests:

- User: Wants to see the nearby stores and select the preferred stores

Preconditions: User is able to successfully connect to the web smart shoppers system.

Success Guarantee:

- Users can obtain a list of nearby store locations from the inputted postal code or city and province combination.

Main Success Scenario:

1. The user successfully connects to the web smart shoppers system.
2. The user enters either a postal code or a city and province combination.
3. The user is presented with a list of nearby stores.
4. The user selects the store of their desire.
5. The user has an option to set the current store as their default store

Extensions:

- 2a. Invalid postal code is entered.
 1. The system displays an error message.
- 2b. Invalid city and province combination is entered.
 1. The system displays an error message.
- 3a. No nearby stores available
 1. The system displays an error message.

Use Case Name: Create Shopping List

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: User

Stakeholders and Interests:

- User: Wants to search for products, view product details, select and add items to cart and ultimately create a shopping list.

Preconditions: User is able to successfully connect to the web smart shoppers system and have selected a store of their choice.

Success Guarantee:

- Users can search for items in the database and the correct item information is provided.
- Users can successfully search and add items of their choice into the shopping list.

Main Success Scenario:

1. The user successfully connects to the web smart shoppers system and has already selected a store of their choice.

2. The user searches for an item of their desire.
3. The user views item details such as item description, item location, and item price.
4. The user is also presented with associated items related to their search.
5. The user adds a desired item to the shopping list and the system updates the shopping list.

Extensions:

- 2a. The item being searched for does not exist.
 1. Item not available message prompted
- 4a. No items associated with currently searched item
 1. Items not available message displayed

Use Case Name: View Current Shopping List

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: User

Stakeholders and Interests:

- User: Wants to view the current shopping cart.

Preconditions: User has decided to view current shopping list after adding one or more items into the shopping list.

Success Guarantee:

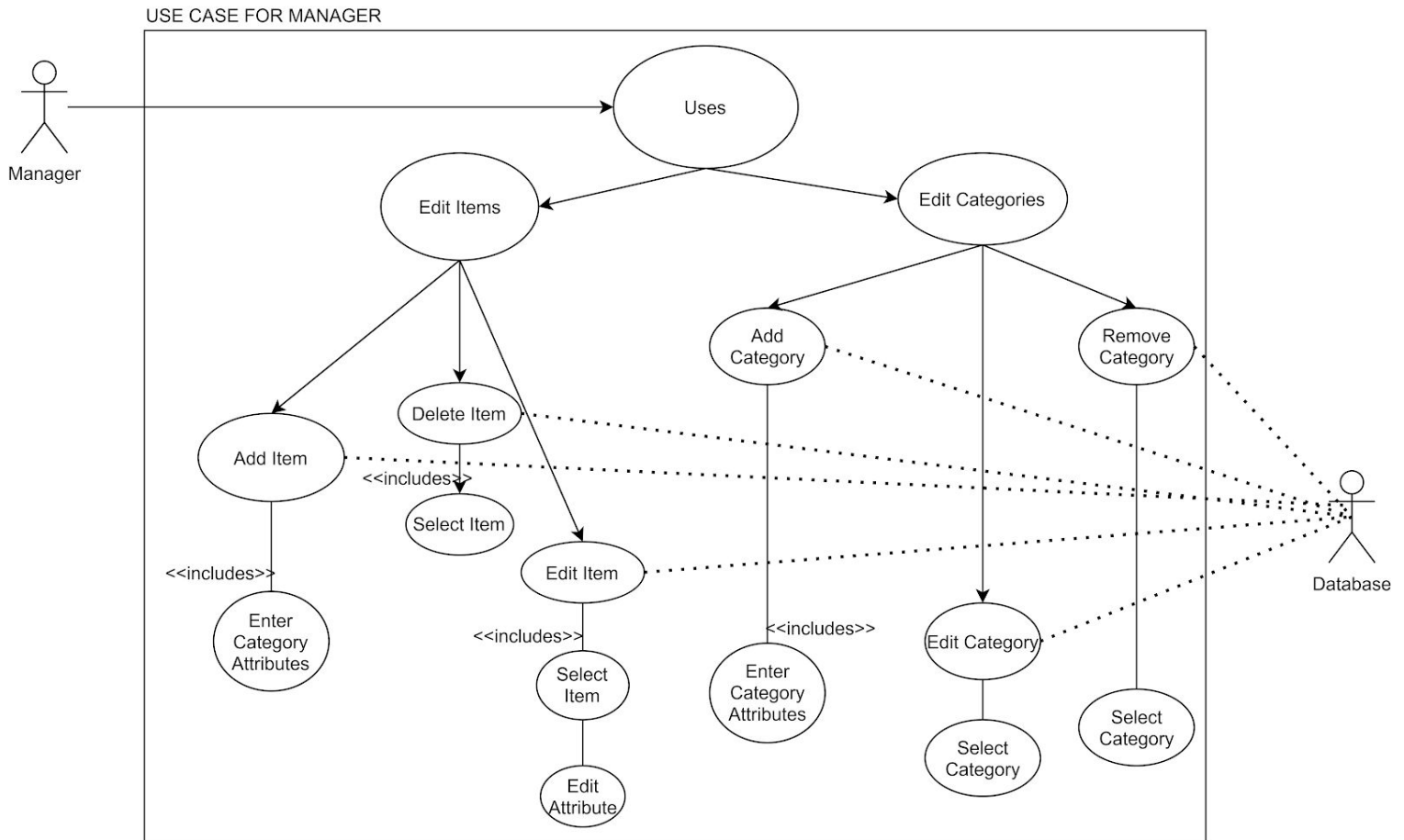
- Users are presented with the correct total price of their current shopping list and the list of items in the best sequence to find them starting at the front of the store.

