

# Effective Data Management Using Iterative Approach in Data Systems

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**Keywords:** Data Systems, Data Management, Divide-and-Iterate, Design Document Specification, SRS.

**Abstract:** This study explored memory management in large datasets from a user-centric perspective, filling a research gap often overlooked. While previous projects primarily aimed to improve data maintenance techniques, this research sought to scrutinize the process of data storage and management within these systems. The primary objective was to identify and analyze the issues encountered throughout the stages of the public tendering process and present potential solutions. The existing system faced application performance issues, bid submission delays, and complexities in bid evaluation, often due to a lack of clarity in the scope of work. In response, the proposed system introduces a user-friendly auction platform with enhanced data management capabilities, catering to sellers, bidders, and merchants. It streamlines sensitive data handling, bidding records, and transactions while employing a divide-and-iterate approach for improved efficiency. This study's contribution lies in addressing the critical challenges in online bidding processes and offering innovative solutions for enhanced performance and data management, with future potential for blockchain and smart contract integration.

## 1 INTRODUCTION

Despite much research effort and popularity, memory management in large amounts of data has yet to be studied from a user perspective. Previous projects have focused on developing efficient data maintenance techniques and identifying problem areas in such applications. However, none of them have examined the process by which data is stored and maintained within these systems itself. The objective of this project is to identify and analyze issues at each stage of the public tendering process. It will also propose possible solutions to address or mitigate these issues. The selection of a seller for the subcontracting the project for purchase of goods and services associated with that project is accomplished through the bidding process. A bid record contains information about the goods and services that will be purchased or specifications for the project. Instead of employing the conventional approach used in big data systems, we aggregate all the sensitive and substantial data offered by various participants in the bidding process and handle it with the divide and retrieve approach in this project. The most frequent problem is that the bidding system is unable to offer a thorough

contractor database with their staff, past projects and experiences, and performance reviews. The lack of human resources, both in terms of quantity and skill, is a serious consideration. Online bids may be submitted at any time, day or night. Online auctions are almost completely devoid of time and space constraints. Before placing a bid, buyers can research the items and get information thanks to the listing. Everyone with internet access is able to take part in the auction as a seller or a bidder. This work's main goal is to develop new iterative approaches in the way of general linear regression problem that can be divided directly and conquer traditional approach.

## 2 METHODOLOGY

### 2.1 SDLC

Stage1: Investigation Scheduling

Necessity investigation is vital role and it works crucial organize in SDLC. It gets input and performed senior individuals of the group with inputs from hosts, deals office, showcase surveys and specialists in space within industry. It will be pointed out by

utilizes to arrange the fundamental approach of conduct should be included in the temperate, movable, and specializable areas. Planning in quality confirmation necessary activities and recognizable proof about dangers related with the venture is additionally exhausted. The result of achievability ponder is effectively with few dangerable changes made.

#### Stage 2: Significant necessities

In Software Requirement Specification is used to define and validate the product conditions and got approved from the request judges. It consists all the conditions to be designed and developed during the design life cycle.

#### Stage 3: Product Design Scheme

Software Requirement Specification is a developing product enthusiasm infrastructure which is developed by product study leaders. Grounded on the criteria specified in the SRS, multiple product architectural design approaches are generally represented in the Design Document Specification. This Design Document Specification is audited by all crucial stakeholders and grounded on colorful parameters similar as issue exploremment, product stealness, design modulation, budget and time consumptions, the Swish design approach is product-name specified.

#### Stage 4: Mounting product structure

In Software Development Life Cycle the actual development thresholds are erected. Programming law is generated in some stages while using Design Document Specification. If the design is activated in some manner, law generation can not bebothered. inventors have to follow the rendering guide lines of their association. Tools in programming like compilers, practitioners, debuggers etc. are used to convince various laws. High position programming languages like C, C++, Pascal, Java, and PHP are used for rendering.

#### Stage 5: Testing the Product

Testing phase is the subset for other phases. Almost every phase of models can be included in SDLC. This phase is useful for finding the product defects tracked, corrected, and retested till it meets the standard quality mentioned in SRS.

#### Stage 6: Consumption Market and Safeguarding

Product is examined and prepared to be stationed officially withinside the applicable request officially. Eventually product deployment takes place in levels according to the associations of Business strategy.

The product may be launched and examined in a constrained member withinside the actual business terrain (UAT- stoner reputation testing). The product can be launched as it is or with cautioned improvements withinside the targeted request member. Once the product is launched withinside of request, conservation will be finished for the being consumer base.

## 2.2 Existing System

A poor application performance may necessitate rebidding with a revised scope, delay bid submission dates, and make bid evaluation extremely challenging. The challenge in the proposal evaluation and source selection can be traced back to anon informative or ambiguous scope of work, which may delay company's projects. The study therefore recommended, among other things, that the application and data management performance should be handled properly in online bidding activities in order to increase the collaboration between the departments and the users of bid documents. Collaborative behavior by service providers is one of the most frequently observed. In terms of commission to win a tender, this occurred frequently. During the tender process, data fetching and combining in terms of large amount were frequent. Besides, expanding e-obtainment makes potential deceitfulness. According to the findings of a study, the e-procurement procedure in Portugal was plagued by a number of issues, some of which could have an effect on value tendering, competency, time, and expense.

