



# SMART TENDER MANAGEMENT SYSTEM

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**Abstract :-** Project developed to enable the vendors to get all the tender details online and provide facility to submit the tender. Provides a system which will reduce the extra cost which involves for this entire process like advertising, document processing. This application makes the evaluation process to complete within the assigned date. Different vendors with provides different Bids among which some selected bids can be approved It may leads to increase profit and improve the quality of a company. In conclusion the Smart Tender Management System represents a paradigm shift in procurement practices, offering organizations a powerful tool to optimize their tendering processes, mitigate risks, and achieve greater competitiveness in the marketplace.

**Keyword :** Intelligent Tender Management, JSP Projects, MYSQL Projects, Tender Allotment, Tender Result, Tomcat server.

**INTRODUCTION:-** Smart Tender management System Involve combining technology with smart contract functionality to create a secure, transparent, and efficient platform for managing and analyzing tenders Designing. Here's a high-level design for such a system. [5] Designing a Smart Tender management System requires careful planning to create a secure, transparent, and efficient platform for managing tender. In this tender management here there are lots of data with different details are captured and stored with the help of the algorithm that data will be further can be used to analysis to better tender according to client user, [1] 1. Tender Creation and publishing process, 2. Bidding process on the tender 3. Evaluation and Negotiation of the bid, 4. Selection of the . User will check out as per the period of time and budget of time after all this admin will given one tender according to right way.

1. **Smart tender concept :-** After going into login of smart tender system you will identified that there will be so many kind of features as button on the top of the page each button has some different kind. A tender is created by the tendering organization by specifying the details such as

description, bidding period, etc. The tendering company also provides documents such as its balance sheet, a license from tenderso that the bidding company can verify the credibility and chances of defaulting of the tendering company and proceed for bidding. The stipulation of tender takes place i.e. the tendering company states its demands and the evaluation criteria on which a bid will be evaluated.

(A) The bidder registers asynchronously with the system. The bidder is then shown all the tenders available for bid with tender details. The bidder then searches for appropriate tender for bidding.

The tender requirements are sent to the bidder along with the tendering organization details. (B)

The bidder then places a bid on the tender by providing a quote, quotation clauses. The bids are encrypted twice - i. With bidder's symmetric key and ii. Tender's public key (address of tender on the blockchain). The bidder also shows its credibility by providing its balance sheet, a license from RoC (Registrar of Companies) which are encrypted with the same key as discussed earlier. The bidder can only bid during the bidding period and once the deadline is reached, no further bids will be accepted.

## 2. Literature survey:-

AUTHORS	PAPER NAME & YEAR	FEATURES	Advantages	Disadvantages
Dhawal mali , Parth Kitawat, Amit shah	E-Tendering system- 2020	tenders using online procurement platforms eTendering	1-Transparency. 2- cost saving. 3-Legal process	May be a large tender list if there are too many contractors bidding for the task.
Simon maina, Nelson Masese, Denies Kiyeng	A Design of Blockchain system based on tender2021	Organization such as financial services, healthcare and secure tendering.	1-Risk mitigation 2-Fair competition 3-true analysis	Designs are incomplete and if tender as is exposed the client to uncertainty with respect to cost time
Kajal kundar, Varsha warice, Puja Waykule.	Computer based tender system2021	Tender Notices for Computer based Exam are available	1-recording manually 2-reduce in cost 3-detail in analysis	The tendering process consumes additional time

A smart contract is a piece of self-executing code that can be stored, and executed, on the blockchain. A smart contract is deterministic, verifiable, and doesn't rely on any trusted third party. Entities can

enter into an agreement with all of the terms transparent to them (Dannen, 2017). The same integrity checks that keep the transactions on the blockchain from being edited are also in effect here. This means that when entities enter into the agreement, they can be sure that no party will edit the terms of that agreement at a later date. Smart contracts also have state and memory storage and so can hold assets in their own right. Implying that they can be used to hold funds in escrow in instances of asset transfer between parties (Sklaroff, 2017) [2] The applicability of this goes far beyond the cryptocurrencies that are currently popularizing the blockchain. E-Tendering system- 2020 [3] The process of sending and receiving bid tenders using online procurement platforms eTendering makes a huge difference to the procurement process as it offers improved visibility, compliance and decision- making across source-to-pay (S2P) operation [4] Tender Notices for Computer based Exam are available . Identify right Bids opportunities to participate in Government tenders

