Fused (Π) Identification

Meena Arora

Abstract— *Fused Identity card aims to make the process of identification of an individual easier. It is a Web Based Solution for an employer to find the employees of the required profile. Employer looks at the fused ids of the employees and analyzes them for interpretation. Using this we can get various useful information about an employee working within an organization such as the information access rights, Designation, certifications experience and the number of years spend by him/her working in the same post without having any written data using color coding, along with the information which we obtain from a basic identity card like name, photo identification.*

Index Terms— Identity cards, organization, certification, access rights, experience, job allocation, use case.

—————————— ◆ ——————————

1 INTRODUCTION

ALL Identity cards give us an outer characteristic of an employee and by looking at it we only get the general information about an employee working within an organization. We are not able to get the information like field of specialization , access rights, experience, and the number of years spend by him working at the same post etc., we also do not get the total scope of the search technique used by the hiring officials while the allocation of the project. Hence they involve in the global search technique where they search for the complete database for the required qualities in a candidate for a particular project. Hence this makes the whole process cumbersome and at the same time makes the latency of the search technique more than that expected.

Fused identity aims to make the process of identification of an individual easier and at the same time mention the access rights, professional level of a professional and at make the search space available for both global and local search, we are suggesting a new identification and search technique which we named as fused-id. We are capturing all the information of an employee just by looking at his identity card. This also reduces the search space and hence optimizes the search technique. It is a Web Based Solution for an employer to find the employees of the required profile. Employer looks at the fused ids of the employees and analyzes them for interpretation. Fused id does the following functions:

- mention the access rights of an individual
- professional level of a professional
- Optimize the search space

2 PRELIMNERIES

Identity is an integral part of all items known to Humanity.

All living being are struggling for their unique Identity in the universe. It may be in the form of Knowledge, Power,

————————————————

- *Dr. Meena Arora is currently working as Associate Professor in JSS Academy of Technical Education, Noida, INDIA. E-mail:meenaarora@jssaten.ac.in*

Wealth uses or misuses. Therefore all organizations are also willing to keep records of their employees in easy & quick access format. Identity Cards scheme is the best method to store key information about employees. Computerization of the Identity Cards is one of the solutions to make available information's anywhere, anytime as per permission of the Authority. An ID card will provide every person legal rights in the organization including other organizations with an easy and secure way of demonstrating their right to be here and of asserting their place in the organization. The Identity card being proposed will be linked to the person to whom it is issued by a unique identifiers which together with more traditional security checks, should ensure that it is virtually impossible to obtain an ID card in multiple identities. [5]

Identity (ID) cards are in use, in one form or another in numerous countries around the world. The type of card, its function, and its integrity vary enormously. Around a hundred countries have official, compulsory, national IDs that are used for a variety of purposes.ID cards are established for a variety of reasons. Race, politics and religion were often at the heart of older ID systems. The threat of insurgents or political extremists, and the exercise of religious discrimination have been all too common as motivation for the establishment of ID systems which would force enemies of the State into registration, or make them vulnerable in the open without proper documents. [6]

In recent years, ID cards have been linked to national registration systems, which in turn form the basis of government administration. In such systems - for example Spain, Portugal, Thailand and Singapore - the ID card becomes merely one visible component of a much larger system. With the advent of magnetic stripes and microprocessor technology, these cards can also become an interface for receipt of government services. Thus the cards become a fusion of a service technology, and a means of identification.

3   TYPES OF ID CARDS

ID cards give us a outer characteristics of an employee and by looking at it we only get the general information about an employee working within an organization. We are not able to get the information like field of specialization , access rights, experience, and the number of years spend by him working at the same post etc., we also do not get the total scope of the search technique used by the hiring officials while the allocation of the project. Hence they involve in the global search technique where they search for the complete database for the required qualities in a candidate for a particular project. Hence this makes the whole process cumbersome and at the same time makes the latency of the search technique more than that expected.

