

REMOTE FACSIMILE MANAGEMENT

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Abstract — Remote facsimile management is a driver-less printing service that allows users to print by uploading documents from a web browser. No client software or driver installation is required.

With the rise in popularity of BYOD, the demand for printing solutions for unmanaged devices continues to increase. Educating users about how to configure these devices can be inconvenient and complicated, due to issues such as drivers and authentication, and in some situations might not be possible at all. Due to this complexity, many organizations do not allow printing from user-owned systems.

Remote facsimile management provides a simple way to enable printing for smartphones, tablets, and laptop computers, without the overhead of installing printer drivers and managing server authentication. It is a proven and popular solution for occasional printing, allowing users to print their Microsoft Office, PDF, and image files directly from the browser on their own devices.

Your Remote facsimile management deployment can be scaled to meet the needs of your organization, removing bottlenecks and improving reliability. Remote facsimile management scaling through the use of multiple Remote facsimile management servers, increases throughput and minimizes users' wait time for print jobs. Using multiple servers also provides resilience against possible network and server outages.

1. INTRODUCTION

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With the rise in popularity of build your own device (BYOD), the demand for printing solutions for unmanaged devices continues to increase. Educating users about how to configure these devices can be inconvenient and complicated, due to issues such as drivers and authentication, and in some situations might not be possible at all. Due to this complexity, many organizations do not allow printing from user-owned systems.

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2. RELATED WORKS

"Remote Printing System" by Ritesh Varyani, Deepika Kadam & Supriya Kharade in International Journal of Engineering Research & Technology on October – 2013.

This paper provides the base idea of our project. It provides the core idea of Remote facsimile management.

Implementation of Remote Desktop Utility using Teamviewer by Suhashini Chaurasia published in National Conference on Recent Trends in Computer Science and Information Technology 2016.

Remote Desktop Utility specifies the concept of VIRTUAL NETWORK COMPUTING (VNC) ARCHITECTURE. This architecture can be adopted in future by our project.

"Web printing" by A'Peters at Instructional technology support services published on September 2012.

This research paper provides core ideas implemented by remote facsimile management.

"Cloud Computing" by Komal Yadav published in International Journal of Engineering Research & Technology (IJERT) in May 2014.

Remote facsimile management can be implemented using a server or cloud, this journal paper provides a base idea of implementation of cloud and access of data from cloud.

"A Cloud Access Security Broker Based Approach for Encrypted Data Search and Sharing" by Chuanyi Liu, Guofeng Wang, Peiyi Han, Hezhong Pan and Binxing Fang published in 2017 International Conference on Computing, Networking and Communications.

This journal paper states the concepts of cloud and access methods. These can be further implemented in our system.

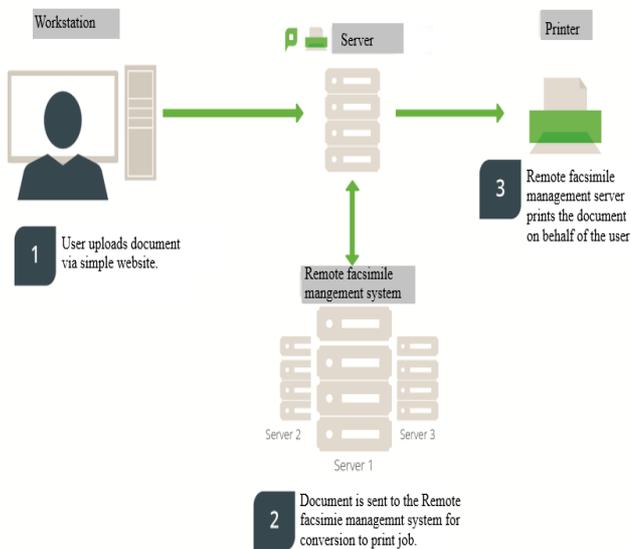
3. PROBLEM DEFINITION

The entire system of remote printing is aimed at printing the documents on the go and thereby reducing the commotions at the copier rooms in the offices. Printing documents often involve the tedious process of going to the copier rooms and getting the hard copies done. What remote printing facilitates us with is the accomplishment of this task without having to be physically present. With this system, a user already has completed the preliminary process, by giving the command for the printout of the document remotely, as soon as he decides which documents are to be hard-copied.

