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COURSE: TFB 1033 OBJECT ORIENTED PROGRAMMING

PROJECT TITTLE: BRO FRESH AND CLEAN

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1.0 PROJECT DSICRIPTION

Overview

The application is designed to manage client and worker information, as well as specific details about car wash sessions. It aims to streamline the process of entering and viewing details related to car washes.

1. **Client Information:**

   o **First Name: Text field for entering the client's first name.**

   o **Last Name: Text field for entering the client's last name.**

   o **Phone Number: Text field for entering the client's phone number.**

   o **Car Plate Number: Text field for entering the car's plate number.**

2. **Worker Information:**

   o **Worker Name: Text field for entering the worker's name.**

   o **Worker ID: Text field for entering the worker's ID.**

3. **Wash Options:**

   o **Water Wax: Checkbox for selecting the water wax option.**

   o **Full Interior Detailing: Checkbox for selecting full interior detailing.**

   o **Full Exterior Detailing: Checkbox for selecting full exterior detailing.**

4. **Wash Session:**

   o **Start Time: Text field for entering the start time of the wash session.**

   o **End Time: Text field for entering the end time of the wash session.**

   o **Status: Text field for entering the status of the wash session.**

5. **Action Button:**

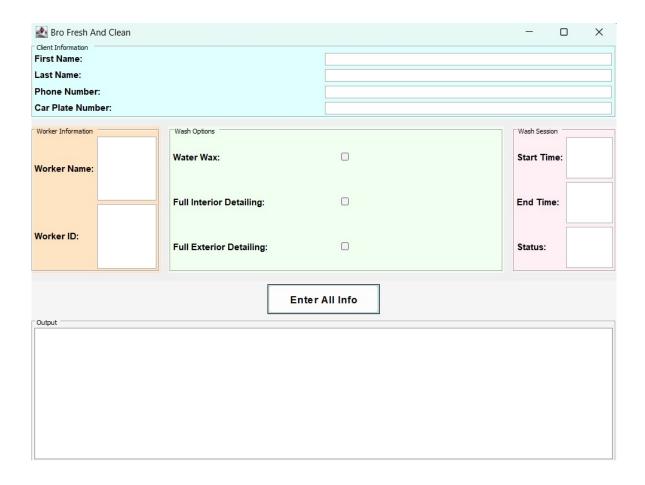   o **Enter All Info: A button to submit all entered information.**

6. **Output Section:**

   o **A section at the bottom of the interface likely intended to display output messages or logs.**

Functionality

- **The application allows users to input and manage information related to car wash services.**

- **The GUI is divided into sections for easy navigation and data entry.**

- **The checkboxes enable selection of specific car wash options, and the text fields capture relevant details about clients, workers, and the wash session.**

- **The "Enter All Info" button likely processes and stores the input data.**

  Potential Use Cases

- **Car wash businesses can use this system to keep track of services provided to clients.**

- **Workers can be assigned to specific tasks and their IDs recorded for accountability.**

- **The system can help in scheduling and tracking the start and end times of wash sessions, improving operational efficiency.**

  Future Enhancements

- **Implementing database integration to store and retrieve client and wash session information.**

- **Adding validation to ensure all necessary fields are filled out correctly before submission.**

- **Enhancing the output section to provide more detailed feedback and logs.**

  This project demonstrates a structured approach to managing car wash

  services, providing a clear and organized interface for users to enter and manage

  relevant data.

2.1 SCREENSHOT OF GUI

Explanation: -

This is the interface that the worker will insert all the information before the work started. All the information will be captured in the database.

2.2 SCREENSHOT OF DATABASE

Explanation: -

-This is the displayed table from the bfacdb database in phpMyAdmin contains columns for storing information about car wash sessions. It includes fields for the client's first name, last name, phone number, and car plate number, as well as the worker's name and ID. There are boolean fields for selecting wash options such as water wax, full interior detailing, and full exterior detailing. Additionally, it records the start and end times of the wash session and its status. This table structure facilitates efficient data management and retrieval for a car wash management system.

Explanation: -

-This is the displayed database table from the bfacdb database in phpMyAdmin shows stored records of car wash sessions. Each row contains detailed information about a session, including the client's first and last name, phone number, and car plate number. It also includes the worker's name and ID, boolean indicators for water wax, interior, and exterior detailing services, and the start and end times of the wash session.This organized storage facilitates easy tracking and management of car wash activities and client interactions.

3.0 UML DIAGRAM

JPanel

+ JPanel(layout: LayoutManager)
+ setBorder(border: Border): void
+ setBackground(color:color): void
+ add(component: Component): void
+ add*component: Component, index: int): void

Connection

+ createStatement(): Statement
+ prepareStatement(sql: String): PrepareStatement
+ close(): void

ActionListener

+ actionPerformed(event: ActionEvent): void

GUI

- frame: JFrame
- firstnameField: JTextField
- lastnameField: JTextField
- phoneField: JTextField
- carPlateField: JTextField
- workernameFeild: JTextField
- workerIdField: JTextField
- waterWaxCheckBox: JCheckBox
- fullDetailingInteriorCheckBox: JCheckBox
- fullDetailingExteriorCheckBox: JCheckBox
- startTimeField: JTextField
- endTimeField: JTextField
- statusField: JTextField
- outputTextArea: JTextArea
- connection: Connection
- static final String URL
- static final String USERNAME
- static final String PASSWORD

+ GUI()
+ createClientPanel(): JPanel
+ createWorkerPanel(): JPanel
+ createWashOptionsPanel(): JPanel
+ createSessionPanel(): JPanel
+ createSouthPanel(): JPanel
+ createLabel(text: String): JLabel
+ connectToDatabase(): connection
+ insertData(firstName: String, lastName; String, phone: String, carPlate:
String, workername: String, workerID: String, waterWax: boolean,
fullDetailingInterior: boolean, fullDetailingExterior: boolean, startTime:
String, endTime: String, Status: string)
+ main(args: String[]): Void

JLabel

+ JLabel()
+ JLabel(text: String)
+ setText(text: String): void
+ getText(): String

ActionEvent

+ getActionCommand(): String
+ getSource(): Object
+ getModifiers(): int

JCheckBox

+ JCheckBox()
+ JCheckBox(text: String)
+ isSelected(): boolean
+ setSelected(selected: boolean): void

JTextField

+ JTextField()
+ JTextField(columns: int)
+ getText(): String
+ setText(text: String): void

JFrame

+JFrame(title: String)
+ setDefaultCloseOperation(operation: int): void
+ setLayout(manager: LayoutManager): void
+ setSize(width: int, height: int): void
+ setLocationRelativeTo(component: Component): void
+ setVisible(visible: boolean): void

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