PROJECT MANAGEMENT DOCUMENT

FOR

COLUMN DATASTORE FOR DATA WAREHOUSE

Project Guide

Prof Ramanathan Chandrashekar

Version No. 1.0

Submitted By

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Activity List

Serial No.	Activity	Time Taken(hrs)
1.	Formulation of the problem	15
	• Understanding problem statement	3
	• Reading relevant background information	6
	• Understanding and documenting requirements	6
2.	Designing a solution and documentation	30
3.	Relevant learning : about Indexing Structures, Column Data Store, Data Warehouse	12
4	Coding and unit testing	200
5.	Integration and system testing	60
6.	Documentation	30
7.	Reviewing	10
8.	Rework/Debugging	50

Project Plan

Phase	Activity	Start Date	End Date	Responsible Person(s)
Gathering of Requirements	Formulation of the problem			
	• Understanding the problem statement	17-01-2013	18-01-2013	All
	• Reading relevant background information	18-01-2013	20-01-2013	All
	• Understanding and specifying the requirements	21-01-2013	23-01-2013	All
Design	Design the solution			
	• Identifying the language in which code is to be implemented to start relevant learning	24-01-2013	24-01-2013	All

	• Identifying the different modules to be implemented	25-01-2013	28-01-2013	All
	• Designing an architecture for the project	29-01-2013	2-02-2013	All
	• Come up with a design document	3-02-2013	5-02-2013	All
Relevant Learning	Learning about the indexing structures, column data store, data warehouse, XML parsing	6-02-2013	9-02-2013	All
Coding	Writing a code for parsing an XML schema file and creating a data file for each column	10-02-2013	12-02-2013	Nagashree
	Writing a code for processing the CRUD operations on the data present in the data files	13-02-2013	5-03-2013	All
	Implementing the indexing structures for data in each data file(Binary Search Tree and Hashing table)	18-02-2013	25-02-2013	Sravya . K
Testing	Preparing a test plan document			
	Deciding on the test set(a set of test cases) against which the code will be tested	11-03-2013	17-03-2013	All
	Testing of code against the decided test cases and fixing of encountered bugs	18-03-2013	23-03-2013	All
Document ation	Documenting all the completed phases	24-03-2013	29-03-2013	All
Reviewing	Reviewing the document to check if all the phases correlate with one another	30-03-2013	05-04-2013	All
Rework / Debugging	Reworking if flaws are found in the previous phase	06-04-2013	13-04-2013	All

Testing Strategy

Testing in the Requirements phase :

- Requirements are tested for feasibility, correctness and completeness
- Functional requirement of this project is that data in stored in column data stores as against relational database and expected to make retrieval of data easier. This requirement is tested.

Testing in Design phase:

- It is tested whether the modules identified can be implemented as desired and implementing the architecture is feasible. Design document is also verified.

Testing in coding phase :

- Unit Testing : There are 3 basic modules to be implemented and tested in our project. They are-
  1. Module for parsing the XML Schema file for the inputs, which are then written in different files.
  2. Module for performing CRUD operations on the data present in the data files previously created.
  3. Module for populating the data into indexing structures like Binary Search Trees and Hash tables.

Each module is tested individually in this phase, by the responsible person, before integration.

Test cases :

1. Test cases for module-1 will be XML Schema files with different user defined tags and attributes. It will be checked whether all these XML Schema files will be correctly parsed as expected and data in populated into data files.
2. Test cases for module-2 will be queries which are analogous to the SQL queries. This module is expected to return desired resultset.
3. Test cases for module-3 will be the input from the data files created in module - 1. This module must be able to construct desired indexing structure for this data.

<u>Integration Testing:</u>

- The above modules are tested after integrating them. The interfaces between then are tested for proper flow of data between then and checked whether desired result is obtained.

Schedule

Testing	Start time	End Time	Responsible Person(s)
In requirements phase	21-01-2013	23-01-2013	All the team members
In Design phase	30-01-2013	02-02-2013	All the team members
Unit Testing			
• Module-1	12-02-2013	13-02-2013	K Sravya
• Module-2	02-03-2013	06-03-2013	All the team members
• Module-3	24-03-2013	03-03-2013	Nagashree D A
Integration Testing	11-03-2013	23-03-2013	All the team members