

How to Perform Proper Indexing?

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Abstract : Efficient query processing is one of the utmost requisites in any business environment to satisfy consumer needs. This paper investigates the various types of indexing models, viz. primary, secondary, and multi-level. The investigation is done under the ambit of various types of queries to which each indexing model performs with efficacy. This study also discusses the inherent advantages and disadvantages of each indexing model and how indexing models can be chosen based on a particular environment. This paper also draws parallels between various indexing models and provides recommendations that would help a Database administrator to zero-in on a particular indexing model attributed to the needs and requirements of the production environment. In addition, to satisfy industry and consumer needs attributed to the colossal data generation nowadays, this study has proposed two novel indexing techniques that can be used to index highly unstructured and structured Big Data with efficacy. The study also briefly discusses some best practices that the industry should follow in order to choose an indexing model that is apposite to their prerequisites and requirements.

Keywords : indexing, hashing, latent semantic indexing, B-tree

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