1.9 Design a restaurant ordering system.
You do not need to write code, but describe a high-level approach:
A. Draw a list   of key requirements
B.What are your   main considerations and problems?
C.What components or tools would you potentially use?

Components and tools:
Components in diagram below
Tools:
App, Website inteface created with html, css
Backend program written with python or jave
Database managed by sql

Restaurant interface: orders, delivery time, option to update client on delivery progress, regecting orders option, page for updating menu connected with database

Usee interface app/or website

Backend program

Login request/response
Promotional offers added to user page
Updates for menu/prices

Queries about users and their regular orders

Regular clients/things they ordered: e_mail, login, regular_orders, address

Database

Our menu with prices and ingredients/allergens: item, price, ingredients, highlighted allergens

Website changes for when changes are enetered in database about menu/ ingredients

Backend would be responsible for communicating with database, checking the user login details against regular customers list, including promotional offeres for regular customers, checking ingredients and menu on the website against the one existing in database for any changes

App/Website would have:
1. login page
2. order as a non-registered user option
3. Full menu with list of ingredients, calories, allergy
4. Promotional page with offers
5. Checkout page with comment section for the order
6. Payment page

Key requirements:
1. User friendly interface with app and website versions
2. Comments section in order is of vital importance as a lot of people are very particular about some ingredients they do not wish to have in the ready meal.
3. Very clear and highlighted way to reflect allergens on the menu.
4. An interface for restaurant with tools for managing orders, updating menu, and notifyng clients about order progress.
5. Built-in payment function on the website maybe connected to restaurant interface for them to be able to track daily profits etc.

Key considerations and problems:
1. Depending on the scale of ordering system there would be requirement for keeping track of reviews etc.
2. Keeping an address and clients database secure as its peoples personal information
3. If we are updating app user on progress of their order in live mode there'd be need to track dellivery person and reflect the location on website, which makes whole system more difficult
4. Creating system for tracking orders for promotions to be allocated that is sustainable over long periods of time and can store information for significant amount of clients.