Main Success Scenario:

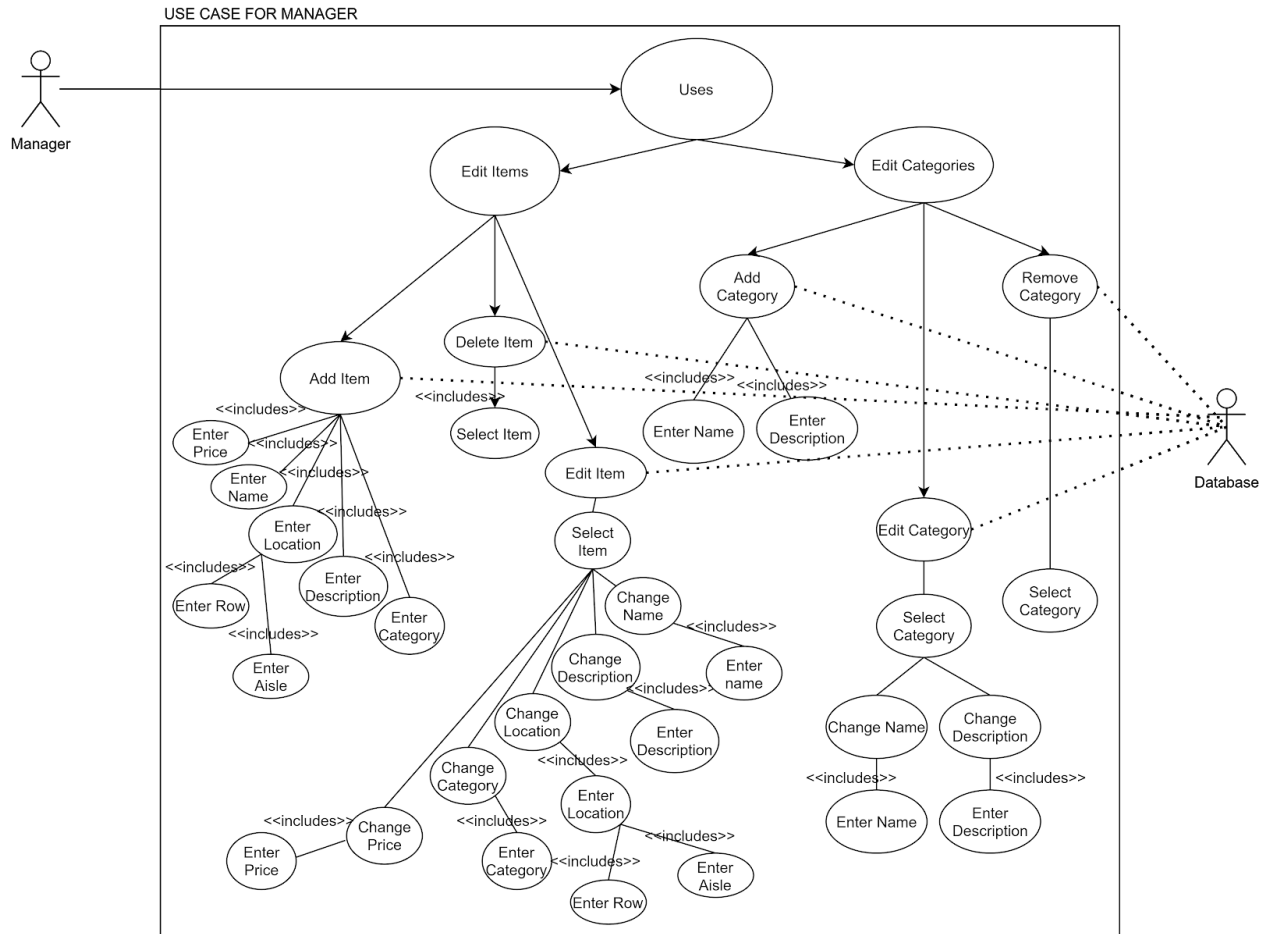
1. The user has added one or more items into the cart.
 2. The user selects to view the current shopping list.
 3. The user is presented with the total price of the current shopping list.
 4. The user is presented with the list of items in the best sequence to find them starting at the front of the store.
-