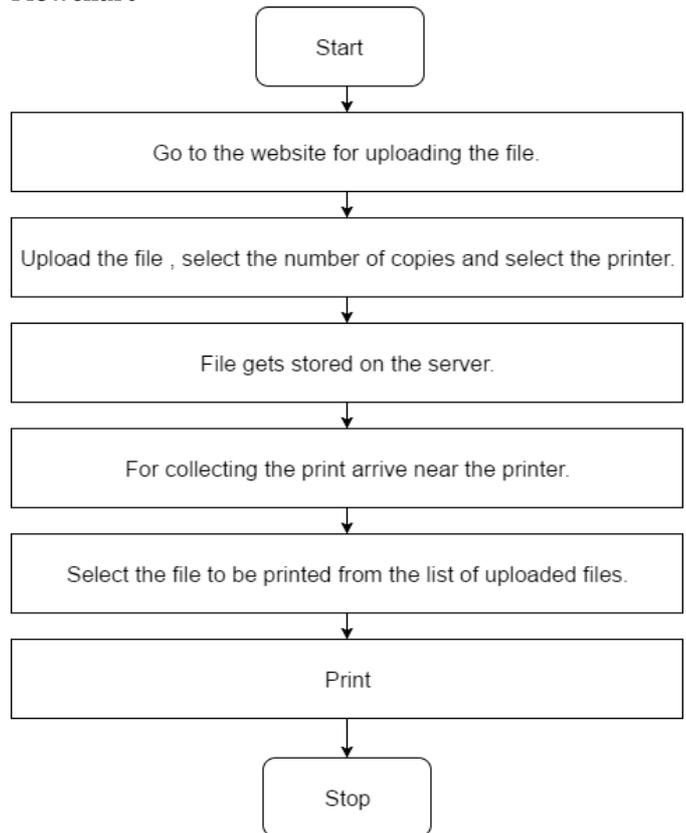
4. IMPLEMENTATION

The design of of Remote facsimile management is illustrated using the System flowchart and UML(Unified Modelling Language) diagrams. Unified Modelling Language diagrams indicate the process flow in a typical Software Development Life cycle, which intertwines the techniques of business modelling, object modelling and data modelling. There are a total of fourteen diagrams supported by UML, a few of which describing more clearly the functioning of a Remote facsimile management and underscore the possibility of its realistic nature. User has to go to website and login in order to upload file. Then select the and upload file, select the correct options(colour print or black & white) select number of copies and submit the job. Once the job is submitted, the file is stored on server. For printing the user has to login into the printer machine and select the file from submitted job. Once a file is printed it is removed from user's job queue and server.

