

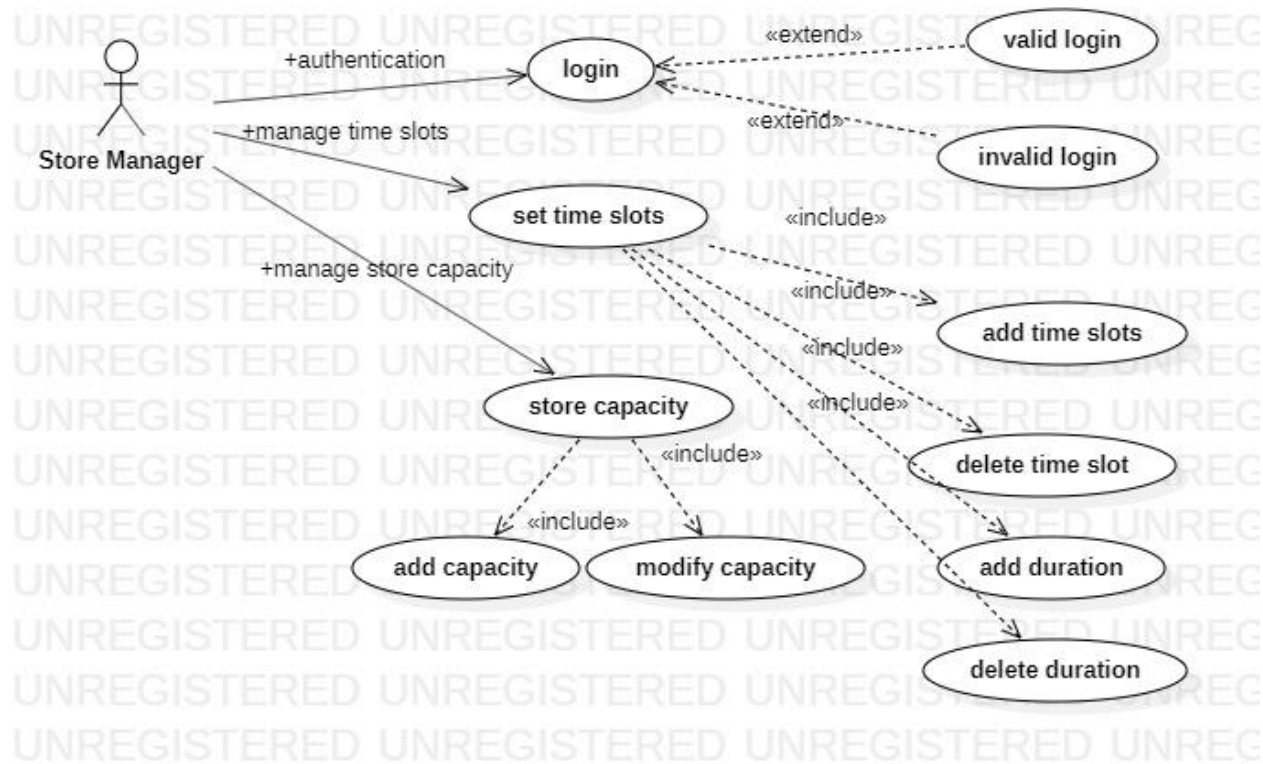
Customers Line-up(CLup) Software Requirements

REQUIREMENTS	SOFTWARE FUNCTIONALITY
[REQ #1]	The software allows store manager to input the login credentials
[REQ #2]	The software allows store manager to set the timeslots.
[REQ #3]	The software allows store manager to modify the timeslots.
[REQ #4]	The software allows store manager to add the duration of visit.
[REQ #5]	The software allows the store manager to modify the duration of visit.
[REQ #6]	The software allows the store manager to set the store capacity.
[REQ #7]	The software allows the store manager to modify the store capacity.
[REQ #8]	The software allows the store manager to send the store information to the system.
[REQ #9]	The software allows the store manager to regulate the influx of people in the building.
[REQ #10]	The software allows the user to insert the user id.
[REQ #11]	The software allows the user to enter the user position manually.
[REQ #12]	The software allows the user to grant access to device location coordinates.
[REQ #13]	The software displays a list of stores based on user's position.
[REQ #14]	The software allows the user to select a store based on his preference.
[REQ #15]	The software checks with the system and validates the user preferred store choice.
[REQ #16]	The software allows user to select the preferred timeslot for that store.
[REQ #17]	The software checks with the system and validates the user preferred timeslots for that store.
[REQ #18]	The software suggests user to change timeslot for that store if the store is already booked with max capacity.
[REQ #19]	The software suggests user to change the store preference if the initial store is running at max-capacity or if it does not have free timeslots.
[REQ #20]	The software allows the user to enter the desired visit duration for the preferred store.
[REQ #21]	The software checks with the system and validates the user preferred visit duration.