### 3. System work flow:-

Step 1 : Start

Step 2 : login to the vendor and register new vendor Step 3 : fill the required document as per option Step 4 : admin will display all your listed document

Step 5 : Admin will check accurate and budget tender in given listed Step 6 : Admin give Assign the one Tender

Step 7 : Vender now can see the status has been given assign Step 8 : Vendor cannot change the once if filled the data

Step 9 : If vendor got status with the not selected go to the step no 3 Step 10 : Vendor got status with the assign then stop

Step 11 : End

### 4. Schema Table:

**A) Creating the tender procedure** createTender(\_tenderTitle, bid, bid O, bidC, \_description, \_address)

Tdr ← new Tender() tdr.manager

← \_address

tdr.title ← \_tenderTitle tdr.description ← description

tdr.bid\_open ← \_bidO tdr.bid\_close

← \_bidC

**B) Placing a Bid procedure** Bid(\_address, \_quote, \_quoteClause, \_documents) companyAdd ← \_address quoteAmount ←

\_quote quoteClause ← \_quoteClause

documents ← \_documents bidStatus ← "pending"

**C) : Bid Evaluation and Negotiation procedure** approveBid(index)

bids[index].bidStatus ← "approved"

**procedure** rejectBid(index)

bids[index].bidStatus ← "rejected"

**procedure** initNegotiation(index)

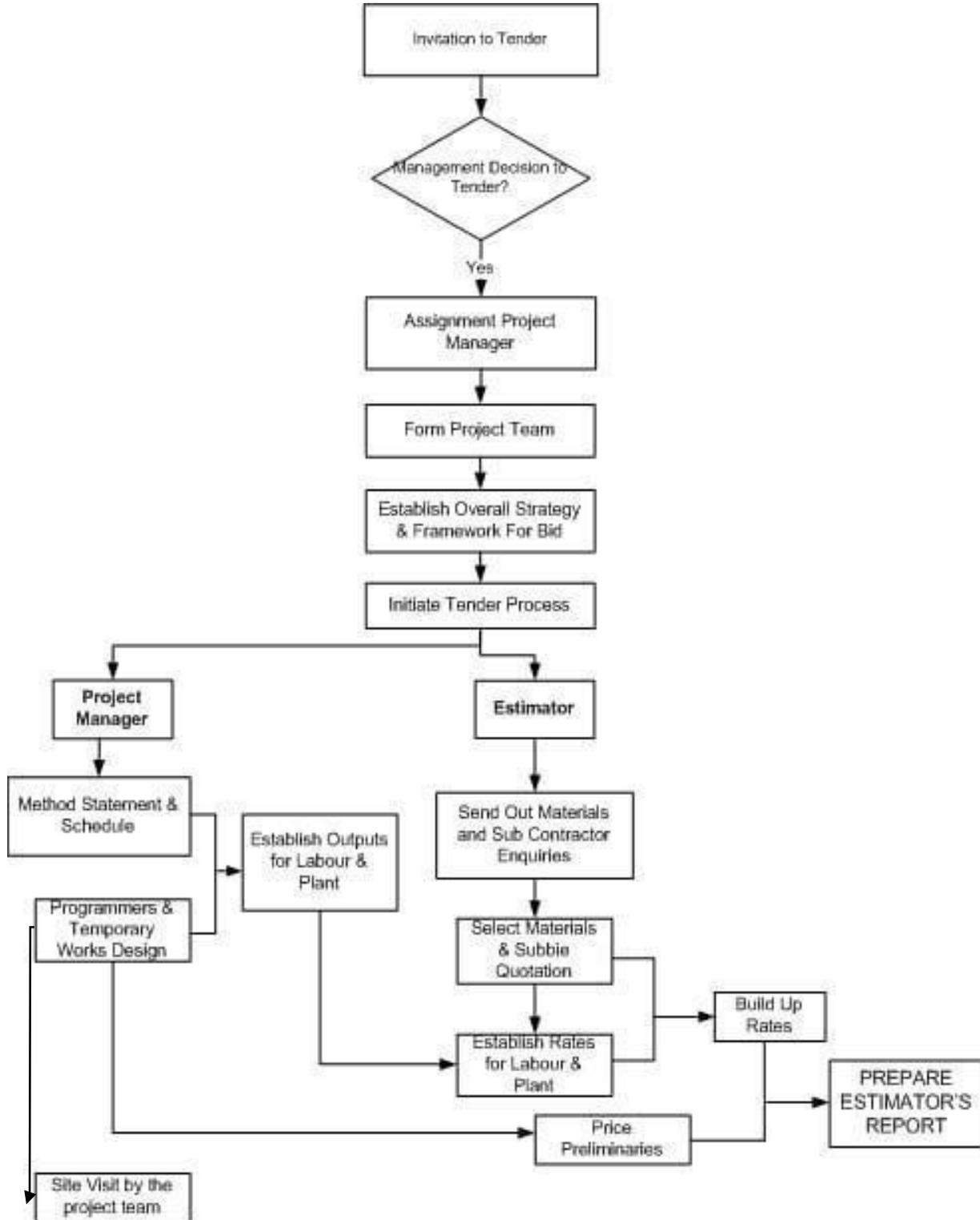
bids[index].bidStatus ← "negotiating"

