**ANALYSIS**

**Definition of Actors**

**Primary Actors:**

1. Aquaponics Merchants
2. Clients from the general public
3. System Administrators

**Definition of Use Cases**

* The list of use cases to be performed by the pre-registered aquaponics **merchants**:

1. Type of User Selection (Seller or Buyer) – Select Seller
2. User Authentication Only (Sign In)
3. Input their contact info, address and location within the app
4. Input their products & related information
5. Receive & approve orders placed by clients along with notifications
6. Receive/Send direct messages from clients via the app

* The list of use cases of **clients** from the general public:

1. Mode Selection (Seller or Buyer) – Select Buyer
2. User Registration & Authentication (Sign Up & Sign In)
3. Input their contact info, address and location within the app
4. Viewing available aquaponics merchants close to them
5. Searching for merchants based on specific products & a specified location or town
6. Place Orders from merchants – specify amount, delivery/pickup, payment mode (Cash/Juice)
7. Send/Receive direct messages to merchants

* The list of use cases for **System Administrators**:

1. User Authentication (Admin Login)
2. Merchant/Seller registration
3. ??
4. ??

**NOTE**

**Justification for:**

* **User Mode Selection between Buyer/Seller**

1. Merchants and buyers will need different interfaces to accomplish their respective roles
2. Merchants will not have the option to sign up as they require pre-registration (Explained below)
3. The other option would be to create two separate apps, one for merchants and one for buyers. But I find the mode selection option to be more effective.
4. If a merchant wants to buy products himself, he will have the option to switch to buyer mode with the click of a few buttons.

* **Why do Merchants require pre-registration by System Admins**
* One of the problem statements is that clients who want to buy organic products cannot find reliable merchants as they cannot guarantee the merchant’s products are in fact 100% bio on their own.
* Before a merchant receive access to use the app to sell their products, they will have to undergo certain steps to guarantee that their products are organic – regular checkups will also be organized to maintain this standard for merchants using the app.
* Hence why merchants can only gain access through a pre-registration, else anyone would be able to create merchant accounts and sell their products without any way to verify their identity and the quality of their products