[REQ #22]	The software allows the user to select a list of shopping items based on their categories and their quantities.
[REQ #23]	The software allows the user to modify the list of shopping items and their quantities.
[REQ #24]	The software allows the user to request a token before visiting the store.
[REQ #25]	The software sends the token generation request to the system.
[REQ #26]	The software receives a unique token number and a unique token QR code from the system and displays it to the user.
[REQ #27]	The software allows the user to request the current queue position for the preferred store.
[REQ #28]	The software allows user to scan the token QR code at the validation machine before entering the store.

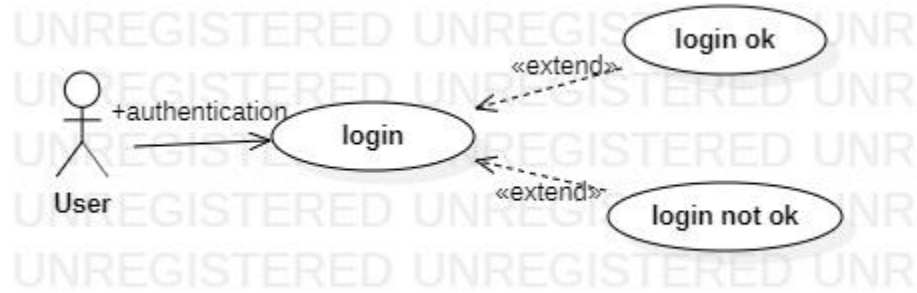
SCENARIO

Scenario #1 (Store Manager accessing the app and primary functionalities)



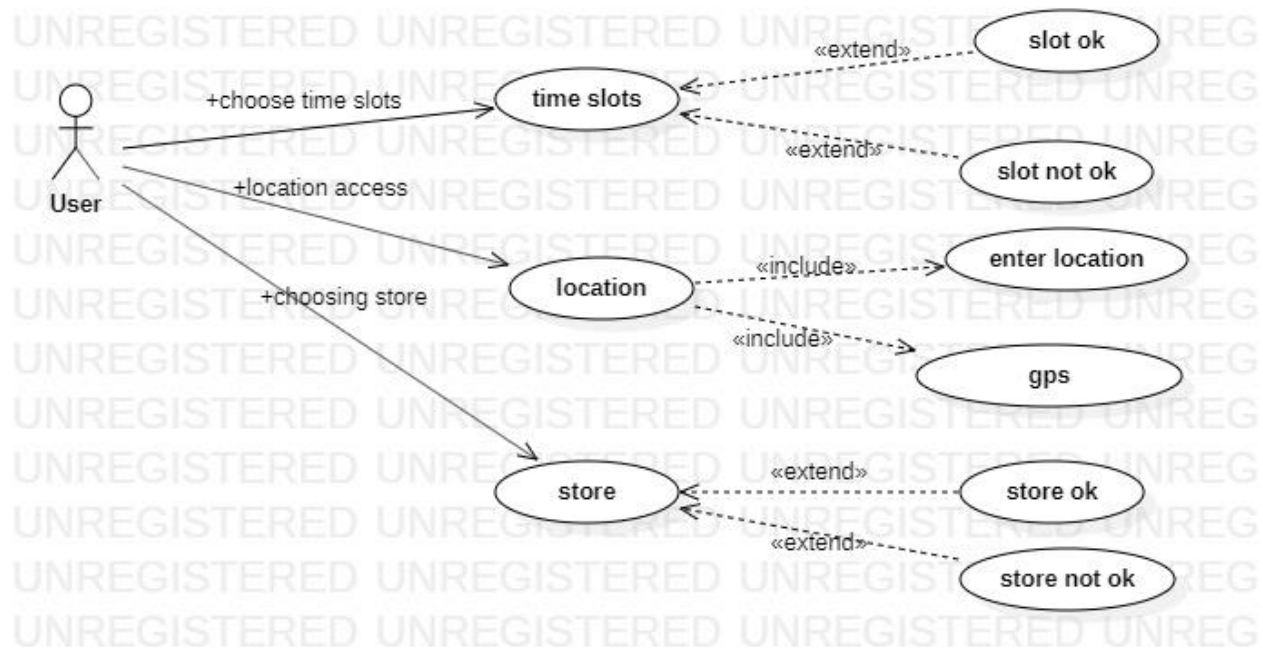
1. The store manager inserts the login credentials into the store manager application.
2. The login credentials are unique username and password given to the store manager by the system administrator and is unique to each store.
3. The store manager applications sends the admin login credentials to the system for authentication. If the login credentials are invalid, the admin is prompted a message stating that the login credentials are invalid and suggest for re-entry of login credentials. Upon successful authentication through the system, the admin receives a message from the system to the store manager application stating that the login credentials are valid.
4. The admin can now add time-slots, add expected visit duration or modify them.
5. The admin finally enters the store capacity into the application and send the entire store info(store id, store location, time-slots, expected visit duration and store capacity) to the system and receives a reply message from the system when the details are updated.