Store Manager Use Case Diagram

Simplified:



Expanded:



Use Case Name: Add item to existing category

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: Store Manager

Stakeholders and Interests:

- Store Manager: Needs to expose information about a new item in the store to customers
- Store Owner: Wants to sell new products.

Preconditions: The store manager has successfully logged into the web smart shoppers system.

Success Guarantee:

- The new product is searchable by name at the respective store that it has been added to
- Information such as price, description, and location are associated correctly with the item

Main Success Scenario:

1. The store manager selects a store from their list of managed stores.
2. The store manager launches the modified inventory GUI component of the system and selects "add item."
3. The system displays required fields for the category, item name, item description, item price, and item location in the store.
4. The store manager enters valid information into each field and submits it to the system.
5. The system instantiates the new item in the system with respect to the selected store. and displays a success message to the store manager.

Extensions:

5a. The store manager attempted to add an item with a name that was non-unique

1. The system displays an error message.

5b. The store manager attempted to add an item in a location that is already occupied in the store.

1. The system displays an error message.

5c. The store manager attempted to add an item to a category that does not exist.

1. The system displays an error message.

5d. The store manager attempted to add an item with an invalid price: negative or missing price.

1. The system displays an error message.

Use Case Name: Remove item from existing category

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: Store Manager

Stakeholders and Interests:

- Store Manager: Needs to remove an item from a store that it does not carry anymore, so it cannot appear in searches by customers.

Preconditions: The store manager has successfully logged into the web smart shoppers system.

Success Guarantee:

- The product is not searchable by name at the respective store that it has been removed from.
- The location at the store is updated in the system to now be empty.

Main Success Scenario:

1. The store manager selects a store from their list of managed stores.
2. The store manager launches the modified inventory GUI component of the system, and selects "remove item."
3. The system displays a name field.
4. The store manager enters the name of the product to be removed.
5. The system removes the item from the store inventory, marks the previous location of the item as empty, and prompts the store manager with a success message.

Extensions:

- 5a. The store manager attempted to remove a non-existing item at the store.
 1. The system displays an error message.
- 5b. The store manager attempted to remove nothing.
 1. The system displays an error message.

