Secured E-Counselling Framework Using Composite Web Services

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Abstract - In this paper, we proposed a Secured E-Counselling Framework using Composite Web services to enhance the counselling, which is fully works as an online. This framework will be a great relief to the students in terms of reporting, registration and searching the information about college and university. Moreover this software gives an overview of the entire institute in a sort interval time and will be also great help to University to manage in the whole counselling procedure by reduce their paper work and their time. Students counselling system for Engineering/MBA/MCA is conducted by face to face communication in between the student and staff. This is suitable only for the students who are nearer to that university which conduct counselling. But this system will not be a comfortable one for the students who are coming from long distance. To avoid this problem, attending the counselling through the online from their own place with proper authentication is proposed. This task is accomplished by Student Online Counselling system.

Keywords - e-counselling, authentication, web services, Security

I. INTRODUCTION

Cooperative services are capable of intelligent interaction and are able to discover and negotiate with each other, mediate on behalf of their users and compose themselves into more complex services[1]. These exact Properties of WS are the ones that present most challenges and raise the issue of guaranteeing a given "quality" of services to final users. This concept of quality is expressed in terms of Functional and non-functional requirements, such as performance or security and it is these two particular attributes that attract researchers in their quest for means of evaluating WS.

A WS is a software system identified by a URL, whose public interfaces and bindings are defined and described using XML. Its definition can be discovered by other software systems. These systems may then interact with the WS in a manner prescribed by its definition, using XML-based messages conveyed by internet protocols. This definition has been published by the world-wide-web Consortium W3C, in the WS Architecture document.

Composition of web Services is the key technology of SOA implementation, and web Services selection is an important issue in web service Composition[2]. A single web services often integration provides one business function. However, an enterprise often requests the integration of several business functions, with some logical constraints and data dependencies.

a) In E-Counselling system students no need to go to the place where the counselling is held. Students will attend the

consoling from their own place. The main thing is only right person can attend the counselling at right time. So, the high security primitive is needed for this paper.

b) Only the eligible candidates can only be viewed and accessed the website along with their username, password, and security question for authorization when session is created to the group of students.

c) Students no need to come from distances with their parents/ guardian for attending the counselling. Wasting of time and money will be reduced. Ease of access to monitor the seat vacancies of various colleges. Students spend only one or two hours to choose college. Immediate updating of seat vacancies will be accessed by each and every student who are included in the session. Time delay happened by the Transport or other resources will be reduced.

II. RELATED WORK

San-yih Hwang, Ee-peng Lim, chien-Hsiang Leel, chen-Hung chenlI have proposed the concept of "on composing reliable composite wed services[3]: A study of dynamic web service selection". Dynamic wed service selection refers determine a subset of component wed services to be invoked so as to orchestrate a composite wed services in additional ,when selecting the operation of component wed services to invoke in WS composition, the atomicity of each component WS, which requires either one of its operations or some finial operation are invoked, has to hold at the end of WS composition. The goal of automatic WS composition is therefore to determine whether a given composite WS can be derived Using a set of components web services and if so how to compose.

Elias Pimenidisa, Christos K.Georgiadisb Web services (WS) are the Modern response of traders and online service providers to satisfying the increasing needs and demands of the digital communities[4]. WS formation and operation is based on a software system designed to support interoperable machine-to-machine interaction over a network. Security is of paramount importance to WS and the ability to measure and evaluate the level of security available is key to establishing and continuing to develop the level of trust based on reputation developed by the provider of the WS. The greatest challenge in offering secure WS is to groups of people where the Level of expertise of the user is low and the need for transparency of the service provision quite high, such as the case with services offered primarily to people in rural areas. Providers of such services face many challenges in balancing the requirements

for performance, interoperability, and security against the cost of implementing secure systems and running profitable operations through low income generating WS[5]. A review of services offered, of the users and the challenges in building online trust among providers and users are discussed for the case of rural areas in the United Kingdom.

III. E-COUNSELLING FRAMEWORK

In E-Counselling system students no need to go to the place where the counselling is held. Students will attend the consoling from their own place. The main thing is only right person can attend the counselling at right time. So, the high security primitive is needed for this project.

Only the eligible candidates can only be viewed and accessed the website along with their username, password, and security question for authorization when session is created to the group of students.

Students no need to come from distances with their parents/ guardian for attending the counselling. Wasting of time and money will be reduced. Ease of access to monitor the seat vacancies of various colleges. Students spend only one or two hours to choose college. Immediate updating of seat vacancies will be accessed by each and every student who are included in the session. Time delay happened by the Transport or other resources will be reduced.

A. Institute Record

Seat information only viewed by the students who are in the today counselling date other students view this detail only at the end of each day counselling. Another one thing is "Entering into counselling panel" this page accessed only by the students who are in the time allotted between in the schedule table. There are three searching categories of college seats will be provided to the students that is search by location, by community, by college code and also general view.

