3d: Persistent Data Storage

Our data processing cannot be instantaneous, because we need to record all of the information. When the users enroll their information and register in this system, our database process system needs to record this information every times. When the courier put the takeout into the cabinets, our database process system needs to record this information every times, because we need to know who put the takeout into the cabinets. It means that we need ensure the food security and responsibility of every courier. When the users finished the whole process, our database process need to record all the information, because we need to know what kind of food users like. And in the next time, we will recommend the similar food to the users; it is benefit for the merchants to make some plans to the users. Out data storage must be permanent, not instantaneous through the above description. About the database schema, we need to record all of the information relate to the users and couriers.

3e: Network Protocol

3g: Hardware Requirements

We need lock control device module, card reading device module, bar code and QR code reader, video module, 32K horizontal needle bill printer (printing courier sheet), short message module, etc., the main cabinet door configuration is: electronic control on/off; item detection sensor, Windows 7 system with 21 inch touch LCD screen, WiFi wireless Internet module.

About the hardware selection and explanation:

CPU: Intel, Core i3, 4130

Memory: Kingston 4GB\_DDR3\_1600\_

Hard Disk: Seagate Barracuda 2TB 7200 RPM 64MB SATA3

Wifi module: Waveshare\_MX1081\_stm32\_wifi module\_

POS Card Brushing Machine: Yibao POS Machine

Banknote Checking and Change Finding Module: Rongkang 866 Small Banknote Checking Machine

Voice prompt module: Blue Horse LMD107\_

Digital keyboard module: kangaroo DS-9018A/9018\_

Touch screen control module: DC80480B070\_02TW\_10.2 inch with touch\_1280\*720TFT\_1G memory with configuration/USB/SD/5-26V power supply, etc.

Short Message Module: ATK-SIM900\_GSM/GPRS Module Short Message Telephone Development Board\_

Bill Printing Module: Jiabo GP5860III Thermal Small Bill Printer

Video equipment: Longshian 8-way all-D1 hard disk video recorder

Bar Code and Two-Dimensional Code Reader: Symbol DS-6708 Two-Dimensional Bar Code Scanner

Card Reader Module: 125KHz RFID Module Radio Frequency Electronic Card Reader

Lock control equipment: intelligent electric latch