Smart Work Center for Hindustan Tungsten Carbide

¹Mr. Mayur Dhatrak, ²Mr. Akash Pawar, ³Mr. Ravindra Magar, ⁴Mr. Sushil Pimale, ⁵Mr. Vaibhav Khairnar, ⁶Prof. Sonawane S. R.

Department of Computer Engineering
SND Polytechnic, Yeola

Abstract: We are presenting a savvy framework which will permits our client to follow every single movement utilized for building the carbide material , Implementing this framework will take web technology as the innovation and data set proposed by customer. Our framework will be online which will have distinctive client like super administrator, chief, and so on every one will have diverse client id and secret key, our framework depends on QR code checking, where client will login to application and output the QR code dependent on canister (Container which is client to convey the material) as our framework will naturally change the situation with building the stage. The current status of specific material will be displayed in plain view. The advantages will be simple following of current period of material and the amount. We are additionally giving an element where super administrator will set the consent for the sub clients what to alter and when to alter. Our aim is utilized to keep up with the encryption and security of data. Our system will be electronic which will have assorted customer like super overseer, boss etc. each one will have unmistakable customer id and mystery key , our structure relies upon QR code separating , where customer will login to application and result the QR code subject to holder as our structure will change the circumstance with building the stage. The current status of explicit material will be shown on display.

Keywords: QR code, Android app, website, Notification

INTRODUCTION

We are introducing a smart system which will allows our user to track each and every activity used for building the carbide material, Implementing this system will take Web Technology and My SQL as the technology and database suggested by client. Our system will be web based which will have different user like super admin, manager, etc. each one will have different user id and password, our system is based on QR code scanning, where user will login to application and scan the QR code based on bin (Container which is user to carry the material) as our system will automatically change the status of building the phase.The current status of specific material will be displayed in plain view

MOTIVATION

The current situation of Hindustan Tungsten Carbide organization is very upset the fundamental issue they are confronting right presently is to oversee records. Not able to find the phase of particular material of client. Due to which the commitment to client goes fail.

LITRATURE SURVEY

Cao, Ping; Yao, Dacheng, 2018, ”Dual Sourcing Policy for A Continuous-Review Stochastic Inventory System” [1]

We study a continuous-review inventory system with dual sourcing modes and Brownian motion demand. The regular order is from one supplier at some constant rate with a low unit cost while the expedite order is from the other one with a fixed setup cost and an expensive unit cost. With usual holding/shortage cost, the system's objective is to choose a regular constant order rate and an expedite replenishment policy such that the long-run average cost is minimized. We show that the regular ordering rate must be strictly less than the expected demand rate and an optimal expedite ordering policy is the well-known (s, S) policy. In particular, based on the theoretical analysis, we give a computational algorithm to demonstrate how to find the optimal regular ordering rate * and expedite policy parameters s* and S* . Finally, using the algorithm, we investigate the effects of system's parameters on the optimal policy parameters and value of dual sourcing by numerical studies.[

Wu, Caesar; Nadjaran Toosi, Adel; Buyya, Rajkumar; Ramamohanarao, Kotagiri, 2018, ” Hedonic Pricing of Cloud Computing Services” [2]

In this paper, Cloud service providers (CSP) and cloud consumers often need to forecast the cloud price to optimize their business strategy. However, pricing of cloud services is a challenging task due to its services complexity and dynamic nature of the ever-changing environment. Moreover, the cloud pricing based on consumers' willingness to pay (W2P) becomes even more challenging due to the subjectiveness of consumers' experiences and implicit values of some non-marketable features, such as burstable CPU, dedicated server, and cloud data center global footprints. Unfortunately, many existing pricing models often cannot support value-based pricing. In this paper, we propose a novel solution based on value-based pricing, which does not only consider how much does the service cost (or intrinsic values) to a CSP but also how much a customer is willing to pay (or extrinsic values) for the service. We demonstrate that the cloud extrinsic values would not only become one of the competitive advantages for CSPs to lead

the cloud market but also increase the profit margin. Our approach is often referred to as a hedonic pricing model. We show that our model can capture the value of non-marketable features. This value is about 43.4Average Annual Growth Rate (AAGR) of Amazon Web Services' (AWS) is about -20.0ceteris paribus. In comparison with Moore's law (-50equivalent in the cloud. The primary goal of this research is to provide a less biased pricing model for cloud decision makers to develop their optimizing investment strategy

