FINAL YEAR PROJECT REPORT

WEB APPLICATION FOR ANIMAL RESCUE & PET ADOPTION

In fulfillment of the requirement
For degree of
BS (COMPUTER SCIENCES)

By

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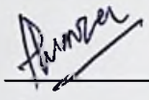
DECLARATION

We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

Signature: 

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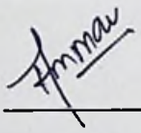
Signature: 

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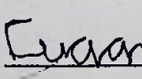
Signature: 

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WEB APPLICATION FOR ANIMAL RESCUE & PET ADOPTION

ABSTRACT

The objective of this project is to develop a web application to help animal shelters and local NGO(s) with their administrative and logistical day to day tasks. This report explores the modules and functionalities offered by the application to help save care for animals and assist stakeholders and shelter in similar fashion. Different stages for the development of this application shall be discussed in the report. Finally the end product of the application will be written in the software called VS Code and deployed on internet upon successful approval from all the stakeholders involved.

This project uses MERN stack (React JS, Express JS, Mongo DB, and NodeJS), a powerful combination of JavaScript technologies for the development and design of the application. The main advantage of using these technologies is that they provide robust and effective development environment and libraries for effective application development. Different modules of this application are discussed with an in depth analysis of user flow and architecture of the application.

After a comprehensive research process to find suitable functionalities and modules for the application from numerous reference applications, the modules were finalized and progression of development followed suit. The application involves various libraries necessary for assisting in development to provide organizations with a reliable, secure, effective application that helps their welfare endeavours greatly. Some notable libraries integrated with this project are bCrypt, cookie-parser, GridJS, Material UI and JWT.

The application provides interfaces for staff to upload details of animals, educational resources, expenses, and medical records. Application visitors can view these resources and browse collection of animals housed inside the shelter to adopt/foster animals and take part in the welfare endeavours of the organization. Recommendations for future development and conclusions are also included in the report.

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