Scenario #2 (User chooses time slots/ preferred location and store)



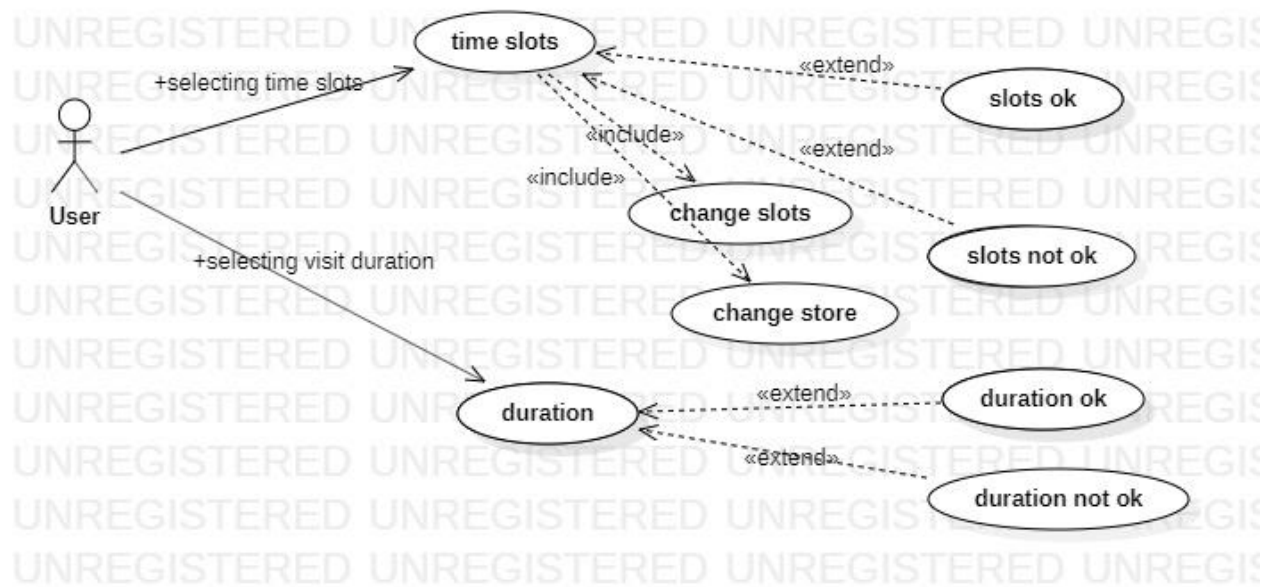
1. The user enters the user id(a unique name/guest name) into the user application.
2. The user id is sent to the system for validation (Example of admissible id's – andrea21, george672, Example of incorrect id's - %4@\$*-+).
3. If a user enters name Andrea, it may or may not be accepted by the system because the system accepts a unique name different than the other user's name stored in the database.
4. Similarly, if the user enters symbols in the name, it gets flagged automatically as invalid name in the system.
5. If the user id is invalid, the user is prompted to re-enter a new name id until the conditions of a valid name id are satisfied.

Scenario #3 (User chooses time slots, preferred location and selects store)



1. If the user id is valid, the user is requested to provide his location by manually entering it or by access grant through the user's device gps coordinates.
2. After receiving the user's location, the systems scans the store info in the database which was received from the store manager previously.
3. The system compares the user location with the stores location and send a list of stores for selection by the user in the user's location perimeter.