ID cards are established for a variety of reasons. Race, politics and religion were often at the heart of older ID systems. [2]

Broadly expressed, there are three different forms of ID card systems:

- Paper based documents (Low maintenance cost but susceptible to forgery)
- Readable plastic card systems (Moderate cost, durable, major forgery potential)
- Smart Integrated systems (High cost, wide functionality, low threat of forgery)

Stand Alone ID documents are issued in primitive conditions, or in environments, which are subject to sudden economic or political change. Often, areas under military rule or emergency law will issue on the spot ID cards, which are, essentially, internal passports. Their principle purpose is to establish that a person is   authorized to live in a region. The majority of ID systems have a support register which contains parallel information to that on the card. A regional or municipal authority often maintains this   register. In a minority of countries, this is a national system. It is a cost effective system with most of the feather of smart card. Virtually all card systems established in the past ten years are integrated systems. They have been designed to form the basis of general government administration. The card number is, in effect, a national registration number used as a common identifier for many government agencies [4].

A national Registration card is an identity document that verifies that we are a citizen of a particular country [3].

4   FUSED ID CARDS

In this paper a new form of an id card is proposed which will overcome the short comings of a normal id card.

Unlike a normal id card, by just looking at the fused-id we can get various useful information about an employee working within an organization such as the information access rights, Designation, certifications experience and the number of years spend by him/her working in the same post .

The various fields used are as follows and are shown in the figure 1
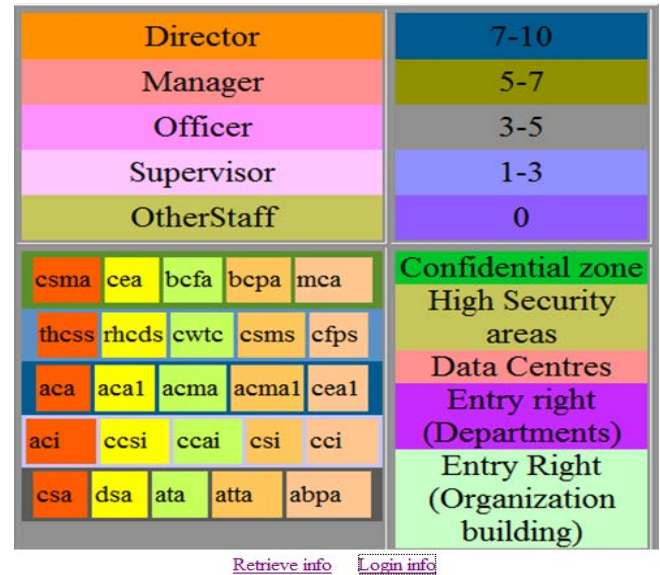
. Fig 1. Fused ID Card

The employer will be responsible to manage the employee's on the system which includes creating new employee account, edit existing account details and delete the currently provisioned employees. The Employee Management will display the list of employee provisioned in the system. Employer can edit the details or can delete the employee account at this interface. Employer can create new employee account in the system.

4.1 Employer interface

The employer interface will also allow the employer to perform the following activities:

- Create New Employer account.
- Register a new Employee.

Roles of an employer:

- User Management :Creation & Deletion of records
- Study Management : Delete some unwanted records from the system
- Employee Registration : Create a new Employee account in the system
- New Request Creation

The entry page where professional information is entered by the authorized person is shown in Fig. 2. It includes access rights to zones, experience in years and the certifications possessed by the employee.

Fig. 2   Professional Information

4.2 Employee interface

- The employee interface will allow the employee to perform the following Activities:
- View employee list
- View fused id
- Zoom the Region of interest
- Fused id Creation.

Roles of employee:

- Account Creation
- Enter various information
- View own fused id
- Zoom Region of Interest

4.3 Access Rights

This field consists of various zones which are accessible by a certain person. The zones are as follows:

☐ Confidential zone
☐ High security areas(Research labs)
☐ Data centers
☐ Entry rights(department building)
　☐ Entry Rights (organization)

4.4 Certifications

This field consists of information of certifications done by the various employees within the organization. The certifications done at different levels are as follows:

i. Administrator [1]