Use Case Name: Edit existing item

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: Store Manager

Stakeholders and Interests:

- Store Manager: Needs to edit an item from a store. This could include altering its name, price, location, description or category.

Preconditions: The store manager has successfully logged into the web smart shoppers system.

Success Guarantee:

- The attributes associated with that item are updated.

Main Success Scenario:

1. The store manager selects a store from their list of managed stores.
2. The store manager launches the modified inventory GUI component of the system, and selects "Edit Item."
3. The system displays a set of existing items.
4. The store manager chooses an item that should be edited..
5. The system edits and updates the item.

Extensions:

- 5a. The store manager attempts to assign an invalid type to an attribute.
1. The system displays an error message.

Use Case Name: Create new category

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: Store Manager

Stakeholders and Interests:

- Store Manager: Needs to create a new category under which items can be classified.

Preconditions:

- The store manager has successfully logged into the web smart shoppers system.

Success Guarantee:

- The new category exists and new items can be classified under that category.

Main Success Scenario:

1. The store manager selects a store from their list of managed stores.
2. The store manager launches the Edit Categories GUI component of the system, and selects "Create new category."

3. The system displays a name and description field.
4. The store manager enters the name of the Category and provides a description.
5. The system creates the category, and prompts the user with a success message.

Extensions:

- 5a. The store manager attempts to assign an invalid type to an attribute.
1. The system displays an error message.
- 5b The store manager attempts to create a category that already exists
1. The system displays an error message.

Use Case Name: Remove existing category

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: Store Manager

Stakeholders and Interests:

- Store Manager: Needs to remove a category from a store under which items can no longer be associated.

Preconditions:

- The store manager has successfully logged into the web smart shoppers system.
- There exist no items classified under the existing category.

Success Guarantee:

- The product is not searchable by name at the respective store that it has been removed from.
- The location at the store is updated in the system to now be empty.

Main Success Scenario:

1. The store manager selects a store from their list of managed stores.
2. The store manager launches the Edit Categories GUI component of the system, and selects "remove item."
3. The system displays a set of existing categories.
4. The store manager selects an existing category.
5. The system prompts for confirmation.
6. The Manager confirms their decision.
7. The System removes that category from the set of existing categories.

Extensions:

- 5a. The store manager attempts to remove a category under which items are still classified.
1. The system displays an error message.

Use Case Name: Edit existing category

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: Store Manager

Stakeholders and Interests:

- Store Manager: Needs to edit an existing category within their store.

Preconditions:

- The store manager has successfully logged into the web smart shoppers system.
- The category they wish to edit exists.

Success Guarantee:

- The category exists and its associated attributes are updated.

