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COURSE: TFB1033/TEB1043: OBJECT ORIENTED PROGRAMMING

GROUP NAME: BRO FRESH AND CLEAN

PROJECT TITTLE: ONLINE LAUNDRY SYSTEM

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INTRODUCTION: -

In today's digital world, certain traditional practices, particularly in the laundry services, are lagging the technological curve. Despite the widespread adoption of cashless payment systems in various sectors, the laundry industry persists in relying on outdated methods such as cash or tokens for transactions. In a world increasingly driven by technology, tasks like laundry management are lagging in innovation. Bro Fresh and Clean navigate through digital world to find solutions for consumer and make things easier and efficient. It is within this context that we propose the development of BFAC App, a Java-based application designed for laundry management with a lot of new features such as cashless payment, variety of customization and real-time tracker for the washing and drying machine.

PROBLEM STATMENT: -

In today's digital age, the laundry service market deserves to benefit greatly from embracing modern technologies to fulfil clients' evolving demands. Traditional laundry services face difficulties in providing an easy and convenient customer experience, such as cash-only payments, variable laundry completion times, and a lack of detergent and softener customization options.

1. **Cash-Only Payments:** Traditional laundry services primarily rely on cash payments, which can be inconvenient for many customers who prefer digital transactions.
   - **QR Code Payments:** Generating QR codes for easy scanning and payment can simplify the transaction process.
   - **Cashless Payment Methods:** There is a need to support multiple e-wallets (e.g., Touch & Go, Grab Pay, and Apple Pay) to offer flexible and convenient payment options.
   - **Secure Transactions:** Ensuring the use of a secure and encrypted platform is essential to prevent data breaches and protect customer information.

2. **Variable Laundry Completion Times:** Customers often face uncertainty regarding when their laundry will be ready, leading to inconvenience and dissatisfaction.
   - **Real-time Tracking:** Provide customer with the current status and estimated. completion time of laundry can enhance transparency and reliability.
   - **Real-time Updates:** Customer will receive updates regarding their laundry (drying or washing) which can improve the overall service experience.

3. **Lack of Detergent and Softener Customization:** Traditional services typically offer limited options for detergents and softeners, which may not meet individual customer preferences or sensitivities.
   - **Selection Options:** Offer variety of detergents and softener preferences,

By using these modern technologies, laundry service providers may greatly improve the customer experience, increase productivity, and remain profitable in a continuously changing market.

SOLUTION: -

Our proposed laundry machine app system offers a comprehensive solution:

For Users:

- **Real-time machine availability:** View machine status (available, in use, cycle complete) from anywhere.
- **Remote cycle monitoring:** Track cycle progress and estimated completion time.
- **Mobile payment:** Securely pay for laundry through the app via online transactions.
- **Wash cycle recommendations:** Receive suggestions based on fabric type and soil level.
- **Laundry notifications:** Receive alerts when cycles finish.
- **Variety of selection:** Users can choose detergent and softener based on their preferences.

Advantages For the Users:

- **Increased user convenience and control:** Users can plan their laundry schedules efficiently.
- **Improved user satisfaction:** Users can enjoy the user-friendly app laundry experience.
- **Efficiency:** Get suggestions based on fabric type and soil level for optimal cleaning.

CONCLUSION: -

This laundry machine app system streamlines the laundry process for users, offering unparalleled convenience and control. Forget scrambling for quarters or rushing down to the laundry room only to find all the machines occupied. With real-time machine availability and remote cycle monitoring, you can plan your laundry trips efficiently and avoid wasted time. The app even takes the guesswork out of washing by recommending cycles based on your laundry, ensuring optimal cleaning for every load.

Overall, this app system empowers users with a smooth and efficient laundry experience. From mobile payments to timely notifications, it removes the hassle from laundry day, leaving you with more free time and peace of mind.