**TEAM:** LAL

**PROJECT LEAD:** Logan Connolly

**TEAM MEMBERS:** Abel Briggs, Lizkebe Manjuk, Logan Connolly

**PROJECT:** Restaurant Automation

System Requirements

IN – input, OUT – out, PRO – process, FN – functional, NF – nonfunctional

IN-FN-01: The system shall take in orders (food and drink).

IN-FN-02: The system shall read in payment via card, Near Field Communication (NFC), and cash.

IN-FN-03: The system shall allow chefs to mark orders as complete.

IN-NF-04: The system must take in input through touch screen devices that are able to run the Java Virtual Machine.

IN-NF-05: The system must be able to read both chip and swipe cards.

IN-NF-06: The system must be equipped with NFC chips to be able to read data from NFC payments.

IN-NF-07: The system must be equipped with a cash terminal.

IN-NF-08: The system must respond to user input within 500 milliseconds.

OUT-FN-9: The system shall display all available food (the menu) to the customer.

OUT-FN-10: The system shall display each order to the chefs.

OUT-FN-11: The system shall display when the order is complete to the customer.

OUT-FN-12: The system shall display the total price of the order.

OUT-FN-13: The system shall print a receipt when the order is processed.

OUT-FN-14: The system shall display when the order is ready to be picked up.

OUT-FN-15: The system shall display a confirmation message to confirm the order when the customer attempts to check out.

OUT-NF-16: The system must be equipped with a printer to print receipts.

OUT-NF-17: The system must be network equipped to display the order to the chef.

PRO-FN-18: The system shall calculate sales tax.

PRO-FN-19: The system shall add sales tax to the bill.

PRO-FN-20: The system shall calculate the bill based on items ordered.

PRO-FN-21: The system shall keep track of how many orders go through in a day.

PRO-FN-22: The system shall keep track of analytics on how much each item is ordered.

PRO-FN-23: The system shall generate a report of analytics of order statistics.

PRO-FN-24: The system shall generate and maintain order numbers.

PRO-NF-25: The system shall be implemented using the Java Virtual Machine (JVM).

PRO-NF-26: The system shall run on any OS that is able to run the JVM (Windows, Linux, etc.).

PRO-NF-27: The system must have an administrative control panel.

PRO-NF-28: The system shall not store credit/debit card information.

PRO-NF-29: The system shall display the orders to the chefs by communicating using the local area network (LAN).

Unique Nouns

Order, food, drink, payment, card(credit/debit), Near Field Communication, cash, chefs, ~~NFC chips, terminal~~, ~~menu~~, customer, price, receipt, ~~printer~~, tax, ~~bill~~, items, analytics, report, ~~statistics~~, order number, administrative control panel

Strikethrough items did not meet the requirements or were out of scope.

