PARENTO

ABSTRACT

PARENTO is an innovative app designed to enhance communication between caretakers and parents by providing real-time updates on children's daily activities. Key features include a *Daily Activity Timeline* that visually represents key events like meals, naps, and playtime, as well as *Photo & Video Sharing* for securely sharing moments with captions or notes. The app also supports *Live Streaming* during special times, allowing parents to watch their children in real-time.

Communication is further strengthened with *Direct Messaging & Voice Notes, enabling quick updates and sharing of concerns. **Health & Wellbeing Tracking* ensures that important aspects like sleep, diet, and physical activity are monitored, with the option to log health incidents. Parents can provide input through a *Parent Feedback & Requests* system, ensuring their preferences are considered.

In case of emergencies, the app provides instant *Emergency Alerts* with quick access to contacts. *User Roles & Permissions* allow for varying levels of access, ensuring the right people have the right information. Additionally, the app includes *QR Scanning* for secure check-ins and check-outs, making the management of children's activities seamless and secure.

MODULES
- ADMIN
- DAY-CARE
- STAFF
- PARENTS

ADMIN
- LOGIN
- VERIFY DAY-CARE
  - ACCEPT/REJECT
  - VIEW STAFFS
- VIEW PARENTS
  - VIEW BABY DETAILS
- VIEW FEEDBACK

DAY-CARE
- REGISTER
- LOGIN
  - IF APPROVED
- MANAGE STAFFS
- MANAGE FACILITIES

- VIEW BABIES
    - VIEW PARENT DETAILS
- MANAGE ADMISSION DETAILS
- VIEW ADMISSION REQUEST
    - ACCEPT/REJECT
    - GENERATE QR
- VIEW FORWARDED COMPLAINTS
    - SEND REPLY
- VIEW FEEDBACK
- CHAT WITH PARENTS
- PROVIDE MEETING LINKS

STAFF
- LOGIN
- VIEW PROFILE
- VIEW BABY DETAILS
    - VIEW PARENTS
    - ADD ACTIVITY DETAILS
- VIEW COMPLAINTS
    - FORWARD TO DAY-CARE

PARENT
- REGISTER
- LOGIN
- VIEW FACILITIES
- MANAGE BABIES
- VIEW DAY-CARES
    - REQUEST FOR ADMISSION
    - MAKE PAYMENT
- VIEW BABY DETAILS
    - VIEW DAILY ACTIVITES
    - TRACK CHECK IN AND CHECK OUT DETAILS
- SEND COMPLAINT
    - VIEW REPLY
- SEND FEEDBACK
- CHAT WITH DAY-CARE
- VIEW MEETINGS

Tables

Login
- login_id

- username
- password
- usertype

Day_care
- day_care_id
- login_id
- day_care_name
- owner_name
- phone
- address
- license_number
- capacity
- operating_time
- daycare_description

Staff
- staff_id
- login_id
- day_care_id
- staff_name
- staff_email
- staff_phone
- staff_dob
- gender
- staff_address
- position
- qualification

Parent
- parent_id
- login_id
- parent_name
- parent_email
- parent_phone
- parent_address

- parent_dob
- parent_gender

Babies
- baby_id
- parent_id
- baby_name
- baby_dob
- baby_gender
- baby_photo
- allergies_or_dietary_restriction
- medical_condition

Feedback
- feedback_id
- day_care_id
- login_id
- feedback
- date_time

Facilities
- facility_id
- day_care_id
- facility_name
- facility_type
- facility_des
- facility_capacity
- facility_image
- operating_hrs
- safety_measures

Adminssion_request
- admission_id
- parent_id
- baby_id

- start_date
- preferred_schedule
- qr_code

Complaint
- complaint_id
- login_id
- complaint
- reply
- date_time
- status

Admission_payment
- payment_id
- admission_id
- amount
- date_time
- status

Daily_activity
- activity_id
- baby_id
- date
- activity_type
- description
- start_time
- end_time

Checking_history
- check_id
- admission_id
- check_in_date
- check_in_time
- check_out_date
- check_out_time

Chat
- chat_id
- sender_id
- sender_type
- receiver_id
- receiver_type
- message
- date_time

EXISTING SYSTEM

In the existing system, communication between parents and caretakers in daycare settings is often limited and inefficient. Typically, parents receive updates about their child's day only at the end of the day, which can be stressful for parents who wish to stay informed in real-time. This lack of immediate communication also means parents have limited visibility into their child's daily routine, such as meal times, naps, and play activities. Additionally, the existing system lacks a structured platform for health and well-being tracking, often relying on inconsistent manual record-keeping by caregivers. Furthermore, feedback and complaints are typically managed through informal channels like emails or paper forms, which can result in delayed responses and unresolved concerns. Security during pick-up and drop-off times is another area of concern, as there are often no robust systems to verify the identities of individuals, which can lead to potential safety risks. In emergencies, there is no structured system in place to quickly alert parents and provide them with real-time updates, causing confusion and delays. Moreover, admissions and payments are generally managed through paperwork or separate systems, leading to inefficiencies and the potential for data loss. Lastly, there is often no role-based access control, resulting in privacy and security concerns

as all users may have access to sensitive information.