Architectural Design

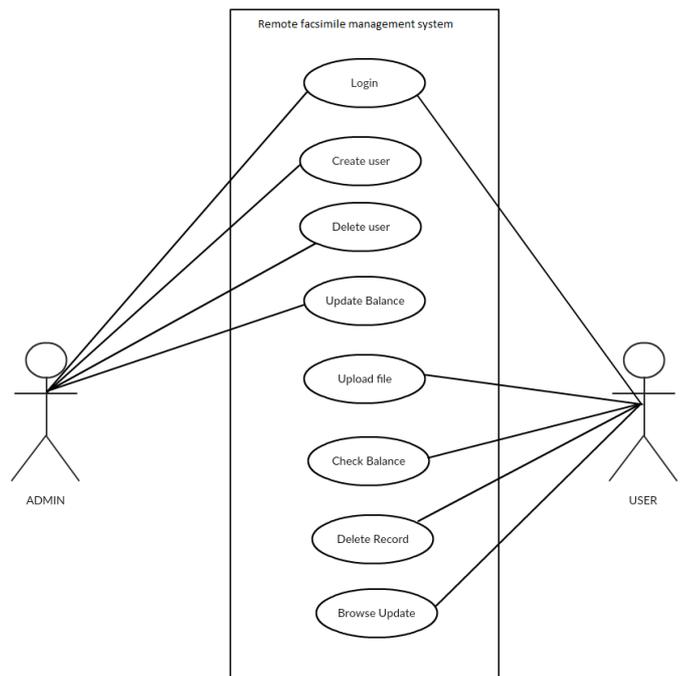


Flowchart

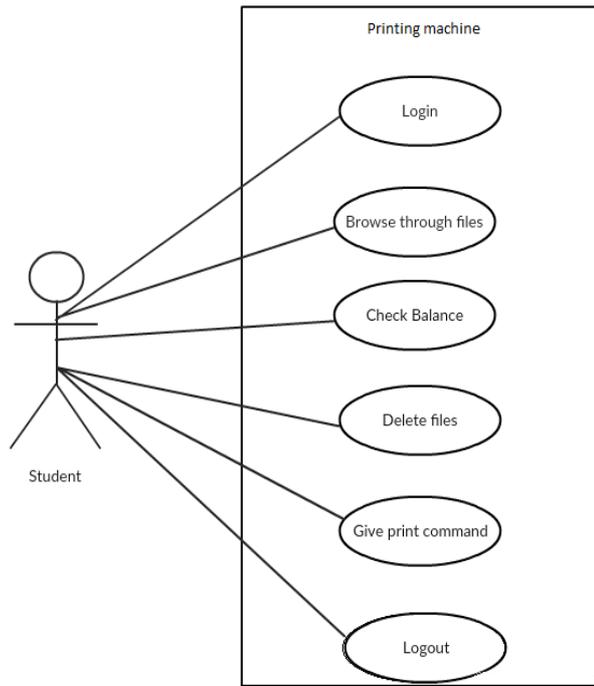


Use case Diagram

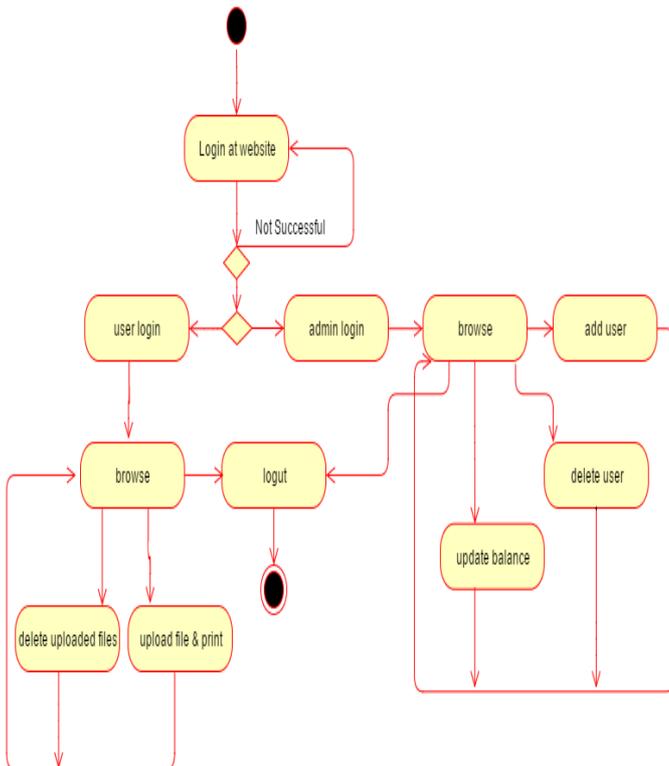
1. UML diagram for website



2. UML diagram for printer machine.



Activity Diagram

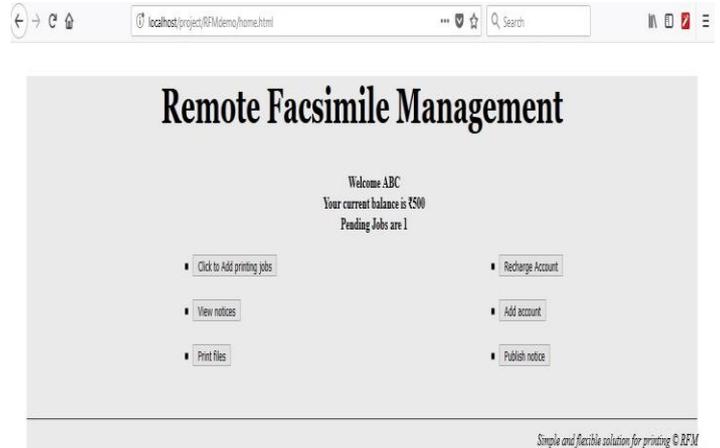


5. RESULTS

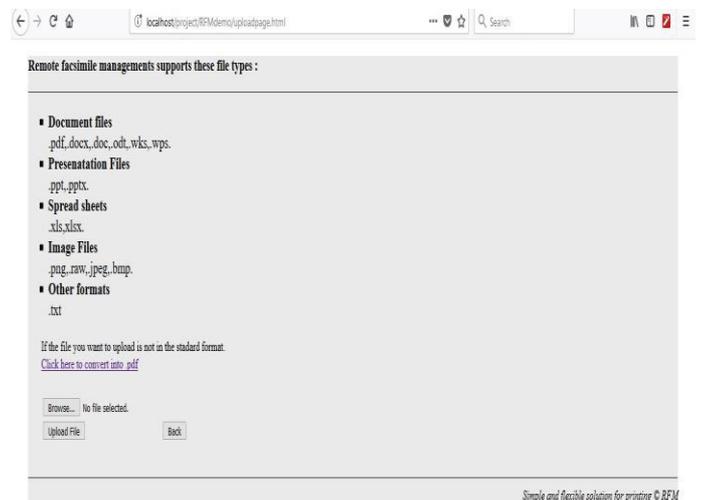
1) First the user has to enter his User ID & password.



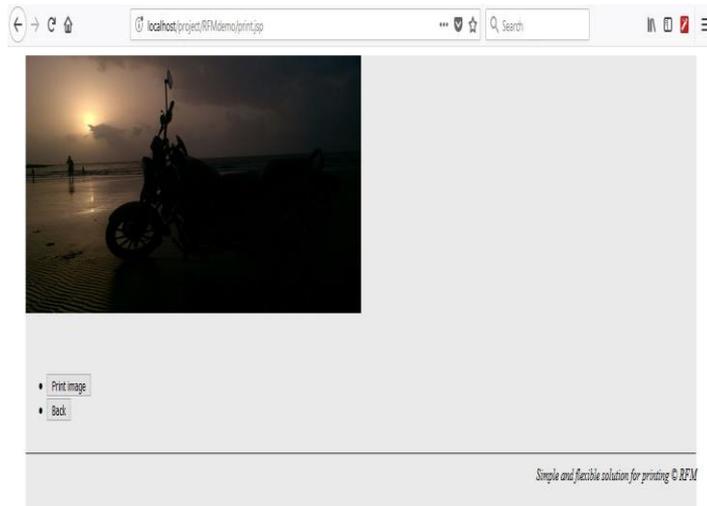
2) Home page



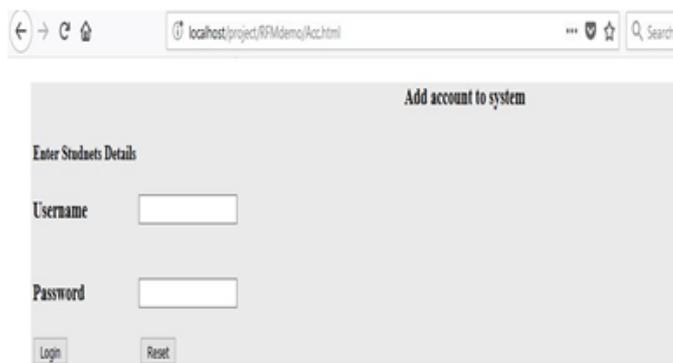
3) Uploading a file.



4) At printing machine user is displayed the submitted job held in queue



5) System admin can add or recharge account



6. CONCLUSION

The main objective behind studying and developing this project is to make the printer usage facility more convenient and efficient to the users and provide an easy way to track usage for management. By the implementation of this project in any institute, organization or office where there is massive use of printers, the staff members can properly handle their documents and take a print of the same in a convenient way. For example, if this project is implemented in engineering colleges then the college server can keep a record of each student and staff and all of their respective documents which they might have uploaded through the web page linked to the college website that may have the facility of viewing, uploading & deleting the documents, checking the balance. By installing the executable file on the printer machine, the students and staff members can easily view, print or delete the documents. This may also lead to proper use of college property since every person of the college will be charged of each print that they take.

REFERENCES

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