An Interesting Insight & Interaction of Q*cert With BaseX Data Base System in the Context of BIG-DATA Based on - HighVolume Data Querying, Informatics & Computing.

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[I] Introduction & Inspiration:

"Formalizing Image Processing in Higher Order Logic(hol) by Understanding and Using XML-Hol-Scala-JVM Software Framework Towards Processing of Cryo-Em/TEM/SEM Images Based on Levy Processes a Novel Suggestion."

Authors: D.N.T.Kumar

Category: Digital Signal Processing

{ Source : http://vixra.org/author/d_n_t_kumar }

Q*cert – CoqTheoremProver[CTP]/OCaml as Bio-informatics Platform in the Context of Understanding Protein Folding Mechanisms

Authors: D.N.T.Kumar

{ Source : http://vixra.org/author/d_n_t_kumar }

https://db.in.tum.de/

To understand our paper please read all the references & materials provided as links.

[II] Informatics Framework:

Q*cert -----> XML Query Engine interaction involving BaseX

Input/s

It is "Important" to Understand OCaml-interaction with XML and then use Q*cert with BaseX involving XML Schema to Process BIG DATA e.g. CryoEM Data/Neuroinformatics/MRI Data in the context of High Performance Computing(HPC)

Approximate Query Engine Interaction Framework for Computing & Informatics

Lot of FINE TUNING is required

[Readers - Please check all the information before using this suggestion.]

OCAML-XML INTERACTION IN THE CONTEXT OF BASEX

Figure I – Our Simple Suggestion for BIG DATA Applications involving Query Engine Technology in the Context of BaseX DBS.

"Many industry data standards, e.g.HL7,OTA,FpML,MISMO,NIEM, etc. are based on XML and the rich features of the XML schema specification. Many of these standards are quite complex and it is not uncommon for a specification to comprise several thousand pages. In publishing, DITAis an XML industry data standard. XML is used extensively to underpin various publishing formats. XML is widely used in a Services Oriented Architecture (SOA). Disparate systems communicate with each other by exchanging XML messages. The message exchange format is standardised as an XML schema (XSD). This is also referred to as the canonical schema." [Source:Wiki]

http://galax.sourceforge.net/

https://en.wikipedia.org/wiki/XML

https://www.w3.org/TR/REC-xml/

https://www.w3.org/XML/Core/

[III] Information on Mathematics & Software Used:

[i] Q*cert: A Platform for Implementing and Verifying Query Compilers

{ Source : https://dl.acm.org/citation.cfm?doid=3035918.3056447 }

[ii] Coq Theorem Prover

{ Source : https://coq.inria.fr/}

[iii] BaseX

{Source: http://basex.org/basex/gui/}

- [iv] http://basex.org/basex/xquery/
- [v] http://basex.org/basex/server/
- [vi] http://basex.org/basex/gui/
- [vii] https://ocaml.org/
- [viii] https://caml.inria.fr/pub/old_caml_site/humps/caml_XML_tools.html
- [ix] https://github.com/dbuenzli/xmlm

[IV] Acknowledgment:

Special Thanks to all. This is Non-Profit Academic R&D Only.

[V] References:

- [1] https://db.in.tum.de/DB-Uebungsbuch/
- [2] https://dblp.uni-trier.de/pers/hd/n/Neumann_0001:Thomas
- [3] https://querycert.github.io/
- [4] https://querycert.github.io/doc.html
- [5] http://basex.org/about/publications/
- [6] http://researchers.lille.inria.fr/~niehren/Papers/X-Fun/0.pdf
- [7] https://www.cl.cam.ac.uk/~jrh13/papers/joerg.pdf

THEN END.