Yang, Zhibo; Xu, Huanle; Deng, Jianyuan; Loy, Chen Change, 2028, "Robust and Fast Decoding of High-Capacity Color QR Codes for Mobile Applications" [3]

The use of color in QR codes brings extra data capacity, but also inflicts tremendous challenges on the decoding process due to chromatic distortion cross channel color interference and illumination variation. Particularly, we further discover a new type of chromatic distortion in high-density color QR codes—cross-module color interference—caused by the high density which also makes the geometric distortion correction more challenging. To address these problems, we propose two approaches, LSVM-CMI and QDA-CMI, which jointly model these different types of chromatic distortion. Extended from SVM and QDA, respectively, both LSVM-CMI and QDA-CMI optimize over a particular objective function and learn a color classifier. Furthermore, a robust geometric transformation method and several pipeline refinements are proposed to boost the decoding performance for mobile applications. We put forth and implement a framework for high-capacity color QR codes equipped with our methods, called HiQ. To evaluate the performance of HiQ, we collect a challenging large-scale color QR code dataset, CUHKCQRC, which consists of 5390 high-density color QR code samples. The comparison with the baseline method [2] on CUHKCQRC shows that HiQ at least outperforms [2] by 188implementation of HiQ in iOS and Android also demonstrates the effectiveness of our framework in real-world applications.

LIMITATION OF EXISTING SYSTEM

• Costing: The Existing system is high cost and this is main reason most of the system is failed.

• Technology Complexity: Most of system is the complex to understand, Not user friendly as compare to our proposed system

• Time Consuming Feature: In existing system, the performance is low and most of the time system gets hanged due to load.

• Not Easy to Understand: Systems are complex to understand and they were not user friendly

EXPERIMENTAL SETUP

The Aim of the project is to reduce the problem of time consuming.

• To make a centralized systemto avoid the duplication of data and to provide the security to user.

• It will be enjoyable method without affecting their day to day life.

• To make a system for normal user who is lack of qualified personnel and adequate infrastructure in rural India.

• Easy to understand framework

• Security giving to significant information of client. • Staying away from the pernicious assaults by programmer.

Hardware and Software Requirements

     Hardware Requirements
- Android Mobile
- Processor: Intel (R) Core (TM) i3 CPU 3.
- Installed RAM : 1 GB 4
- Hard Disk : 60 GB
- Keyboard : Standard Windows Keyboard
- Mouse : Two or three button mouse
- Monitor : SVGA

Software Requirement

- Windows Operating System 7
- Front end : Android Studio/ IDE
- Back end : Firebase

1. Andriod : Android is a mobile operating system based on a modified version of the Linux kernel and other open source software, designed primarily for touchscreen mobile devices such as smartphones and tablets. Android is developed by a consortium of

developers known as the Open Handset Alliance and commercially sponsored by Google. It was unveiled in November 2007, with the first commercial Android device, the HTC Dream, being launched in September 2008. Most versions of Android are proprietary. The core components are taken from the Android Open Source Project (AOSP), which is free and opensource software (FOSS) primarily licensed under the Apache License. When Android is installed on devices, ability to modify the otherwise FOSS software is usually restricted, either by not providing the corresponding source code or preventing reinstallation through technical measures, rendering the installed version proprietary. Most Android devices ship with additional proprietary software preinstalled,[13] most notably Google Mobile Services (GMS)[14] which includes core apps such as Google Chrome, the digital distribution platform Google Play, and associated Google Play Services development platform.

SCOPE:

 Cloud computing is the on-demand availability of computer system resources, especially data storage and computing power, without direct active management by the user. Large clouds often have functions distributed over multiple locations, each location being a data center. Web technologies refers to the way computers/devices communicate. with each other using mark up languages. It inovation It is communication across the web, and create, deliver or manage web content using hypertext markup language (HTML).

