

Application Introduction:

A POS (Point of Sale) system is a combination of software and hardware that enables businesses to manage transactions between their customers and the business. It is typically used in retail, hospitality, and other industries where goods or services are sold directly to consumers.

The software component of a POS system is typically installed on a computer or mobile device, and it allows the user to ring up sales, track inventory, process payments, and generate reports. The hardware component includes a cash register, barcode scanner, credit card reader, and other peripherals that are used to facilitate transactions.

A POS system can help businesses streamline their operations by automating many of the tasks associated with processing sales, managing inventory, and tracking customer information. It can also provide valuable insights into sales trends and customer behavior, which can help businesses make informed decisions about pricing, promotions, and product offerings.

Concept Map:

1. **Basic Java comments and basic Java syntax:** Used Everywhere throughout the program.
2. **Data types in Java:** Used Everywhere throughout the program. (In App class: ints, booleans, strings, arraylists, exception objects)
3. **Type casting in Java:** Used to convert read string data from file into other formats such as integers, etc.
4. **Basic Class Design and Usage:** Multiple classes in the application.
5. **Java methods:** Every class contains some methods
6. **Java static methods/variables:** Used mostly in FileHandler, OrderManager, and ItemManager Classes.
7. **Unit Testing:** Unit testing created for Order, Item, Date, Time, etc.
8. **Exception Handling:** Used for File Handling stuff in case of file (s) not present in root directory.
9. **Inheritance:** Multiple inheritance examples such as Order, inherited from Date and Time.
10. **Interfaces:** Multiple interface example such as OrderInterface etc.