☐ Certified cite minder Administrator
☐ Certified CA eHealth Administrator
☐ Brocade certified fabric Administrator (BCFA)
☐ Broad work certified platform Administrator

ii. Specialist

☐ Red hat certified security specialist(RHCSS)
☐ Red hat certified data center specialist(RHCDS)
☐ Certified wireless technology specialist(CWTS)
☐ Certified software measurement specialist (CSMS)
☐ Certified function point specialist(CFPS)

iii. Associate

☐ Adobe certified associate(ACA)
☐ Apple certified associate(ACA)
☐ Aruba certified mobility associate(ACMA)
☐ Autocad certified mobility associate(ACMA)
☐ Carrier Ethernet associate(CEA)

iv. Instructor

☐ Adobe certified instructor(ACI)
☐ Checkpoint certified security instructor(CCSI)
☐ Cisco certified academy instructor(CCAI)
☐ Certified systems instructor(CSI)
☐ Cirtix certified instructor

v. Analyst

☐ Certified SOA analyst
☐ Service desk analyst(SDA)
☐ Advanced test analyst
☐ Advanced technical test analyst
☐ Business process analyst

4.5 Number of years (Experience)

This field contains the information that how many years are spend by an employee of the organization working at a specific level. The various levels are as follows:

1. Administrator level
2. Manager level
3. Officer level
4. Other staff

F. Designation

This field consists of information that at what designation a person is working in a specific department .The various roles are as follows:

1. Director
2. Manager
　☐ General manager
　☐ Chief General manager
　☐ Assistant General manager
3. Officer
　☐ Senior divisional officer
　☐ Divisional officer

4. Supervisor
        ☐ Project leader
        ☐ Team member
5. Other Staff
        ☐ Interns
        ☐ Other supporting staff

5 USE CASE DIAGRAM

In software and system engineering, a use case diagram shows a list of steps, typically defining interaction between a role (knows in UML as an actor) and a system, to achieve a goal. The actor might be a person, a company or organization, a computer program, or computer System-hardware, software or both. Similarly, a person using a system may be represented as different actors because he is playing different roles. Use cases describe the interactions that take place between actors and IT system during the execution of business processes. An association is a connection between an actor and a use case. Several actors at one use case mean that each actor can carry out the use case on his or her own and not that the actors carry out the case together. According to UML, association only means that an actor is involved in a use case. An association is used in a restricted manner as shown in fig. 3.
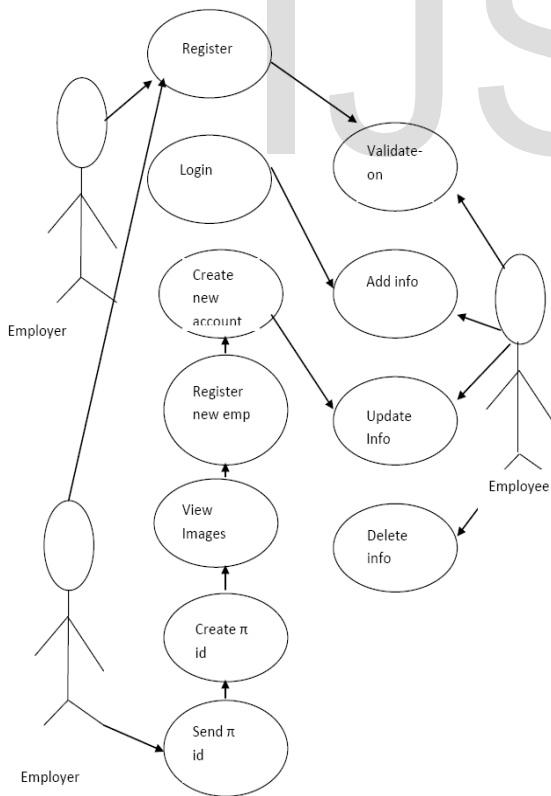

Fig 3. Use Case Diagram

This process of identification of an individual becomes easier and at the same time mentions the access rights, professional level of a professional and makes the search space available for both global and local search we are suggesting a new identification and search technique which we named as fused-id. This also reduces the search space and hence optimizes the search technique. Information regarding the employee is obtained and inserted into the database which can be later modified only by authorized person, i.e., administrator.

During job allocation the allocator inserts his requirement into the ID by selecting the required fields. The system now gives a list of all the candidates which are eligible for the given job according to the requirement. This also reduces the search space and hence optimizes the search technique. So to capture maximum information of an employee by just looking at his id card by using global search technique and service oriented architecture we are proposing a new form of identity card, which is named as fused-ID.