Scenario #4 (User modifies time slots, selects visit duration or changes store)



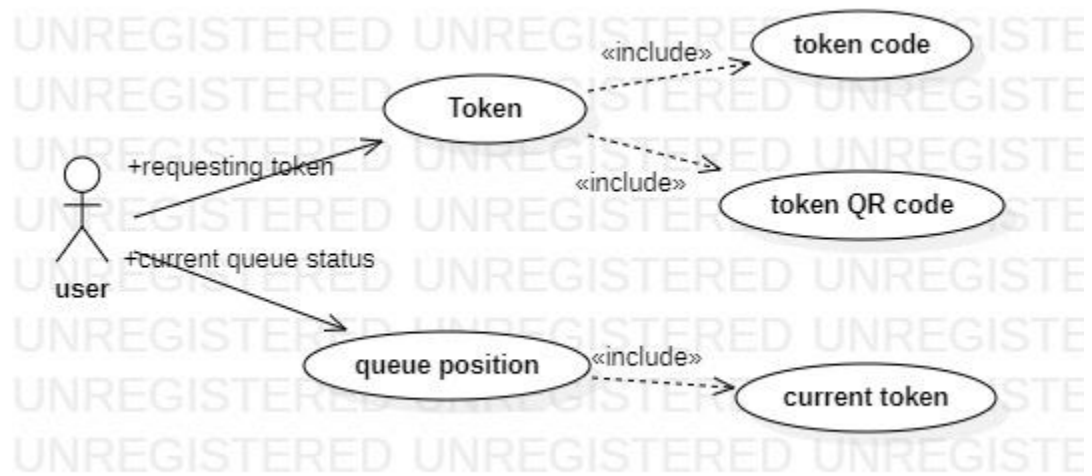
1. The user enters the preferred store, time-slots and expected duration through the user application.
2. The application send the user inputs to the system, the system check the user inputs and matches it with the store info in the database, validates the choices and sends the store confirmation to the user.
3. If the user's inputs doesn't match with those of the store info in the database , the system suggests for changing the store or changing the preferred slots and visit duration.

Scenario #5 (User creates a shopping list by adding, deleting or selecting items)



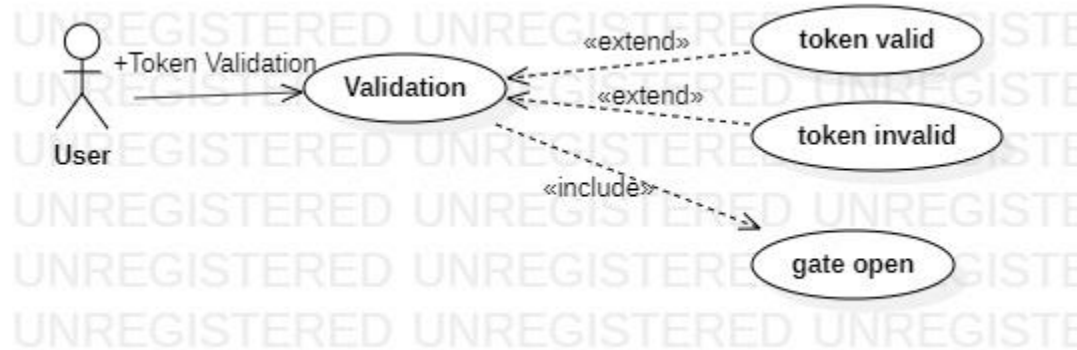
1. Once the store is confirmed, the user selects the ShoppingList interface through the user application.
2. The user can add list of products and mark their quantities based on their categories.
3. The user can also modify his preferences through the same shopping list interface by adding or deleting products.

Scenario #6 (User request generation of Token and checks current queue position)



1. The user uses the user application to request the system to generate the Token(a numerical number corresponding to the current queue position for that particular store) and a unique Token QR code.
2. The user requests the current queue position through the user application and the request is passed to the system.
3. The system then replies to the user regarding the current queue position to the user through the user application.

Scenario #7 (User scans and validates Token QR code at Validation Machine)



1. The user scans the QR code through the user application at store's validation machine for entering the store.
2. If the user violates the current queue position by scanning the QR code before the current queue position, the validation machine will notify the user to wait until his/her position in the queue.
3. If the QR code is valid, the validation machine interacts with the gates to open for entering the store.