

3 - TIER CROSS PLATFORM APPLICATION FOR DIGITAL VISITING CARD WITH GUI

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Abstract - Today, The Digital Revolution has changed the Business and Marketing model. The use of paper, Cheques, cards etc has been reduced consequently. Business card plays an important role in Business. Every day 27 million Business cards are printed and company sales are increased by 2.5% for every 2000 business cards handed out. Unfortunately, 63% of people throw visiting card after the use without a second thought. The Evolution of Digital Business cards has been growing from 1993 to till. The Era started from an OCR recognized business card to NAO robot recognition of business card and e-mail delivery. In this paper, we are proposing an 3 – Tier Cross platform application for Digital Business Card with an Graphical Interface. The user can create his own business card with the graphical templates provided by the admin in and for any platform (Web, Android or IOS application). User can Create, Update, Delete, Share and Add any e-Business card. Sharing can be done by various Social media API's, SMS, Email.. Business cards are visible to anyone as a view, Therefore no login authentication needed. User can track his business card using Visitors count. Searching of Business cards can be done by Artificial Intelligence (AI) Algorithms. The Login Authentication is done by AI via OTP. The user can add his description, About the company, Logo to his business card. The user can save his leads (Business Card of another user from the same application). Admin can make a track of users and whole as website. API's are created for cross platform, API consists of Hash key and token for accessing the data from the database. Smart phones can access data using an API producing data in Json/xml format.

Key Words: Business Card, Digital Card, Visiting Card

1.INTRODUCTION

Business card plays a major role in a business marketing. It carries the information of a company or individual. It typically includes the company / individual's name, company, contact information, website, e-mail id, address etc. Today even the Social media contact details are present in an Business card like Facebook, Twitter, LinkedIn, Skype etc.

Every day 27 million Business cards are printed and company sales are increased by 2.5% for every 2000 business cards handed out. Unfortunately, 63% of people throw visiting card after the use without a second thought.

Digital Business Card evolution has been started since 1993 to till. It has been started from scanning an business card and recognising the texts with OCR to NAO robot for automatic scanning and sending of email's. But the Physical Business Cards aren't extinct yet.

Business Card software's are used for designing an Graphical elements with layouts for an physical card like Photoshop etc. Also the web-to-print services allows the customer to design their business card and deliver it to their home or business address. There are collectors of Business card especially antique cards, Celebrity cards etc. The largest known business collectors' club is the International Business Card Collectors (IBCC). They are used for exchanging cards with other members.

1.1 OBJECTIVE

To develop a 3 tier Cross platform application for Business Card with Graphical User Interface. The Business Cards can be created, shared and edited through an Web / Android application. An Cloud Database stores all the data's and cerate's Json Restful API. The Digital Business Card can be shared in Facebook, Twitter, Google+, WhatsApp, SMS and other means. They are graphically designed with Web and Android Application. They can be viewed in any medium. To-additional, the Digital Business card Application is user-friendly which can be created in less than 3-mins.

1.2 Existing system

A Business Card Scanners and Pokens are used for saving and exchanging. A Business Card scanner is used for scanning the physical business card and the texts are recognized through OCR library to fill in the fields. Whereas the Pokens are physical hardware used to store the data's and shared via RFID. Business card in Pokens can be shared only when the 2 pokes come in contact with each other.

1.3 Disadvantage of Existing system

- Difficult to share
- Lack of Graphical User Interface Designs
- Printing of cards cannot be stopped.
- Can be viewed only in an Desktop / PC

2 PROPOSED SYSTEM

To develop a 3-tier Cross Platform application for Digital Business Card with GUI. A Web Application is used as an base platform. The Digital Business card can be created, shared, edited, connected and deleted through an Web or Mobile Application.

The Web application creates an API for Viewing, Editing, Connecting of Digital Business Cards for the mobile application. The data's are viewed in an JSON format as Objects. These Objects are retrieved by the Mobile Application. A Graphical Digital Business Cards can be created and viewed in all the platforms.

2.1 PROPOSED SYSTEM ADVANTAGES

- User Friendly
- Graphical Business Cards
- Add, Delete, Edit and Connect with Leads
- Can be Accessed through Desktop / PC or Mobile Application

2.2 PROJECT DESCRIPTION

In this section, we will focus on developing an Web and Android Application for Graphical Digital Business Card using an Cloud with RESTful API and increase the efficiency of sharing the application.

2.3 PROBLEM DEFINITION

Previous work includes the conditions, A physical card is mandatory. The physical card is scanned and recognized through OCR library. Later, An NOA robot is introduced for auto scanning with email recognition using OCR and Email delivery. The Business card can be used only in an Desktop / PC and was not user friendly.

2.4 User Authentication

Using an AI system, when an unknown user tries to access the account using brute force method. The system identifies with the limit of 3 attempts for login. When the user attempts for more than 3 times the account will get blocked for 24 hours.

2.5 RESTful API

REST technology is used for transferring the data through any protocol, When used for Web API it typically takes the advantage of an HTTP. It has an Client - Server Architecture where the data's can be accessed by an Mobile Application.

3 PROJECT MODULES

- View Card
- Login
- Edit / Create Cards
- Restful API

- Connection
- Sharing

3.1 LOGIN

Using an AI system, when an unknown user tries to access the account using brut force method. The system identifies with the limit of 3 attempts for login. When the user attempts for more than 3 times the account will get blocked for 24 hours.

If a new visitor is arrived, the user can register for an free account and use the free Business Cards.

3.2 VIEW CARD

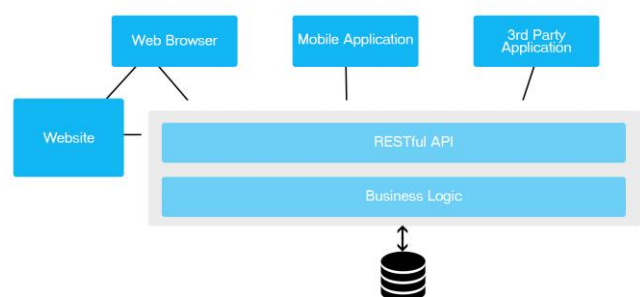
While creating an card, the user has give an unique slug name. The cards can be accessed through the slug name without the need of an authentication.

3.3 EDIT / CREATE CARD

Only the authenticated user can created or Edited the Digital Business Card using Web / Mobile Application.

3.4 RESTFUL API

Restful API is considered for Client - Server Architecture. The Objects and datas for an mobile application is retrieved from Web Application using Json or XML format. The conversion of Objects and data's to Json are done by RESTful API.



3.5 CONNECTIONS

The shared business cards can be saved and viewed anytime from your account.

4. CONCLUSIONS

Proposed is an 3-tier Digital Business Visiting Card with Graphical User Interface, we have achieved it in designing and developing using Web Server for Web and Mobile Application. Our application is capable of creating, Editing, Deleting, Sharing and Storing Digital Visiting Cards. The objective of the design is the eliminate the use of physical paper or card. Other than any other E-Cards we have introduces many aspects in many functionalities.

Furthermore, Combines with application of Artificial Intelligence for Authorising the user and RestFUL API for cross-platform application.

The Web Server is encrypted using RSA Algorithm and is equipped with SSL (Secure Socket Layer), Content-Delivery-Management(CDN), Firewall and Load Balancer for Security and Performance.

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