## 3 PROPOSED SYSTEM

The goal is to create a user-friendly auction site where products can be sold and value-added services are provided to sellers and bidders along with maintaining the sensitive data of the merchants and handle the bidding records and transactions involved in the process. All users can sign up securely, including for a personal profile. Complete Inquiry of the whole site for simple access. The traditional divide and conquer method is modified and used as divide and iterate approach to resolve the data management issue. The computing platform decomposes large amounts of data into manageable chunks in order to maximize memory and processing time when the data's velocity for processing is extremely high. This work's main goal is to develop new iterative approaches to the general linear

regression problem directly on divide as well as conquer traditional approach.

### 3.1 Advantage of Proposed System

It allows for fair assessment work done and it reduces controversies in risks. It enhances the job execution by offering a well and good road map to fetch and combine these data. Finally this new approach can bring huge benefits of memory-storage and time-complexity will be reduced. Increased performance in of application due to handling the data effectively. Data integrity will be increased.

## 4 MODULES

Admin  
Merchant  
Customer  
Auctioneer  
Vendor

### Admin

Admin module is used to login the particular module which is called as Admin homepage. In this module the menu include view details, upload email, review, update payment include in homepage. The admin view the details of the client details and product details in this module and give approval to the client. Further process will be done only by registration process by Admin. Admin review the product details for auction and he is responsible to find out the highest bidder and send the email. The admin review the product of vendor and upload the price for unsold products. The user's payment process will be verified by the administrator. If it is verified successfully the report will be sent to the customer. After the payment process he will find the highest bidder in the bidding process and upload email.

### Merchant

This module upload details, review price, view Product, View Status and logout are the menu's include in this module. Merchant view the available products details after that he will upload the bidding product for action then the merchant will review the bidding price allocated by the auctioneer. Here the merchant will view the details of the bidding product. After viewing details merchant will accept the product if bidding price is gain for the product or he will reject the product if bidding price is loss for the product. He will update the email process about the

auctioneer status details which product is highly sale in the bidding process.

### Customer

Customers module can be enabled for editing in this module. The admin will assess the registration details of the clients. Clients status will be enabled in customer's web page. Once get the approval from admin it will show on the view status page. Then the client will upload the requirement details on the upload page. Before upload the requirements id processing is compulsory. The id will be sent to the client email id. After entering the generated id then only the customer will view the bidding product details otherwise he will not be able to view the product details. Customer will bid on the product who participate in auctions bid against each other in order to win the asset through the bidding process. They do so by placing competitive bids in an attempt to beat out the other buyers. The person who bids the highest amount wins the auction. After that the customer will upload the payment for the bid product and get the product from auctioneer.

### Auctioneer

In Auction module the Auctioneer needs to register and login this module, it will redirect to the Auctioneer homepage like view products, upload payment, upload products details, upload email and logout will displayed on the Auctioneer homepage. The auctioneer view the products uploaded from merchant and fix price to each product for bidding. Goods or services by offering them for bidding—allowing people to bid and selling to the highest bidder. The bidders compete against each other, with each subsequent bid being higher than the previous bid. Once an item is placed for sale, the auctioneer will start at a relatively low price to attract a large number of bidders. The person who bids the highest amount wins the auction. The auctioneer will upload the details of unsold product to admin and fix price to the unsold product. Auctioneer will upload the email for the higher bidder. And upload the product to the person who wins the bid.

### Vendor

In vendor module it includes view products, upload payment, bid product and logout will displayed on the vendor homepage. The vendor view the unsold products for bidding. After viewing the product the vendor bid on the product who participate in auctions bid against each other in order to win the asset through an bidding process. They can do by placing competitive bids in an attempt to beat out the other buyers. The person who bids the highest amount wins

the auction. Here, the vendor upload the payment for the bid product after the payment he will get the product from auctioneer.

## 5 CONCLUSION

Software development is a continuous process in the software development life cycle. As per the needs of the user from time to time the development process can be modulated. The project has no doubt of easily modification and enhancement would be done from time to time. Technologies for online auctions are changing the way we do business online. However, the uncooperative behavior of the major online auctioneers frequently impedes the expansion of auction-related research and the creation of new auction security methods. Due to the lack of high-quality auction data and literature on the design of online bidding process. This application can be upgraded in the future to give a lot of usefulness, which we have not yet included. There are so many things that could fall under this wide area. The big data systems framework makes it possible to identify, describe, and analyze the most important parts of the bidding process. This lets people appreciate and understand how complicated connections and relationships between different parts are. In future the block chain and smart contracts techniques will improve tamper free application and efficient application.

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