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# WEB TECHNOLOGY BASED ANIMAL RESCUE PORTAL

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Abstract— A stray animal is a term used for free-roaming animals in public areas such as housing areas or parks. These animals do not belong to anyone. A stray animal can cause problems in various ways. The main aim of this project is to develop an accurate, reliable, and efficient platform for dog adoption/surrendering. This platform is based on software and database to solve the problem that occurs for the public who want to adopt/surrender dogs. The current platforms offer a minimal, non-flexible, non-updated resource platform with little awareness to people regarding stray animals being abused. Schedule & Report of vaccination are not always known to the people; such necessary information will be provided on the website; also information on veterinary doctors nearby and their contact details will be provided.

Keywords—Stray animals, cruelty, adoption, software platform, vaccination.

# I. INTRODUCTION

A stray dog is defined as any dog in a public area that is not under direct human control. Therefore, this term encompasses un-owned and community-owned dogs but excludes dogs on leashes or under direct human control at the time of a survey (WSPA, 2009). Stray dogs can be either previously owned dogs [1,2] or can be feral dogs (wild dogs) that have never been owned [3]. Factors such as easy availability of food, lack of predators, low number of competitors, and the ease with which a breeding partner can be found can lead to rapid increases in stray dog populations [4]. Dogs are the first species to have been domesticated and share a close cultural, social and economic association with humans [5]. Pets are treated as family members in the Western world and approximately 50% of households keep pets [6]. Domestication of dogs has been shown to provide many benefits to humans [7]. For example, pet ownership is associated with a decreased prevalence of depressive symptoms [8]. It has been reported that pet owners visit their doctor less often, use fewer medications and have lower blood pressure and cholesterol levels than non-pet owners [9]. Dogs have roles in the management of many psychological, psychiatric and biomedical conditions in humans [10, 11].

domestication-in particular, the However. dog overpopulation of stray dogs-can have negative impacts on public health and animal welfare. The overpopulation of stray dogs is an important animal welfare and public health concern in India [12, 13]. It has been reported that 92–97% of human rabies deaths occur in India following bites from infected dogs, of which 60% have been reported from stray dogs [14,15]. Stray dogs transmit many important zoonotic pathogens in India [16]. Large numbers of dogs have been reported to roam the streets in many parts of the country [17, 18, 19]. These high numbers of stray dogs are due to large amounts of edible waste available on the streets, cultural tolerance of stray dogs and a lack of consistently employed sustained birth control programs [20].

According to official data, there are 17.14 million stray dogs in India [21]. This estimate is based on the collection and compilation of information from veterinary personnel based on their areas of work, and passive surveillance. Reliable and repeatable scientific methods have not been used to derive this estimate, and so it might be inaccurate and likely lacks precision.

As partial fulfilment of the Final Year Project, the main aim of this project is to develop an accurate, reliable, and efficient platform for animal (dogs) adoption/surrendering. This platform is based on software and a database to solve the problem that occurs for the public who want to adopt or surrender dogs. The current product of the animal adoption/surrendering platform offers minimal, non-flexible and non-updated resources platform. With an awareness of people regarding stray animals being abused. Up till today, many activities and campaign has been organised not only by the government but also NGO's to create awareness among human being. For example, they have organised campaigns in schools to train this young generation how to handle pets correctly. They organised activities related to animal awareness for the public and they also rated several techniques to follow the current technology trend. VOLUME: 07 ISSUE: 05 | MAY - 2023 SJIF 2023: 8.176 ISSN: 2582-3930

The website will have the essential information such as types of pet breeds, the portal will provide with information of the dog's behaviour, their food types, etc. This portal will have proper measures to know how to nurture a pet and keep information of their vaccinations, its schedules, and relevant data. Website will have the contact details of veterinary doctors, adoption centres, pet requirement details, and donation details too.

Filing of complaints of animal abuse, any mishaps will also be a part of our website. We will be assisting with various sources of requirements of pets.

# II. METHODOLOGY

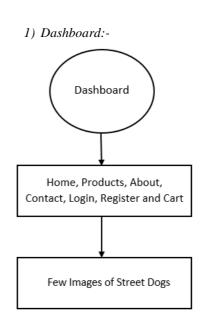
## A. AIM :-

To develop an accurate, reliable, and efficient platform for the people who can help the stray animals for adoption/surrendering, medical care and relevant information about the particular mammal. Building a one-step antidote for all the problems by developing a wide portal for the rescue and supervision of pets.