PROPOSED SYSTEM

The proposed system, PARENTO, seeks to address these limitations by offering a comprehensive app designed to enhance communication and management of children's activities in daycare settings. The app provides real-time communication through a Daily Activity Timeline, which allows parents to receive instant updates on their child's activities throughout the day, such as meals, naps, and playtime. This real-time access keeps parents engaged and reassured. To further strengthen the connection between parents and their children, the app includes Photo & Video Sharing and Live Streaming features, enabling parents to view special moments and watch their children in real time during special events. The app also introduces a structured Health & Wellbeing Tracking system, allowing caregivers to log important health metrics like sleep, diet, and physical activity, ensuring consistent and accurate monitoring of children's health. Feedback and complaints are efficiently managed through the Parent Feedback & Requests system, providing a direct and organized channel for parents to share their concerns and receive timely responses. For enhanced security, the app features QR Scanning for secure check-ins and check-outs, ensuring that only authorized individuals are involved in picking up or dropping off children. In emergencies, the app provides Instant Emergency Alerts to parents, facilitating quick communication and response. Additionally, PARENTO supports digital management of admissions and payments, streamlining these processes and reducing administrative burdens. The app's User Roles & Permissions feature ensures that sensitive information is accessible only to authorized users, protecting privacy and enhancing security. Overall, the proposed system aims to provide a more efficient, secure, and engaging experience for parents, caregivers, and daycare staff alike, addressing the shortcomings of the current system with innovative, user-friendly solutions.

OBJECTIVES

- Enhance Communication Between Caretakers and Parents:
  - Develop a platform that facilitates real-time updates and communication between day-care staff and parents.
  - Ensure that parents are informed about their children's daily activities, health, and well-being.
- Streamline Daily Activity Tracking:
  - Implement a feature that allows staff to log and parents to view children's daily activities, including meals, naps, and playtime.
  - Provide a visual timeline to make activity tracking easy and intuitive.
- Secure Photo and Video Sharing:
  - Create a secure environment for sharing photos and videos of children with their parents.
  - Allow staff to add captions or notes to provide context for the shared media.
- Enable Live Streaming for Special Events:
  - Develop a feature that allows parents to watch their children in real-time during special events or activities.
  - Ensure that live streaming is secure and accessible only to authorized parents.
- Improve Direct Messaging and Voice Notes:

- Implement a direct messaging system for quick communication between staff and parents.
  - Allow the sharing of voice notes for more personal and efficient updates.
- Health and Wellbeing Tracking:
  - Create a module for tracking important health and wellbeing metrics such as sleep, diet, and physical activity.
  - Provide the ability to log health incidents for comprehensive monitoring.
- Parent Feedback and Requests System:
  - Develop a system that allows parents to provide feedback and make requests.
  - Ensure that feedback is reviewed and acted upon by the day-care administration.
- Emergency Alerts and Quick Contacts:
  - Implement an emergency alert system to notify parents in case of urgent situations.
  - Provide quick access to emergency contacts for immediate response.
- User Roles and Permissions:
  - Design a role-based access control system to manage different user types (admin, day-care, staff, parents) and their permissions.
  - Ensure that each user type has the appropriate level of access to information and features.
- Secure Check-In and Check-Out Management:
  - Develop a QR scanning feature for secure check-ins and check-outs of children.
  - Ensure that the management of children's activities is seamless and secure.
- Admin Verification and Management:
  - Implement a system for admin to verify and approve day-care registrations.
  - Allow admin to view and manage staff, parents, and baby details.
- Day-Care Management:
  - Provide tools for day-care management, including staff management, facility management, and admission processing.
  - Enable day-care to view and respond to complaints and feedback from parents.
- Staff Management and Activity Logging:
  - Allow staff to view and update their profiles.
  - Enable staff to log and manage activity details for the children in their care.
- Parent Registration and Engagement:
  - Develop a user-friendly registration process for parents.
  - Provide features for parents to manage their children's details, view day-care facilities, and engage in communication with day-care staff.
- Meeting and Complaint Management:
  - Implement a system for scheduling and providing meeting links for parent-teacher interactions.
  - Allow parents to send complaints and view replies, ensuring their concerns are addressed.

