1. **Members**
2. Kong Mun Jun 20WMR08867
3. Lee Chun Xian 20WMD08871
4. **Proposed System Title**

Point Of Sales system. Queen Alexandra Butterfly Farm Sales System.

**C. *System synopsis (WH-Q)***

1. There is an authentication for the staff who use this system to log in with their staff identification and password.
2. This system is enabled to accept certain orders from customers by selling tickets.
3. After received several orders, the system will automatically compute the total amount of payment that the user needs to pay and proceed.
4. Thus, the system will generate a report to list out purchased items from the customer.

**D. *Justification of proposal/benefits***

First and foremost, the benefit consists of our system is to reduce the heavy burden from staff by systematic the purchasing system. However, people will normally use the way of paperwork to record down every business transaction made by the customer, and no longer there are many files to keep the customer data. This may cause a heavy burden for the staff to make arrangements the records into a folder and keep track of the specified order once any cases happen. Future more, it may help to improve work efficiency since every shift staff is trained to use the system for accepting orders from customers without any time delayed and disorder information. Finally, this system helps to prevent leakage of data from outsiders due to the strict identification system included cipher mechanism which is user exceeded 3 times the wrong password entered incompatible with the system sets password will jump out from the login page. At the same time, the customer details are being protected from this function.

**E.** ***System Functions & Features***

***1. Login Function (MJ)***

This function will ably staff to log in to the system to proceed with their duty with the sales system. It will need staff to enter their Staff ID and their respective password, the password will be in asterisk form. Login time is given limited time to the staff, if over the time it will need staff to re-login which is part of our advance feature in our system. Staff also can change the password if they forget their old password, but they must hit some requirements to avoid other staff simply change the password.

***2. Menu Function (MJ)***

This function will able staff to service our customers by selecting our products on the menu that customers want to order. Quantity can insert till 2 digits for ordering and more than one order can be in one single ordering bill.

***3. Billing Function (CX)***

This function will be assisting the Menu function in bringing it to the conclusion of the payment by showing out the whole list of payments. 7 digits including 2 decimals point will be one of our **advanced features** in this function.

***4. Report Function (CX)***

This function-able the manager to view the reports in the system. Various reports that required will be shown in this system such as the sales report, stock report et cetera.

**Formulas Used**

* Payment Function
  + Sub Total = Price \*Quantity
  + Net Total = (Sub Total \* 0.16) + Sub Total
  + Small Change = Total Paid – Net Total

**F*. Business Rules***

* Each customer can have one or more bill payments and each payment can only belong to one customer. **[One to Many]**
* Each customer can have one or more orders and each order can provide one or more customers. **[Many to Many]**
* One payment only can be done in one time **[One to One]**
* Each payment will be directed to one staff only and each staff will control zero or many payments. **[One to Many]**
* Each customer can make zero or many cancellations in the payment and each cancellation only belong to customers. **[One to Many]**
* Each staff can provide zero or more report details for the report, also each report can consist of at least one or many report details from staff. **[Many to Many]**
* Each staff can only have one Staff ID and each Staff ID can only belong to one staff. **[One to One]**