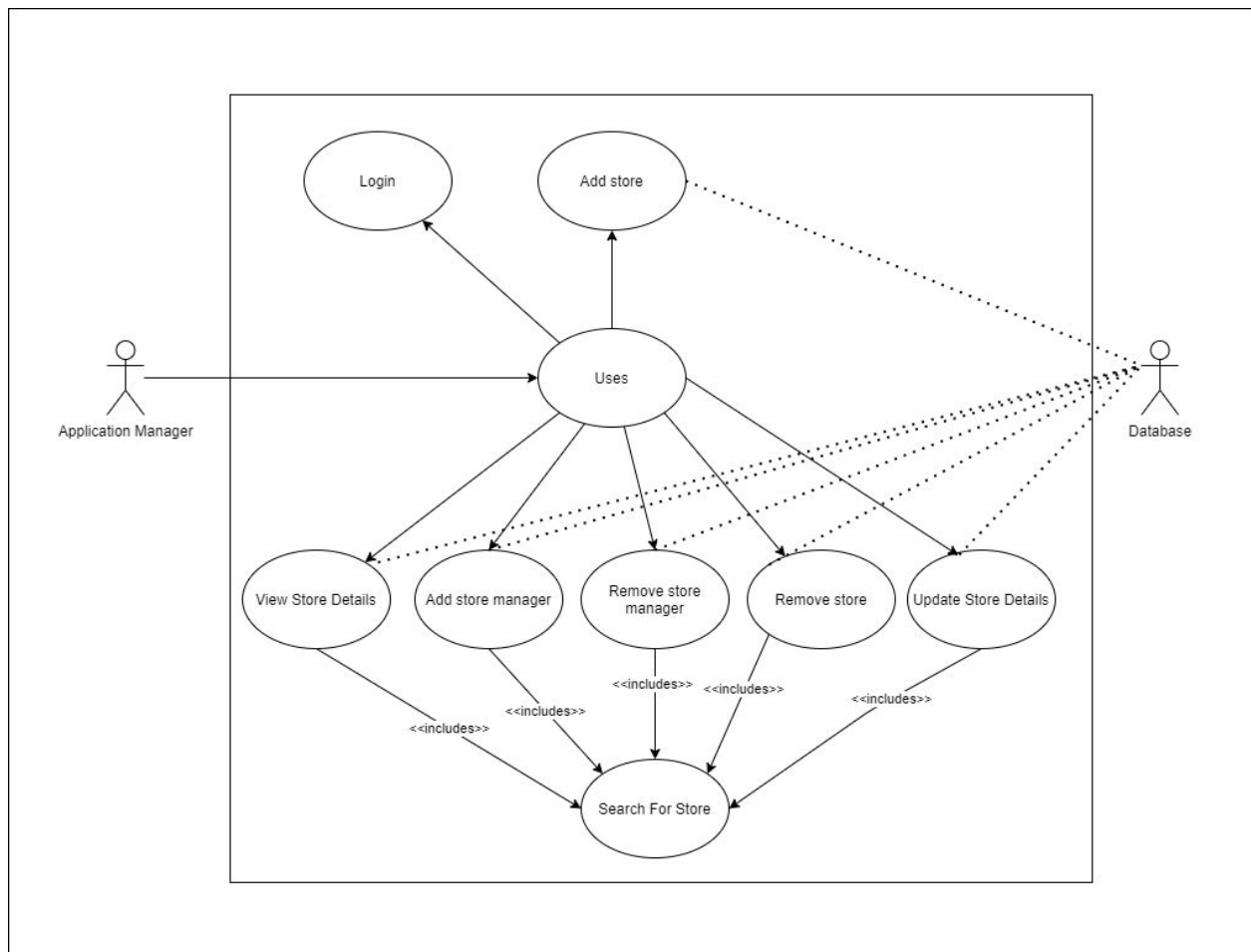
Main Success Scenario:

1. The store manager selects a store from their list of managed stores.
2. The store manager launches the Edit Categories GUI component of the system, and selects "Edit Category."
3. The system displays a set of existing categories.
4. The store manager selects an existing category.
5. The system displays the current attributes associated with that category, and provides a form for them to be edited.
6. The manager edits the categories and confirms their decision.
7. The system prompts for confirmation.
8. The Manager confirms their decision.
9. The System edits the attributes of that category from the set of existing categories.

Extensions:

- 5a. The store manager attempts to assign an invalid type to an attribute.
1. The system displays an error message.
-

Application Manager Use Case Diagram



Use Case Name: View Store Details

Scope: Database, Web smart shoppers system

Level: User-level goal

Primary Actor: Application Manager

Preconditions: The Application Manager has access to the system.

Success Guarantee:

- Information about the store searched for is listed for the Application Manager, including the name, location, and all current store manager accounts assigned to that store.

Main Success Scenario:

1. The Application Manager searches for the store in the system by entering its name.

2. The system retrieves the respective store, and displays the information including its name, location, and all store manager accounts bound to it.

Extensions:

- 2a The Application Manager attempts to search for a store that does not exist in the system.
1. The system displays an error message.

Use Case Name: Add store

Scope: Database, Web smart shoppers system

Level: User-level goal

Primary Actor: Application Manager

Stakeholders and Interests:

- Store owner: The stakeholder or composition of stake-owners who own the stores want to add their store to the system.

Preconditions: The Application Manager has access to the system.

Success Guarantee:

- The store now appears in the system for Application Managers who wish to add store managers to it.

