Mobile Car Detail Business - Program Summary -

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Goal and Functionality: This Java program aims to facilitate the ordering and scheduling of services for a mobile car detailing business. The application allows users to select from a list of services, schedule an appointmnt, and receive an order summary displayed on-screen and saved to a file. The program incorporates Java features such as classes, inheritance, interfaces, arrays, and file handling to enhance modularity and efficiency.

Target Audience: The program is designed for small business owners and customers lookng for an easy way to book mobile car detailing services. Business owners can customize the service offerings, while customers can conveniently select their desired service and schedule an appointment.

Strengths:

- User-friendly interface for easy selection of services and appointments
- Modular design and reusable classes makes it modifiable
- Uses object-oriented programming with inheritance and interfaces

Weaknesses:

- Very stingy input, can cause errors if input is not correct, such as dates
- This is only made for mobile car detailing, which can require changes for other types of small businesses

Future Improvements:

- Introducing a GUI for an easier and better appearance of the program
- Make the program be made for different business types rather than just mobile car detail
- Have forgiving input validation providing more input freedom

Pseudocode for Mobile Detail Business Program

1. **Start Program →**
2. Define Interfaces:
    a. “OrderProcessor” with methos “processOrder()”
    b. “AppointmentScheduler” with method “scheduleAppointment()”
3. Define class Business

    a. Properties: **name, services[], prices[]**
    b. Constructor initializes business name, services, adn prices
    c. Method “displayServices()” to print available services
4. Define class MobileCarDetailer (Inherits from Business class and contains interfaces)
    a. Additional Properties: “selectedService”, “appointmentDate”, “appointmentTime”
    b. Method takeOrder():
        i. Displays 3 services
        ii. Tells user to select services
        iii. Call “scheduleAppointment()”
    c. Implement processOrder():
        i. Print order details
    d. Implement scheduleAppointment()
        i. Tells user for date and time
        ii. Call “saveOrderToFile()”
    e. Method saveOrderToFile():
        i. Write order details to a text file
5. Define main method in BusinessOrderApp
    a. Create instance of “MobileCarDetailer”
    b. Call “takeOrder()”
    c. Call “processOrder()”
6. **End program!**