ParentAssist: Caring Support for Senior Parents

Abstract:

ParentAssist is a user-centric web application tailored to meet the needs of individuals aged 45-70 and their adult children. It offers a comprehensive range of essential services to support their overall well-being and family dynamics. The platform begins with a seamless registration and login process for all users, enabling easy access to its functionalities.

Health Maintenance empowers parents to take charge of their well-being by adding their medical information, personalized doctor details, and managing appointments. The Medication Reminders feature ensures timely intake of prescribed medicines through email or WhatsApp notifications and dosage instructions.

An innovative aspect of ParentAssist is its Personalized Medicine Recommendations, which utilizes users' medical history to suggest suitable medicines. Home Maintenance services cater to various household tasks with the assistance of garden workers, housekeepers, plumbers, and electricians.

The Stress Relief Techniques service aims to provide relaxation and peace of mind. Insurance management and payment portal are also incorporated. The application is further enhanced by a sophisticated Chatbot Assistance, equipped with Natural Language Processing, enabling seamless interactions, and even predicting low side-effect medicines. In essence, ParentAssist strives to create a personalized and holistic user experience, empowering users and promoting their well-being.

Functionalities:

1. **Registration and Login:** The website will feature for the registration and login for all users using their credentials
   - User Registration
   - User Login

2. **Health Maintenance:** The Health Maintenance functionality empowers parents to manage their health proactively.
   - Adding Parents details.
   - Adding Medical Information's.
   - Adding Personalized Doctors information.
   - Cancel Appointments.
   - Payment Portal

3. **Medication Reminders:** The Medication Reminders feature aims to help parents manage their prescribed medications effectively and avoid missing any doses.
   - Medication Reminders(email/WhatsApp).
   - dosage instructions.

4. **Personalized Medicine Recommendations:** Analyzing the diseases and suggestion medicine.
   - Personalized Medicine Recommendation by analyzing mentioned diseases.

5. **Home Maintenance:** Provides a feature for home maintenance
   - Home maintenance services like garden workers, housekeepers, plumbers, and electricians for various household tasks.
   - Payment Portal

6. **Stress Relief Techniques:** Providing user service for releasing stress
   - Stress Relief Therapies.
   - Videos.

7. **Insurance:** Provides feature for managing their insurance policies and payment
   - The Insurance services
   - Payment portal

8. **Chatbot Assistance:** The Chatbot Assistance module features a sophisticated chatbot equipped with Natural Language Processing capabilities.
   - Ability to get input as native languages and manglish.
   - Ability to predict less side effect medicine for the disease.

User Modules:

Website Admin

Site Admin is the root user who has the overall control of the system. Privileges and functionalities of this role includes:
- Ability to manage the registrations and login for the website
- Ability for viewing user accounts details.
- Ability to delete, and update user accounts details on request
- Ability to pause users' activity in website.
- Ability to add home maintenance workers providers.
- Ability to add Insurance companies.
- Ability to monitor payment details.

Adult Children's Module:

The Children's Module provides adult children with a dedicated dashboard to access their parents' health information, including medical history, recent check-up details, doctor feedback, and medication details.

- Ability to register and login
- Ability to add parents.
- Ability to add doctors.
- Ability to view parent's health information/medical history/recent check-up details.
- Ability to view doctor's feedback.
- Ability to view next appointment.
- Ability to cancel appointment.
- Ability to view reminders from the doctors.
- Ability to interact with chatbot to know the medicine side effects.
- Ability to view and enquire workers for home maintenance.
- Ability to view and enquire insurance policies offered by the application.
- Ability to do payments for services provide by the application.

Doctors Dashboard:

The Doctor's Dashboard offers secure login, access to patient health data, AI-based prescription for low side-effect medicines, custom medication reminders, feedback collection,

and appointment scheduling, empowering doctors with efficient tools for improved patient care and better healthcare outcomes.

- Ability to log in.
- Ability to access parent's health information, medical history.
- Ability to prescribe medicine for the diseases using ML predicts less side effect medicine for the mentioned diseases.
- Ability to set custom reminders for taking medicines, specifying dosage instructions.
- Ability provide Feedback.
- Ability to appointment Scheduling.

Parent Dashboard:

The Parent Dashboard serves as the central hub for parents, offering a personalized overview of their health-related data, medication reminders, stress relief techniques, and support resources.

- Ability to login.
- Ability to view the health-related data.
- Ability to view mediation reminder.
- Ability view stress relief techniques such as videos, activities etc.
- Ability to view and enquire workers for home maintenance.
- Ability to view and enquire insurance policies offered by the application.
- Ability to do payments for services provide by the application.

Home Maintenance Dashboard

The home maintenance dashboard serves as the central hub for home maintenance providers to describe their services for their customers.

- Ability to register.
- Ability to login.
- Ability to accept request.
- Ability to cancel request.
- Ability to add services.
- Ability to view customers details (name, place, phone).
- Ability to receive payments.

Insurance Dashboard

The Insurance dashboard serves as the central hub for insurance providers to describe their services for their customers.

- Ability to register.
- Ability to login.
- Ability to view customers details (Name, Place, Phone)
- Ability to add insurance policies and its details.
- Ability to add insurance packages related to its policies.