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In Collaboration with

UNIVERSITY OF WESTMINSTER

**Best Dog**  
**Dog Breed Recommendation System using**  
**Ordinal Priority Approach**

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Submitted in partial fulfilment of the requirements for the BSc in Computer Science degree at  
the University of Westminster.

**July 2022**

## **Abstract**

The relationship between dogs and humans is a long and complex one. Nowadays people are familiar with the phrase ‘Dogs are man’s best friend’, but there is a lot more to dogs than most people would think. Dogs have the ability to experience a wide range of emotions, from contentment to sadness. Dogs have been known to cry with happiness or when they are comforted when in distress. They experience a range of emotions just like humans, which is something that makes them such an important asset in a human’s life. However, the selection of breeds for various needs requires a piece of proper knowledge to understand the nature and the characteristics of the dog breed. If some person selects a dog breed that is not suitable for its environment it can cause various problems to both the dog and other living beings around it.

This research aims to present a solution to recommend dog breeds by the method called the Ordinal Priority Approach with collaborative filtering. According to this approach, the system will be asking the user to prioritize the attributes which are referred to as characteristics of a dog according to their preference. The dataset is obtained by web scraping the ‘Dogtime’ website which includes data on almost every dog breed especially purebred dogs including attributes of physical characteristics and personalities. As a result, the proposed system called “Best Dog” is recommending most suitable dog breeds and similar dog breeds. It will be able to help the people who are willing to get a suitable dog for their home according to their preferences.

**Keywords:** Dog breed recommendation system, OPA, Dog breeds, Mixed-breed dogs, Pure breed dogs