MODULE DESCRIPTION
1. Admin Module
Description:

The Admin module is designed to manage and oversee the entire application, including the verification and management of day-care centers, staff, parents, and children.
Features:
- Login: Admin can log in to the system using their credentials.
- Verify Day-Care: Admin can review and approve or reject day-care center registrations.
  - Accept/Reject: Decision-making feature for day-care center applications.
  - View Staffs: Admin can view the list of staff associated with each day-care center.
  - View Parents: Admin can view the list of parents and their associated children.
    - View Baby Details: Detailed information about each child, including health records and activity logs.
  - View Feedback: Admin can view feedback submitted by parents and staff.

2. Day-Care Module
Description:
The Day-Care module allows day-care centers to manage their facilities, staff, and children's activities. It also facilitates communication with parents.
Features:
- Register: Day-care centers can register their details to be verified by the admin.
- Login: Day-care staff can log in to manage their center's activities.
  - If Approved: Access granted after admin approval.
- Manage Staffs: Day-care centers can add, remove, or manage their staff.
- Manage Facilities: Day-care centers can update information about their facilities and services.
- View Babies: Day-care centers can view the list of children enrolled.
  - View Parent Details: Access to parent contact information and preferences.
- Manage Admission Details: Day-care centers can manage admission requests.
  - View Admission Request: Review parent requests for admission.
  - Accept/Reject: Decision-making feature for admission requests.
  - Generate QR: Create QR codes for secure check-ins and check-outs.
- View Forwarded Complaints: Day-care centers can view and respond to complaints forwarded by staff.
  - Send Reply: Provide responses to complaints.
- View Feedback: Day-care centers can view feedback submitted by parents.
- Chat with Parents: Direct messaging feature for communication with parents.
- Provide Meeting Links: Share links for virtual meetings with parents.

3. Staff Module
Description:
The Staff module enables day-care staff to log in, view and update children's details, and communicate with parents.
Features:
- Login: Staff can log in to access their profile and manage children's activities.
- View Profile: Staff can view and update their personal and professional details.
- View Baby Details: Staff can access detailed information about each child, including health records and activity logs.
  - View Parents: Access to parent contact information and preferences.
  - Add Activity Details: Log daily activities such as meals, naps, and playtime.
- View Complaints: Staff can view any complaints related to their day-care center.
  - Forward to Day-Care: Forward complaints to the day-care center for

resolution.

4. Parent Module

Description:

The Parent module allows parents to register, log in, and manage their children's details. It also facilitates communication with day-care centers.

Features:

- Register: Parents can register their details and their children's details.
- Login: Parents can log in to access their children's information and communicate with day-care centers.
- View Facilities: Parents can view the facilities and services offered by day-care centers.
- Manage Babies: Parents can add, update, or manage their children's details.
- View Day-Cares: Parents can view available day-care centers and their details.
    - Request for Admission: Submit admission requests to day-care centers.
    - Make Payment: Process payments for day-care services.
- View Baby Details: Parents can view detailed information about their children, including health records and activity logs.
    - View Daily Activities: Access the daily activity timeline for their children.
    - Track Check-In and Check-Out Details: Monitor their children's check-in and check-out times.
- Send Complaint: Parents can submit complaints or concerns to the day-care center.
    - View Reply: View responses from the day-care center regarding their complaints.
- Send Feedback: Parents can provide feedback on the day-care center's services.
- Chat with Day-Care: Direct messaging feature for communication with day-care staff.
- View Meetings: Access scheduled meeting links for parent-teacher interactions.

SYSTEM SPECIFICATION

Hardware and software requirements for the installation and smooth functioning of this project could be configured based on the requirements needed by the component of the operating environment that works as front-end system here we suggest minimum configuration for the both hardware and software components. Working off with this software is requirements concrete on system environments. It includes two phases

- Hardware requirements
- Software requirements

HARDWARE REQUIREMENTS

- INPUT DEVICE   :MOUSE,KEYBOARD
- OUTPUT DEVICE   :MONITOR
- MEMORY   :4GB RAM(MINIMUM)
- PROCESSOR   :INTEL i3

SOFTWARE REQUIREMENTS

- OPERATING SYSTEM   :WINDOWS 7/8 for better
                        Performance.
- FRONT END   : ,PYTHON DJANGO
- BACK END   : MYSQL

- SOFTWARES USED   :VISUAL STUDIO CODE
- WEB BROWSER   :Internet Explorer/Google Chrome/Firefox