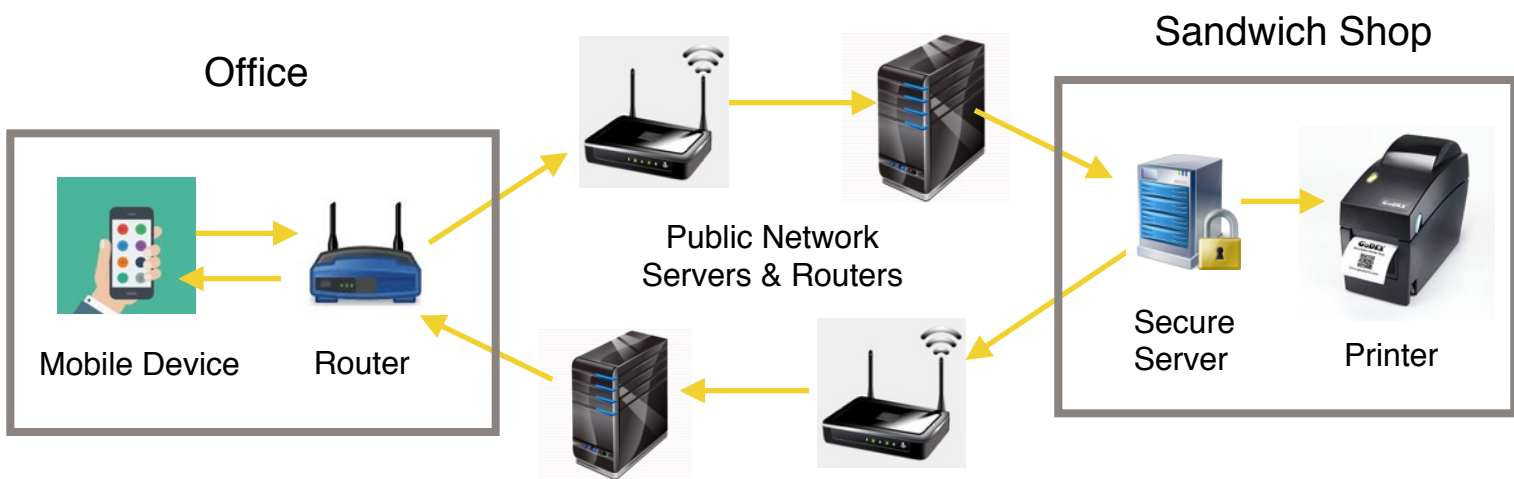


A Sandwich Order

Using the OSI Model



OSI DIAGRAM



A Sandwich Order

Using the OSI Model

1. Physical Layer: Use your cell phone to launch the Order Sandwich App that is already installed on your phone. This lets you make a connection to the sandwich shop server via your office router so that you can make selections and place the order.
2. Data Link Layer: The sandwich selection details are converted to bits of data which are stored as packets. These packets are easy to transmit. The Media Access Control (MAC) manages and gives permission for the data packets to flow. The logical Link Control (LLC) detects any errors in the data packets.
3. Network Layer: The network layer is responsible for efficiently routing the data packets from one device to the next. Since you are at the office when the order is placed, the local office router is connected to the internet and thus pushes the data out onto the wider public network. The data packets eventually arrive to the secure server at the sandwich shop, which has its own IP address. The network layer translates IP addresses into physical addresses to help locate the sandwich shop server so that the order data can get to its proper destination.

4. Transport Layer: The sandwich order data is transported back and forth. This is the layer where feedback back to your mobile device occurs, specifically telling you that the data/order has been received and that it will be ready for pickup in 15 min, or if it is ready to be picked up now.

5. Session Layer: The session layer controls the connection between multiple users and the server, whether placing their order by phone or by other means. It establishes, controls, and terminates the sessions between the client using the sandwich order application and the server receiving the orders. This is also the layer where user information like name, email address, phone number, and previous order info are stored. This info is stored within cookies, likely on the users device which has placed the order.

6. Presentation Layer: The sandwich order details are formatted at this layer. The operating system on the device used to place the order translates the order details into a format that can be received and understood by the sandwich shop server and printer. The order data is reconverted into details about the sandwich order so that it can be printed and the sandwich can be made.

7. Application Layer: This is the layer that is seen by the user on their phone. The user decides what kind of sandwich to order and what toppings they want. This order is then converted at the presentation layer, which becomes data that is sent to the sandwich shop server. The sandwich shop server also uses the application layer to print out a receipt which shows what kind of sandwich is to be made and who ordered it.

