**Use case diagram: Fashion Inventory Management Improvement System**

**Actors:**

* Customer-Primary actor of the system.
* Staff- One of the secondary actors of the system.
* Inventory System API- One of the secondary actors of the system.
* Payment Service API- One of the secondary actors of the system.
* Order System API- One of the secondary actors of the system.

**Use case:** Register.

**Reason:** This was not stated specifically in the coursework specification, but it is more user friendly if customers can have accounts to keep track of their activity.

**Use case:** Log-in.

**Reason:** *Customers* and *Staff* should be able to log-in to their accounts (if they have one.)

**Use case:** Scan.

**Reason:** *Customer* and *Staff* can scan QR codes of products from WEARTHIS to see their availability. Only *Customer* has the option to add to bag.

**Use case:** Verify.

**Reason:** This will verify the input given by the user to make sure it is appropriate. It is in an *Include* relationship with (use cases): *Register, Log in, Scan and Make payment* because every time they occur this action has to happen.

**Use case:** Check availability

**Reason:** This action will be performed by the *Inventory System API*. It is an *Extend* of *Scan,* so it will only happen when the QR code is verified.

**Use case:** Add to bag

**Reason:** The customer can choose to add the scanned item to their online shopping bag.

**Use case:** Make payment

**Reason:** C*ustomer* can checkout and pay for their wanted items.

**Use case:** Place order.

**Reason:** This is managed by the *Order System API*. It is in an *Extend* relationship with *Make payment* because only after the payment details are verified and are correct, then the order will be placed.

**Use case:** Update inventory

**Reason:** *Staff* and the *Inventory* *System* *API* can update the inventory by using the system.