

An Android Application for Cloud Based Printing System

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Abstract: *During Covid-19 Pandemic, Offline Print shops are encountering significant plunges in people walking through. However, this doesn't mean closing shops absolutely and believe that the situation will end. Vendors are using the web-based space to get orders, during the lockdown. There are many existing frameworks for this issue yet there are a few provisos in every framework, so there is a requirement for a framework that offers the client to put orders from any place any time utilizing the versatile application with the assistance of distributed computing. Prior to putting in a request, the customer ought to compute of fairs, assessed season of conveyance ought to be determined. The client would pay utilizing different installment techniques like UPI, Net Banking, Debit Credit card, and retailer shouldn't have to contribute huge sums. This causes financial specialists to embrace the progressions of business needs to their web based shop site. The proposed framework adds an upper hand to any business with smoothed out key cycles and mechanized work process and conveys full oversight, compelling request support, and checking to assist the printing business with expanding deals.*

Keywords: Cloud printing, Evaluation method, Web print, Cloud computing

I. INTRODUCTION

Buyers and sellers can get together through the online trading space, and in that way, we can enjoy more and more convenient business services. On-line printing system provides basic printing service for digital works so that consumers can upload and print at any time to achieve an efficient online printing approach. In this system, on-line print ordering module is basically used for all the required features, and consumers can easily navigate to the various works hits, get a convenient and quick understanding about work-related information, and make a purchase.

Online store is the main needs of online business people today. But there is a problem faced by businesspeople who run their business on online shop website, especially the technique aspect of online shop website management that is hard to do. This problem is very important because the need of business people always changes rapidly based on the business situation. This makes business people adopt the changes of business needs to their online shop website.

On-line printing system will provide a basic printingservice for digital works so that consumers can upload and print at any time to achieve an efficient online printing approach.

We propose a system that offers the user everything any printing company requires to print manage their business from estimating, outsourcing, producing job sheets, deliverydockets, accounts, management reports, diary system. After placing order by the client calculation of fairs, the information will transfer to the respective production team. With our system shop owner don't need to invest largeamounts. We provide access to the full system, customize documents, and import information onto the system. Internetsurfing affects the modern life with its technological innovation and rapid change.

II. LITERATURE SURVEY

Real-Time Stencil Printing Optimization Using a Hybrid Multi-Layer Online Sequential Extreme Learning and Evolutionary Search Approach [1] aims to develop a dynamic optimization model performing real-time control of a

stencil printing process (SPP) by maintaining the optimal printer parameter settings. In a surface mount technology (SMT) assembly line, stencil printing is a major process that affects the yield of printed circuit boards (PCBs). During printing, environmental changes may induce the PCB's printing results to deviate from initial optimal outcomes. To consistently improve the system performance, a real-time adaptation of the printer settings is an effective and cost-efficient approach.

An Online Method for Load Impedance Extraction for Printed Lines Based on Near Field Measurements [2]. In this system The prediction and control of electromagnetic emission in integrated circuits (IC) and circuit module on printed circuit boards (PCBs) are important to solve the equipment-level electromagnetic compatibility (EMC) problems. The electromagnetic emission acts as the external performance of the physical characteristics of electronic devices, which are determined by its internal circuit structure and working status. The input and output impedance of the IC and circuit module on the PCBs have a large impact on their electromagnetic emission. Therefore, accurate impedance characteristics are necessary for predicting the electromagnetic emission, such as in integrated circuit emission model. For passive devices, such as resistors and inductors, the impedance analyzers (IA) can be used to test their impedances. An Online Method for Load Impedance Extraction for Printed Lines based on Near Field Measurements [3] in this as technology advances, the Internet has become part of our life. We exist in a generation of information explosion. Internet services and events evolve and change constantly out with the old and in with the new which generates a significant change in modern people's life and surfing habits. Today's consumers commonly search for the goods, luxuries, and even unpopular products they need through e-commerce platforms on the Internet. The Internet breaks through the restrictions of space, time, devices, and places. The ease of use of an e-commerce site is to furnish clients with acceptable exchange adequately and productively. It assists with getting a complete understanding of client's needs and improving product advancement to provide a superior user experience.

III. PROPOSED SYSTEM

We propose a system that offers the user everything any printing company requires to print manage their business from estimating, outsourcing, producing job sheets, delivery dockets, accounts, management reports, diary system. After placing order by the client calculation of fairs, the information will transfer to the respective production team. With our system shop owner don't need to invest large amounts.