Main Success Scenario:

1. The Application Manager interacts with the “add store” feature of the Application Manager dashboard.
2. The system prompts the administrator to enter new store information.
3. The Application Manager enters new store information including name and location, and submits the information.
4. The system instantiates the store in the system and prompts the Application Manager with a success message.

Extensions:

- 4a. The Application Manager attempted to add a store with an existing name in the system.
1. The system displays an error message.
- 4b. The Application Manager attempted to add a store at a location where another store already exists in the system.
1. The system displays an error message.

Use Case Name: Remove store

Scope: Database, Web smart shoppers system

Level: User-level goal

Primary Actor: Application Manager

Stakeholders and Interests:

- Store owner: The stakeholder or composition of stake-owners who own the stores want their store removed from the system. Perhaps it is shutting down, or for another reason.

Preconditions: The Application Manager has access to the system. The Application Manager has successfully searched for the store.

Success Guarantee:

- The store no longer appears in the system for Application Managers who wish to add store managers to it.
- Existing store managers who were previously added to the store no longer see the store in their list of managed stores.
- All categories and items associated with the store are erased from the system database.

Main Success Scenario:

1. The Application Manager searches for the store to remove.
2. The system displays the stores details and a list of actions including remove store, add manager, remove manager, and update details.
3. The manager selects the remove store action.
4. The system displays a name field for the store to be removed.
5. The Application Manager enters a name of a valid store.
6. The system removes the store from the database and all associated information.

Extensions:

- 6a. The Application Manager attempted to remove a non-existing store.
1. The system displays an error message.

Use Case Name: Add Store Manager

Scope: Database, Web smart shoppers system

Level: User-level goal

Primary Actor: Application Manager

Stakeholders and Interests:

- Store owner or hiring manager: The stakeholder or composition of stake-owners who own the stores want to add a new store manager to the store.

Preconditions: The Application Manager has access to the system.

Success Guarantee:

- A store manager account is associated with the respective store.

Main Success Scenario:

1. The Application Manager successfully searches for the desired store to add the manager to.
2. The system displays the stores information and lists potential actions to take including add store manager, remove store manager, remove store, and update details.
3. The Application Manager selects the add store manager option.
4. The system prompts the Application Manager for new store manager credentials.
5. The Application Manager enters new store manager credentials for the store and submits them.
6. The system instantiates a store manager with those credentials for the store.

Extensions:

6a. The Application Manager attempted to add a store manager who already exists for that store.

1. The system displays an error message.

Use Case Name: Remove Store Manager

Scope: Database, Web smart shoppers system

Level: User level goal

Primary Actor: Application Manager

Stakeholders and Interests:

- Store owner or hiring manager: The stakeholder or composition of stake-owners who own the stores want to remove a store manager account from a store.

Preconditions: The Application Manager has access to the system.

Success Guarantee:

- A store manager account associated with a store is no longer associated with that store.

Main Success Scenario:

1. The Application Manager successfully searches for the desired store to add the manager to.
2. The system displays the stores information and lists potential actions to take including add store manager, remove store manager, remove store, and update details.
3. The Application Manager enters a store manager name for the store to remove and submits it.
4. The system removes the store manager with those credentials from the store.

Extensions:

4a. The Application Manager attempted to remove a store manager who did not exist for that store.

1. The system displays an error message.

Use Case Name: Update Store Details

Scope: Database, Web smart shoppers system

Level: User-level

Primary Actor: Application Manager

Stakeholders and Interests:

- Store owner or hiring manager: The store might be moving locations, or have rebranded their name.

Preconditions: The Application Manager has access to the system.

Success Guarantee:

- The name of the modified store is changed successfully, and/or the location of the modified store is changed successfully.

Main Success Scenario:

1. The Application Manager successfully searches for the desired store to update the details of.
2. The system displays the stores information and lists potential actions to take including add store manager, remove store manager, remove store, and update details.
3. The Application Manager chooses the update details action, and enters the details to be modified (name and/or location).
4. The system updates the store details respectively, and gives the store manager a success prompt.

Extensions:

4a. The Application Manager attempts to either update the name to an already existing name, or a location to an already occupied location.

1. The system displays an error message.