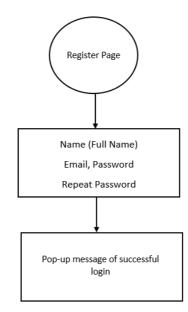
# B. OBJECTIVES :-

- i. To make reports of their vaccination and abuses, saving them from animal cruelty.
- ii. To gather all the information about dogs, their breed and locality, report and mark their presence. Dolan, E., Scotto, J., Slater, M. & Weiss, E. (2015).
- iii. Risk factors for dog relinquishments to a Los Angeles municipal animal shelter. Animals, 5(4), 1311-1328.
- iv. To provide the information of the nearest vets and vaccination survey.
- v. To encourage people to have street animals as pets.
- vi. Making reports of their vaccination, saving them from animal cruelty.
- vii. Having the information of the nearest vets and vaccination survey.
- viii. Animals and their habitat.
- ix. Adoption requirements and new pets for lifestyle.

## C. BLOCK DIAGRAMS :-



2) Register Page :-



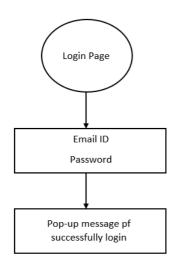
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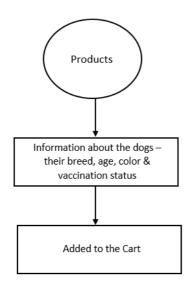
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3) Login Page :-



4) Adoption :-



### III. EASE OF USE

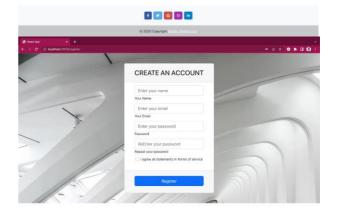
This is a web-based application wherein the welfare of pet animals is taken care of. It is a place where stray, lost, abandoned, or surrendered pets are brought and severed. The application allows the user to adopt a pet, volunteer towards the pet, purchase the products that are related to pets and donate the desired amount to the organisation. The user can do the adoption process through the application as this process is time-consuming if done manually. The application contains pets' related products such as food, grooming products, etc. The application also provides guidelines to the user regarding the health care of pets, how the pets need to be nurtured, how they have to be taken care of after being adopted.

The existing website has the most useful usage in terms of adopting animals, rehoming the animal from their

centre, and helping in terms to promote animals for adoption. But the shortcoming of all those existing websites listed above is that they did not provide any link or way on how to surrender stray animals or pets. As one of the reasons that owner abandons their pets is when they feel they no longer need to keep the pets. So by providing this surrendering option on the webpage, there will be fewer stray animals as the owner can now find the way how and where to surrender their pets instead of leaving them in the alley or public places.

The online platform will be a heaven for animals in need of care and attention, as they will be able to find someone who cares about them. Many animals may also find new homes over time, which will help to rescue those that have been treated quite poorly. The platform will provide a solution to the issues of animal medication, ensuring that accurate and timely vaccination of pets is possible. Necessary and relevant data of animals will be easily available within the website. The online platform will be a common ground for all the needed necessities of information on pets, including their vaccination, adoption facilities, home for the needy, and contact details of veterinary doctors. Emergency cases of animal abuse and mishaps will also be reported, and quick actions may be implemented through this platform.

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			Animal Rescue	
Name	Age	Colour	Description	Add to cart
Martin	9	white	This is our pet and she is very nice pet	Add
Zoey	4	Sweet white	This is our pet and she is very nice pet	Add
tammoy	4	Sweet black	fully vacinated	Add
monty	2	black and white	fully vacinated	Add
reo	2	black and white	fully vacinated (he is very good biy and well dicipline)	Add



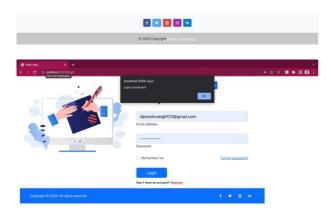
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#### V. REFERENCES

