

A

PROJECT REPORT

ON

**“DYNAMIC QUERY FORM FOR
DATABASE QUERY”**

SUBMITTED TO

SHIVAJI UNIVERSITY,

PARTIAL FULFILLMENT OF REQUIREMENT FOR THE AWARD OF BACHELOR
DEGREE IN COMPUTER SCIENCE AND ENGINEERING.

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TEXTILE AND ENGINEERING INSTITUTE, ICHALKARANJI

(AN AUTONOMOUS INSTITUTE)

(A+ Grade Accreditation by NAAC)

(ISO 9001:2015 CERTIFIED)

2016-2017

D.K.T.E.SOCIETY'S
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CERTIFICATE

THIS IS CERTIFIED THAT PROJECT WORK ENTITLED "DYNAMIC QUERY FORM FOR DATABASE QUERIES" IS A BONAFIDE RECORD OF PROJECT WORK CARRIED OUT IN THIS COLLEGE BY

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We hereby declare that, the project work report entitled "**DYNAMIC QUERY FORM FOR DATABASE QUERIES**" which is being submitted to D.K.T.E. Society's Textile and Engineering Institute Ichalkaranji, affiliated to Shivaji University, Kolhapur is in partial fulfillment of degree B.E.(CSE). It is a bonafide report of the work carried out by us. The material contained in this report has not been submitted to any university or institution for the award of any degree. Further, we declare that we have not violated any of the provisions under Copyright and Piracy / Cyber / IPR Act amended from time to time.

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ACKNOWLEDGEMENT

With great pleasure we wish to express our deep sense of gratitude to Prof. Mr. K. S. Kadam for his valuable guidance, support and encouragement in completion of this project report.

Also, we would like to take opportunity to thank our H.O.D. Prof. (Dr.) D. V. Kodavade for his co-operation in preparing this project report.

We feel gratified to record our cordial thanks to other staff members of CSE Department for their support, help and assistance which they extended as and when required.

Thank you,

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ABSTRACT

Modern scientific databases and web databases maintain large and heterogeneous data. These real-world databases contain over hundreds or even thousands of relations and attributes. Traditional predefined query forms are not able to satisfy various ad-hoc queries from users on those databases. This paper proposes DQF, a novel database query form interface, which is able to dynamically generate query forms. The essence of DQF is to capture a user's preference and rank query form components, assisting him/her to make decisions. The generation of a query form is an iterative process and is guided by the user. At each iteration, the system automatically generates ranking lists of form components and the user then adds the desired form components into the query form. The ranking of form components is based on the captured user preference. A user can also fill the query form and submit queries to view the query result at each iteration. In this way, a query form could be dynamically refined till the user satisfies with the query results. We utilize the expected F-measure for measuring the goodness of a query form. A probabilistic model is developed for estimating the goodness of a query form in DQF. Our experimental evaluation and user study demonstrate the effectiveness and efficiency of the system.

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