**procedure** updateBidToNegotiate(index, \_quote, \_quoteClause, \_address) validIden

←bids[index].companyAddress==\_address)

greatEnd ←now > bidC negotiating ←bids[index].bidStatus  
 == "negotiating"

5.Flow chart:-



6. Result:-

1 All listed Document

Tender Id	Name	Type	Budget	Location	Deadline	Description
T20190725022124	Gandhi Setu Highway	maintenance	₹ 50000	Patna, Bihar	2019-07-19	lkjhgf
T20190725022416	MEGA CITY CONNECTING ROAD CONSTRUCTION	construction	₹ 100000	Delhi	2019-09-14	mega city road construction
T20190725022601	KOKATA HALDIA BRIDGE CONSTRUCTION	construction	₹ 5000000	KOLATA-HALDIA	2019-07-28	bridge construction from kolkata to haldia
T20190725101239	Game Development	software	₹ 150000	Banglore, India	2019-07-19	We are going to start a project on game development using
T20190725101322	Game	software	₹ 150000	Banglore, India	2019-07-19	We are going to start a project on game

2 All assigned Tender.

Tender Id	Vendor Id	Application Id	Status
T20190725022124	V20190725022813	B20190725023010	Assigned
T20190725022416	V20190725023446	B20190725023512	Assigned
T20190725022601	V20190725022813	B20190725024243	Assigned
T20190725101239	V20240208103806	B20240213021418	Assigned
T20190725101322	V20190725022813	B20190725101554	Assigned

## 3. Status (Accept and Reject)

Bidder Id	Vendor Id	Bid Amount	Deadline	Status	Accept	Reject
B20190725022953	20190725022813	51000	Fri Jul 19 00:00:00 IST 2019	Rejected	Rejected	Rejected
B20190725023010	20190725022813	52000	Fri Jul 19 00:00:00 IST 2019	Accepted	Accepted	Accepted

## 7. Conclusion :-

Our Project Tender management System Successfully Created a user friendly environment for tender This Project is flexible and changes can be incorporated easily Easy for further Modification Saves a lot of time by doing most of the processes online It may leads to increase profit and improve the quality of a company Assigns the tenders and project in a well manner and optimal way to the contractors in less time with low cost charges.

## 8. Reference :-

1. [https://www.researchgate.net/publication/342325678\\_Blockchain-based\\_eTendering\\_System](https://www.researchgate.net/publication/342325678_Blockchain-based_eTendering_System)
2. [https://www.researchgate.net/publication/356355183\\_a\\_design\\_of\\_blockchain\\_based\\_smart\\_contract\\_for\\_tendering](https://www.researchgate.net/publication/356355183_a_design_of_blockchain_based_smart_contract_for_tendering)
3. <https://etenders.gov.in/eprocure/app> Government eProcurement System
4. <https://www.tenderdetail.com/Indian-based-exam-tenders> Computerbased tender system2021
5. [https://utpedia.utp.edu.my/id/eprint/13922/1/AbdulAzzim\\_13511\\_BIS\\_FinalDissertation\\_TM](https://utpedia.utp.edu.my/id/eprint/13922/1/AbdulAzzim_13511_BIS_FinalDissertation_TM) MS.pdf