METHODOLOGY

MVC Based E-commerce Design

Literature Review based On Model View Controller
MVC with J2EE

Public Cloud Implementation for E-commerce

Cloud Computing Literature
Review with E-commerce.

Registered E-commerce Application on cloud

Implementing Cloud based services for Merchants
Cloud Based service to Merchants Advertisement, Offers etc

Implementing Recommender System using algorithms, enhancement of CF.

Recommenders System for user with Data Mining Analysis

Perform Testing Based on Data.

Testing How Recommenders, merchant service improve sell

Cloud System

E-commerce sites Integration
The proposed system is MVC based four tier web application for e-commerce with cloud computing. The proposed block diagram is as shown in the fig. 1 the upper block is cloud the public cloud especially for e-commerce systems is created the various e-commerce application will be virtualized in the cloud, the mobile based application will also available on cloud, the upper block is User Block
and E-commerce enterprise block, User Block is for user operations like User Registration, various user requests to the system, User cloud services for e-commerce and most importantly Recommender system by which user will able to take decision for the various e-commerce operations, The e-commerce enterprise registration block will incourage the e-commence application of merchant sites and from using cloud service the mobile advertising algorithm will be plan so that particular merchant target for advertise their product, offer to the particular customer, in this way the e-commerce becomes ubiquitous in nature and provide more flexibility to the e-commerce, The special data mining algorithms will be used to analyze all the information from cloud.

The server side JavaEE (Java Enterprise Edition) web based application development is considered with business rules will be implemented in EJB (Enterprise Java Bean), the complete mvc based approach is used using spring framework technology, with Hibernate as a ORM (Object Relational Mapping) technology, the entire system then will be deployed on cloud and various client application will be run from cloud, the mobile client also run from cloud, the application is also provide data analysis, user rating preferences and recommender algorithms implemented, all implementation will be done in Java EE, and mobile application client will be implemented for various application features. The various data mining algorithm will be implemented in java EE on server side and will be deployed on cloud so that client will be access those application from cloud. The spring framework along with other framework work like hibernate will provide additional benefits like platform and language independent in the overall system. JEE technology and the concept of mvc pattern are introduce in the proposed system, The oracle’s JavaEE provides well technical support for implementations of e-commerce solution with extensibility, flexibility and maintainability but unclear tier partition and user interface mix technologies is the major issue to deal with, mvc pattern enables system to be extensible and modular by separating application into three parts Model, View and Controller proposed idea combines mvc design pattern to construct e-commerce solution with high extensibility
Fig: 2 Proposed Four Tier Developments for E-commerce.

CLOUD COMPUTING WHICH CONNECTS VARIOUS E-COMMERCE SYSTEMS

Data Analysis
Using Data Mining

Recommendation
Algorithm
Above diagram is proposed overall system architecture for the e-commerce system. The various e-commerce system club together in cloud, the cloud will acts as a central system for various system and its like a heart of the system, the cloud will intelligently gather all the data from various e-commerce resources and will create a kind of a repository of e-commerce data and then the various data mining algorithms like classification, clustering, association etc will be used to analyze the data and special algorithm will be design for recommendation system, the recommendation system based on various user inputs and provide result from large data set, as the data set is from cloud it need more processing
power and proper distributed system architecture, for that reason MVC based server site four tier architecture is proposed and client layer will be consisting different version of client like desktop, mobile, tablet etc. To overcome the problem of mobile operating environment problem the cloud will be providing specialized application to run mobile e-commerce and there will be special mobile recommender applications for mobile user interface.

Work Plan

1st Year

- To study e-commerce system for cloud integration.
- To study and analyze the data mining approach for decision support system.
- To study and analyze MVC Based Server side J2EE based System.
- To study other Systems with literature Review.
- To prepare a Research Proposal and Literature Review.
- Prepare a complete Blue print of the research Plan.

2 Year

- Implement MVC Based J2EE Server Side E-commerce Pilot System.
- Create a public cloud or deploy few E-commerce sites on the existing Cloud.
- Create a Data mining work from cloud large data set acts as repository.
- Implement a Recommended System for the given e-commerce case.
- Analyze the Recommendation system, Test the results.

Prepare a complete report as a thesis