Figure 4. shows a employers page for allotment of job, he needs to selects the required values in the ID
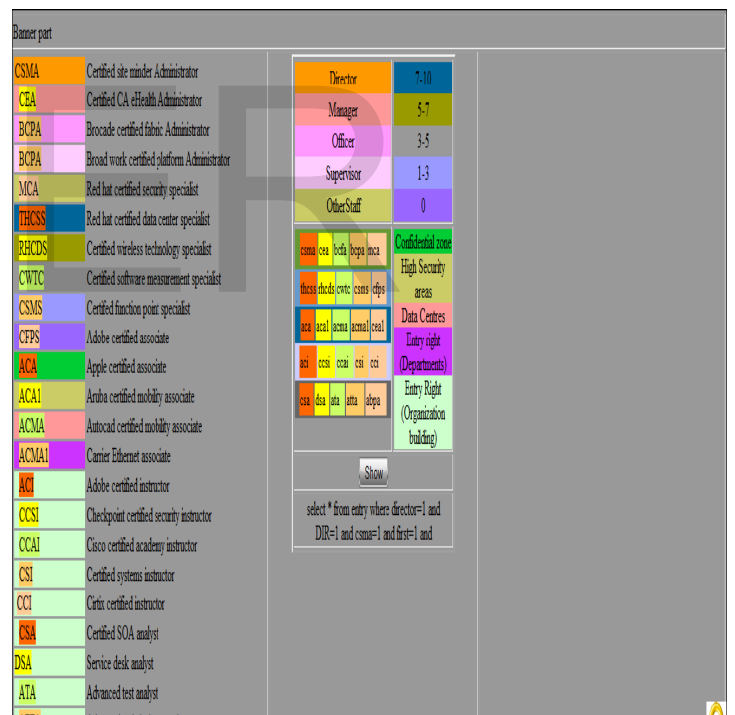

Fig 4. Query Processing

This aims to make the process of identification of an individual easier and at the same time mention the access rights, professional level of a professional and makes the search space available for both global and local search. A new identification and search technique is suggested which is named as fused-id. This also reduces the search space and hence optimizes the search technique.

6 CONCLUSION

This paper presents a new approach for giving the identification to an individual in an organization without actually using the entities. Using an fused ID an employee can know what the attributes of another employee are and as the card can just be understood by the employee of the organization so it would not be possible for other to understand the color coding scheme used.

The employer just needs to select the features required by him for a particular task in the fused ID and then he submits the query. He receives a list of all the employees that are fulfilling the required criteria. Then by looking at the ID of the candidates he can allocate the project to the employee that fulfill the criteria accurately and hence and job allocation is done.

REFERENCES

[1] Daozheng Lu and Simon W. Lu, "Identification card verification system," 1903 Dunloe Cir., Dunedin, Fla. 34698, PP.5432864, July, 1995

[2] Rudy Simon, May 2003 "Identity card and tracking system," PO BOX 17707, Portland, ME 04112-8707, US2003/0086591 A1,.

[3] http://www.google.co.in/search?q=Membership+id+card&hl=en&tbo=u&qscrl=1&tbm=isch&source=univ&sa=X&ei=_QXnUPPoEJDyrQe5jIH4BA&ved=0CDsQsAQ&biw=1366&bih=677

[4] http://www.cisco.com/web/learning/le3/le2/le0/learning_certification_level_home.html

[5] http://www.google.co.in/imgres?q=membership+cards&hl=en&new window =1&sa=X&tbo=d&rls=com.microsoft:enUS:%7Breferrer:source%7D&biw=1280&bih=675&tbm=isch&tbnid=_7Qx_l3juNIqeM:&imgrefurl=http://www.digitechpeople.com/products.htm&docid=fM8dy5jDqiRS4M&imgurl=http://www.digitechpeople.com/images/membership_cards1.jpg&w=370&h=238&ei=nafmUNy7LcuzrAeWoYHICA&zoom=1&iact=hc&vpx=4&vpy=323&dur=435&hovh=180&hovw=280&tx=153&ty=116&sig=101511978276685893660&page=1&tbnh=143&tbnw=223&start=0&ndsp=19&ved=1t:429,r:6,s:0,i:172

[6] http://www.google.co.in/search?q=id+card&hl=en&tbo=u&qscrl=1&biw=1366&bih=677&tbm=isch&source=univ&sa=X&ei=6TmUMfGPIPqrAfnnIG4Cg&ved=0CEAQsAQ