PROBLEM STATEMENT:

        To manage the internal working flow of manufacturing companies and record using phase level tracking and records for updating the information related to delivery of products in the stimulated and committed time to customers.
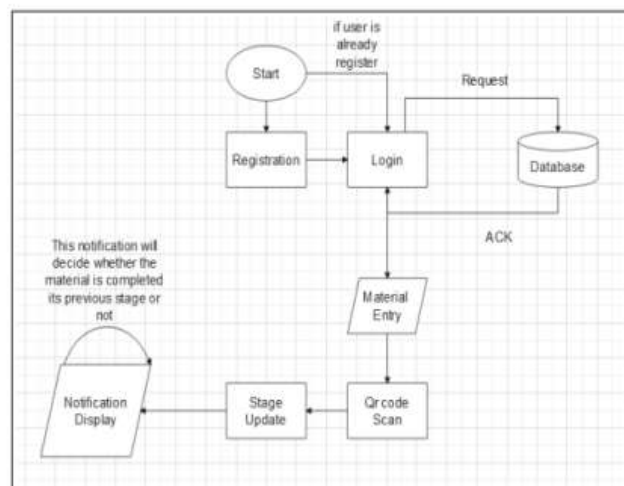
SYSTEM ARCHITECTURE

Fig -1: System Architecture Diagram

ADVANTAGES

1. Easy to use
2. High Performace
3. Scalable

METHODOLOGY

The single problem can be solved by different solutions. This considers the performance parameters for each approach. Thus considers the efficiency issues.

- Problem Solving Methods are concerned with efficient realization of functionality. This is an important characteristics of Problem Solving Methods and should be deal with it explicitly.

- Problem Solving Methods achieve this efficiency by making assumptions about resources provided by their context (such as domain knowledge) and by assumptions about the precise definition of the task. It is important to make these assumptions explicit as it give the reason about Problem Solving Methods.

- The process of constructing Problem Solving Methods is assumption based. During this process assumptions are added that facilitate efficient operationalization of the desired functionality

CONCLUSION

As our project is real time based, and it's a real-time problem, and this type of system is not build yet for particular company. So it's a real time solver which has a features like it is affordable by everyone and it is user friendly. The limitation like complex structure, and low performance are overcome in this project. Hence we are provide a centralized management system with secure AES algorithm for our user to track carbide material production and phases. As our venture is constant based, and it's a continuous issue, and this sort of framework isn't fabricate yet for specific organization. So it's an ongoing solver which has an elements like it is reasonable by everybody and it is easy to understand. The limit like complex design, and low execution are defeated in this undertaking. Subsequently we are furnish a unified administration framework with secure AES calculation for our client to follow carbide material creation and stages.As our endeavor is consistent based , and it's a constant issue , and this kind of structure isn't manufacture yet for explicit association. So it's a continuous solver which has a components like it is sensible by everyone and it is straightforward. The cutoff like complex plan, and low execution are crushed in this endeavor. Along these lines we are outfit a bound together organization structure with secure AES computation for our customer to follow carbide material creation and stages

REFERENCES

1. Cao, Ping; Yao, Dacheng (2018). Dual Sourcing Policy for A ContinuousReview Stochastic Inventory System.

2. Wu, Caesar; Nadjaran Toosi, Adel; Buyya, Rajkumar; Ramamohanarao, Kotagiri (2018). Hedonic Pricing of Cloud Computing Services.

3. Yang, Zhibo; Xu, Huanle; Deng, Jianyuan; Loy, Chen Change; Lau, Wing Cheong (2018). Robust and Fast Decoding of High-Capacity Color QR Codes for Mobile Applications

4. Ahamed, Md. Salahuddin; Asiful Mustafa, Hossen (2019). A Secure QR Code System for Sharing Personal Confidential Information.

5. Genc, Y., Afacan, E. (2021). Design and Implementation of an Efficient Elliptic Curve Digital Signature Algorithm (ECDSA).

6. Yu-Mei Wang, Chia-Tsen Sun, Pei-Chun Kuan, Chun-Shien Lu,HsiChun Wang, (2018), Secured Graphic QR Code with Infrared Watermark.

7. PXuan, Wang; Peng, Cao; Fang-Fang, Chen; Jian-Le, Zhu; Pei-Jun, Huo (2018). Research on the Optimal Threshold of QR Code Recognition Based on Maximum Likelihood Criterion.