As a kind of emerging technology, the application of cloud platform in terms of online printing is still less. This article will design the remote monitoring system considering the characteristics of online printing technology. The main functions of the system include: online printing, user account management, online documents status information and technical support. Online printing is the core function of the system, including documents editing, print preview and real-time monitoring. In addition, the user can upload their own documents and download the other people's through the cloud platform. Users can get relevant information and technical support about online printing from this system.

3.1 Area

To develop a cloud-based printing service for digital works so that consumers can upload and print at any time to achieve an efficient online printing.

3.2 Cloud computing

Cloud Computing is the on-demand availability of computer system resources, especially data storage (cloud 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 centre. Cloud computing relies on sharing of resources to achieve coherence [clarification needed] and economies of scale, typically using a "pay-as-you-go" model which can help in reducing capital expenses but may also lead to unexpected operating expenses for unaware users.

3.3 Mobile Application

A mobile application, most commonly referred to as an app, is a type of application software designed to run on a mobile device, such as a smartphone or tablet computer. Mobile applications frequently serve to provide users with

similar services to those accessed on PCs. Apps are generally small, individual software units with limited function. This use of app software was originally popularized by Apple Inc. and its App Store, which offers thousands of applications for the iPhone, iPad and iPod Touch. A mobile application also may be known as an app, web app, online app, iPhone app or smartphone app.

3.4 Design Concept

On-line printing system provides basic printing service for digital works so that consumers can upload and print at any time to achieve an efficient online printing approach.

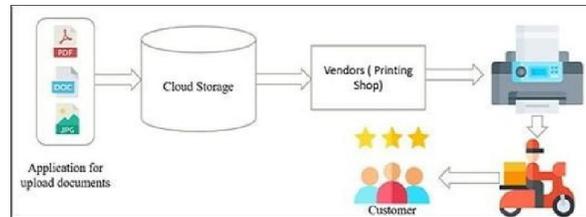


Figure 1.1: Block Diagram of Cloud Based Printing

In this approach, provide an application to client which allows for purpose of printing application which search or upload the required media of product and then it processes further for printing it depends on input from user. It shows the all available vendors nearby to user for printing. Then user can choose vendor and pay by selecting payment mode. The uploaded document store on cloud storage. After completing task, notification will send to user automatically. It also encompasses time, resource, technical requirements and client requirements.



Figure 1.2: Data Flow of Cloud Based Printing System

In this proposed system, we will develop cloud based file print mobile app using GPS to get longitude and latitude of user. In our project there are main two module User module and another is Vendor module. In user module user first search the nearby vendor which can prints their documents. Using some sorting sequences nearby vendors list will be shown to user. User select the specific vendor and upload the documents on that vendors dashboard. Also select the all properties of printing like paper size, no. of pages, color print or black n white etc. and the most important is that the user can upload their document on server.

In other side when vendor gets the documents they download that documents and updating the document status as a in process. As per user requirements they print the documents and again update the document status. This system will have following features:

1. Upload all types of document files.
2. Notify vender about new order.
3. Store data on Amazon AWS
4. Send notification to user after dispatched order.

3.5 Mathematical model

System Description: (I,O,Fn,Sc,Fc)

Input (I): user file soft copies(text documents, pdf, etc) Output(O): User files and file status.

Functions (Fn):

Fn-1: search the nearby vendor.

Fn-2: uploads the documents to vendors dashboard Fn-3: set the specific format of printing document Fn-4: Download the documents.

Fn-5: Update status of file.

Fn-6: Print the file as per user requirements and notify the user to collect theirs documents.

Failure Conditions(Fc):If mobile application doesn't properly get nearby vendor list. If vendor can't update documents status. OR failed to notify to the user

Success Conditions(Sc): If mobile application properly detect the nearby vendors and provide the facility of file print through mobile app.

IV. APPLICATIONS

- Online-Printing Shop
- Online Legal Documentation
- Online Photo Printing

ACKNOWLEDGEMENT

We would like to show our sincere gratitude towards Mrs. M. P. Bhosale, Lecturer, Department of Computer Technology, K. K. Wagh Polytechnic, Nashik for her valuable guidance and encouragement.

CONCLUSION

This paper presents the system which is useful for remote printing where user don't need to go and find printer centre. He or she can find it on mobile application and complete the work. However, we also need to improve in some areas, such as the module's security features, the lack of corresponding data encryption, and when transaction payments should be involved; you can try to take other payment method such as UPI, net banking, PayPal and other forms of payment. These functions will be discussed separately in later research.

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