Case Study: Designing a POS

**Collecting the Requirements:**

**After interview with customer I figure out many problems that he meets everyday.**

* **Cannot manage inventory stock**
* **Waiter speed more time go and tell the chef about food that guest orders**
* **After the chef finished their cook they need to tell waiter to collect it**
* **Hard to view inventory report**
* **Account Spend much time on doing sale report for daily, monthly, and year**

**So after we found out his problem that he meet every day I can find the requirement that he want to do in this POS:**

**Functional Requirement:**

* I will build POS system with staff login, to make sure that only staff can use it.
* have a role permission which super admin can set up staff role and allow which function that role can access.
* Have create, update, delete and view staff.
* Have create, update, delete and view branch
* Have create, update, delete and view category
* Have create, update, delete and view product
* Product have type as ingredient, cut stock type as (product, product\_ingredient)
* Can set up inventory cut stock by product ingredient and by product
* Stock in when new product purchase
* Adjust product inventory
* View product inventory by monthly
* Have create, update, delete and view room
* Create Invoice by using guest room no
* Can print Invoice for guest
* Invoice will be pay when guest check out
* Sale Report daily, monthly and yearly

**Non Functional Requirement:**

* Need to set up local network for make computer connect to each others
* Create a system documentation
* Create videos training on system

**Creating User Stories:**

**Considering these requirements, we identify three major topics:**

* Login System
* Role Permission
* Create, update, delete and view staff
* Create, update, delete and view branch
* Create, update, delete and view category
* Create, update, delete and view product
* Create, update, delete and view room
* Can manage inventory stock
* Create Invoice and print
* Payment
* Sale Report daily, monthly and yearly
* Inventory Report daily, monthly and yearly

**Epic #1: Login System**

* As a user, I need to login to with my user and password so that I can use the system

**Epic #2: Role Permission**

* As a super admin, I want to create role for my staff so that I can assign permission which function in the system that they can use
* As a super admin, I want to assign my staff user a role, so that I can let them use system by their role permission

**Epic #3: CRUD Staff**

* As a access role user, I want to create, update, delete and view staff so that I easy to manage them

**Epic #4: CRUD Branch**

* As a access role user, I want to create, update, delete and view branch so that I easy to manage my inventory by branch

**Epic #5: CRUD Category**

* As a access role user, I want to create, update, delete and view category so that I easy to manage my product by category

**Epic #6: CRUD Product**

* As a access role user, I want to create, update, delete and view product so that I easy to manage my product
* As a access role user, I can specific my product type, and cut stock type on my product so that I can easy to manage how to cut my inventory stock

**Epic #7: CRUD Room**

* As a access role user, I want to create, update, delete and view room so that I easy to manage which room is order food and easy to do payment when guest check out

**Epic #8: Inventory**

* As a access role user, I want to view inventory so that I easy know what should I buy and which product is nearly run out of stock
* As a access role user, I want to do stock in so that it easy when I purchase new inventory
* As a access role user, I want to do stock adjust so that I can adjust when product is expire, broken or cannot use anymore, etc.
* As a access role user, I want to manage product cut stock inventory so that I can easy to add which product should cut stock by ingredient and cut stock by product

**Epic #9: Invoice**

* As a access role user, I want to assign room to invoice when guest order so that I can help accountant to do payment when guest check out
* As a access role user, I want to add product to invoice when guest order so that I can create invoice for guest, and chef.
* As a access role user, I want to reprint invoice so that I easy to show guest when they want to see invoice

**Epic #10: Payment**

* As a access role user, I want to do payment with guest room no when they checkout so that I can easy know how much they will pay

**Epic #11: Sale Report**

* As a access role user, I want to view sale report by daily, monthly and yearly so that I can know how much I earn by daily, monthly and yearly

**Epic #11: Inventory Report**

* As a access role user, I want to view inventory report by daily, monthly and yearly so that I can know how many inventory lost, waste, missing and should buy more or not