- 1. S Hawes, J Kerrigan and K Morris, "Factors Informing Outcomes for Older Cats and Dogs in Animal Shelters", *Animals (Basel)*, vol. 8, no. 3, pp. 36, Mar 2018.
- Muldoon A.L., Kuhns L.M., Supple J., Jacobson K.C., Garofalo R.A. Web-Based Study of Dog Ownership and Depression Among People Living With HIV. JMIR Ment. Health. 2017;4:e53. doi: 10.2196/mental.8180.
- Sharma R., Singh B.B., Gill J.P.S., Jenkins E., Singh B. Canine parasitic zoonoses in India: Status and issues. Rev. Sci. Tech. 2017;36:817–830. doi: 10.20506/rst.36.3.2717.
- Dolan, E., Scotto, J., Slater, M. & Weiss, E. (2015). Risk factors for dog relinquishments to a Los Angeles municipal animal shelter. Animals, 5(4), 1311-1328.

- Foyer, P., Bjällerhag, N., Wilsson, E. & Jensen, P. (2014). Behavior and experiences of dogs during the first year of life predict the outcome in a later temperament test. Applied Animal Behavior Science, 155, 93-100.
- 6. Arhart, C. &Troxler, J. (2014). Approach behavior of shelter dogs and its relationships with the attitudes of shelter staff to dogs. Applied Animal Behavior Science, 160, 116-126.
- Casey, R.A., Loftus, B., Bolster, C., Richards, G.J., Blackwell, E.J., 2014. Human directed aggression in domestic dogs (Canis familiaris): occurrence in different contexts and risk factors. Appl. Anim. Behav. Sci. 152, 52–63.
- Conley, M.J., Fisher, A.D., Hemsworth, P.H., 2014. Effects of human contact and toys on the fear responses to humans of shelter housed dogs. Appl. Anim. Behav. Sci., http://dx.doi.org/10.1016/j.applanim.2014.03.008.
- Casey, R.A., Loftus, B., Bolster, C., Richards, G.J., Blackwell, E.J., 2014. Human directed aggression in domestic dogs (Canis familiaris): occurrence in different contexts and risk factors. Appl. Anim. Behav. Sci. 152, 52–63.
- Duffy, D. L., Kruger, K. A., Serpell, J. A. (2014). Evaluation of a behavioral assessment tool for dogs relinquished to shelters. Preventative Veterinary Medicine, 117(3-4), 601-609.
- Alves A.J.S., Guiloux A.G.A., Zetun C.B., Polo G., Braga G.B., Panachão L.I., Santos O., Dias R.A. Abandonment of dogs in Latin America: Review of literature. Contin. Educ. J. Vet. Med. Zootech. CRMV-SP. 2013;11:32–39. [Google Scholar]
- Christian H.E., Westgarth C., Bauman A., Richards E.A., Rhodes R., Evenson K.R. Dog ownership and physical activity: A review of the evidence. J. Phys. Act. Health. 2013;10:750–759. doi: 10.1123/jpah.10.5.750.
- Garcia R.C.M., Calderón N., Ferreira F. Consolidation of international guidelines for management of canine populations in urban areas and proposed indicators for their management. Rev. Panam. Salud Publica. 2012;32:140–144. doi: 10.1590/S1020-49892012000800008.
- Larson G., Karlsson E.K., Perri A., Webster M.T., Ho S.Y., Peters J., Stahl P.W., Piper P.J., Lingaas F., Fredholm M., et al. Rethinking dog domestication by integrating genetics, archeology and biogeography. Proc. Natl. Acad. Sci. USA. 2012; 109:8878–8883. doi: 10.1073/pnas.1203005109.
- Suraweera W., Morris S.K., Kumar R., Warrell D.A., Warrell M.J., Jha P. Deaths from symptomatically identifiable furious rabies in India: A nationally representative mortality survey. PLoS Negl. Trop. Dis. 2012;6:e1847. doi: 10.1371/journal.pntd.0001847.
- BAHS Basic Animal Husbandry and Fisheries Statistics . 19th Livestock Census. Department of Animal Husbandry, Dairying and Fisheries, Ministry of agriculture, Government of India; New Delhi, India: 2012.
- Punjabi G.A., Athreya V., Linnell J.D.C. Using natural marks to estimate free-ranging dog Canis familiaris abundance in a MARK-RESIGHT framework in suburban Mumbai, India. Trop. Conserv. Sci. 2012;5:510–520. doi: 10.1177/194008291200500408.
- Hiby L.R., Reece J.F., Wright R., Jaisinghani R., Singh B., Hiby E.F. A mark-resight survey method to estimate the roaming dog population in three cities in Rajasthan, India. BMC Vet. Res. 2011;7:46. doi: 10.1186/1746-6148-7-46.
- Totton S.C., Wandeler A.I., Zinsstag J., Bauch C.T., Ribble C.S., Rosatte R.C., McEwen S.A. Stray dog population demographics in Jodhpur, India following a population control/rabies vaccination program. Prev. Vet. Med. 2010;97:51–57. doi: 10.1016/j.prevetmed.2010.07.009.
- Amaku M., Dias R.A., Ferreira F. Dynamics and Control of Stray Dog Populations. Math. Popul. Stud. 2010;17:69–78. doi: 10.1080/08898481003689452.
- Araujo,J.A.,deRivera,C., Ethier,J.L., Landsberg, G.M., Denenberg, S.,Arnold, S., Milgram, N.W., 2010. ANXITANE® tablets reduce fear of human beings in a laboratory model of anxiety-related behavior. J. Vet. Behav. 5, 268–275.
- 22. Arhant, C., Bubna-Littitz, H., Bartels, A., Futschik, A., Troxler, J., 2010. Behaviour of smaller and larger dogs: effects of training methods, inconsistency of owner behaviour and level of engagement in activities with the dog. Appl. Anim. Behav. Sci. 123, 131–142.

