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## Implementation of an IoT-based smart pet clinic web application

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In the existing Sri Lankan culture, raising a pet has become an engrossing hobby. Nevertheless, pets can't raise with the busy lifestyle of humans. There are a variety of pet clinics, co-ordinations, applications, pet shows for pet's welfare. The root cause for this project was "How to implement a functional web application for a pet clinic, for its veterinarians, and pet owners to manage and communicate over an online platform". After identifying that problem, the project was started by following the Software Development Life Cycle's (SDLC) steps. Requirement analysis, design, implementation & coding, testing, and maintenance are the main five steps in SDLC. Throw-way, prototyping was used here as the methodology to repeat the design prototypes. Every specific technique for each step of the SDLC were used to develop the web application successfully. Pet collar feature is going to introduce to provide up-to-date health data of the pet to both pet owner and the pet clinic by applying Internet of Things technology for the use of Sri Lankan customers. Temperature, blood oxygen level, heart rate, location of the pet can identify by this pet collar. Admin, veterinarians, and pet owners were considered as main users. Customer and admin have two separate interfaces in the web application. Home, About, Services, Pet Shop, Appointment, Pet collar, Frequently Ask Questions and Contact were the main pages in customer interface. The web application named as HI PET. Ultimate result is a functional web application for Sri Lankan pet clinics.

**Keyword:** Pet Clinic Web application, Pet care systems, Pet collar

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