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- Barrera, G., Jakovcevic, A., Elgier, A.M., Mustaca, A., Bentosela, M., 2010. Responses of shelter and pet dogs to an unknown human. J.Vet. Behav. 5, 339–344.
- Bergamasco, L., Osella, M.C., Savarino, P., Larosa, G., Ozella, L., Manassero, M., Badino, P., Odore, R., Barbero, R., Re, G., 2010. Heart rate variability and saliva cortisol assessment in shelter dog: humananimal interaction effects. Appl. Anim. Behav. Sci. 125, 56–68.
- Miklosi A. Dog Behaviour, Evolution and Cognition. Oxford University Press; Oxford, UK: 2008. p. 25
- Menezes R. Rabies in India. CMAJ. 2008;178:564–566. doi: 10.1503/cmaj.071488.
- 27. Duffy, D.L., Hsu, Y.Y., Serpell, J.A., 2008. Breed differences in canine aggression. Appl Anim Behav Sci 114, 441-460.
- Shimozako A.J., Cout E.B., Jr. Photographic Capture-Recapture for Estimation of Stray Dog Population. Verlag; Saarbrucken, Germany: 2008.
- Miklosi A. Dog Behaviour, Evolution and Cognition. Oxford University Press; Oxford, UK: 2008. p. 25
- Bennett, P.C., Rohlf, V.I., 2007. Owner-companion dog interactions: relationships between demographic variables, potentially problematic behaviours, training engagement and shared activities. Appl. Anim. Behav. Sci. 102, 65–84.
- Boissy, A., Manteuffel, G., Jensen, M.B., Moe, R.O., Spruijt, B., Keeling, L.J., Winckler, C., Forkman, B., Dimitrov, I., Langbein, J., Bakken, M., Veissier, I., Aubert, A., 2007. Assessment of positive emotions in animals to improve their welfare. Physiol. Behav. 92, 375– 397.
- 32. Taylor, K.D., Mills, D.S., 2007. The effect of the kennel environment on canine welfare: a critical review of experimental studies. Anim Welfare 16, 435-447.
- Botreau, R., Veissier, I., Butterworth, A., Bracke, M.B.M., Keeling, L.J., 2007. Definition of criteria for overall assessment of animal welfare. Anim. Welfare 16, 225–228.
- Christensen, E., Scarlett, J., Campagna, M. &Houpt, K. A. (2006). Aggressive behavior in adopted dogs that passed a temperament test. Applied Animal Behavior Science, 106(1), 85-95.
- Coppola, C.L., Enns, R.M., Grandin, T., 2006. Noise in the animal shelter environment: building design and the effects of daily noise exposure. J. Appl. Anim. Welfare Sci. 9, 1–7.

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