B. Allotment Order Generation (PDF)

iText is a library that allows developers to extend the capabilities of their web server (and other JAVA) applications with dynamic PDF document generation. Using this library generate allotment order to the students after they confirm the college. This allotment order is used to get admission to the chosen college.

Allotment order is created in PDF(Portable Document Format) because user no need to install fonts or any other software like MS-Office. They directly print the document or save it to their local drives. PDF plug-in is enough for the users to view the document dynamically now browsers are released along with this plug-in so we don't want to download this separately.

IV. RESULT

The login service for a student from remote place is shown in Figure 4.1. This service helps the student to enter the counselling website at right time and not earlier. The schedule of counselling data and time to the rank holders is stored in the schedule table. So user can automatically enter into the counselling framework at their allotted date and time. After proper authentication, the server provides the seat information about the college.

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Fig 4.1 The login service for a student from remote place

Figure 4.2 represents the student form. This service is provided to the appropriate student when he enters into the counselling panel.



Fig 4.2 Student form

Figure 4.3 represents the e-counselling seat vacancy information. Here the information about the student and also the list of colleges are available with non-empty seats. The Process of choosing a college is either by college code or location. Then the colleges situated in the selected location will be loaded. This process is directly interacting with data base without submission.

After submission of this form a confirmation service will be

displayed with information about the student and also the chosen college.

JSP	Page *					
	SEAT V	ACANCY I	NF	DR	MA	FION
EARC	H BY LOCATION SEARCH BY COMMUNITY SEATS SEARCH BY	COLLEGE CODE				
CODI	COLLEGE	LOCATION	овс	MBC	SC/ST	TOTAL
C0001	ALAGAPPA CHETTIAR COLLEGE OF ENGINEERING & TECHNOLOGY		10	10	10	10
C0002	ALGAPPA COLLEGE OF TECHNOLOGY C/O ANNA UNIVERSITY	CHENNAI	15	15	15	
0003	COIMBATORE INSTITUTE OF TECHNOLOGY	COIMBATORE	15	15	15	
20004	ANJALAI AMMAL MAHALINGAM ENGINEERING COLLEGE	NAGAPATTINAM	14	15	15	15
C0005	ANNAMALAI UNIVERSITY	SOUTH ARCOT	25	25	25	25
C0006	ADHIPARASHAKTI ENGINEERING COLLEGE	CHENNAI	10	9	10	10
C0007	ADHIYAMAAN COLLEGE OF ENGINEERING	DHARMAPURI	15	15	15	15
C0008	ANGALA AMMAN COLLEGE OF ENGINEERING & TECHNOLOGY	TRICHY	15	15	15	15
C0009	ARULMIGU KALASALINGAM COLLEGE OF ENGINEERING	VIRUDUNAGAR	15	14	15	15
C0010	ARULMIGU MEENAKSHI AMMAN COLLEGE OF ENGINEERING	THIRUVANNAMALAI	30	20	20	20
C0011	ARUNAI ENGINEERING COLLEGE	THIRUVANNAMALAI	9	10	10	10
C0012	CENTRAL ELECTRO CHEMICAL RESEARCH INSTITUTE	KARAIKKUDI	10	10	10	5
C0013	CRESCENT ENGINEERING COLLEGE	CHENNAI	15	15	15	15
20014	DR. MGR ENGINEERING COLLEGE	CHENNAI	14	15	15	15
	GOVERNMENT COLLEGE OF ENGINEERING	TIRUNELVELI	10	10	9	10
00015			10	10	10	10
C0015 C0016	GOVERNMENT OF COLLEGE OF TECHNOLOGY	COIMBATORE	10	10	10	

Fig 4.3 e-counselling seat vacancy information

V. CONCLUSION

In this paper a E-Counselling Framework using Composite Web services is proposed to enhance the performance and accuracy of computing. Thus, this paper is a proof to extend the counselling through online rather than the face-to-face communication.

REFERENCES

- Bertino, E., Squicciarini, A.C., Martino, L., Paci, F., 2006. An adaptive access control modelfor web services. *International Journal of Web Services Research* 3 (3),27–60.
- Bichler, M., Lin, K.-J., 2006. Service-oriented computing. *IEEE Computer* 39 (3),99–101.
- [3] San-yih Hwang1, Ee-peng Lim2, chien-Hsiang Leel, chen-Hung chenII, 2007. Improving webservice discovery with usage data. *IEEE Software* 24 (6), 47–54.
- [4] Elias Pimenidisa, Christos K. Georgiadisb, 2006. E-readiness or digital exclusion—evaluating a country's status. In: *Proceedings of the 2nd E-Democracy National Conference with International Participation*, Athens Bar Association and the Scientific Council for the Information Society, Athens, Greece, pp. 87–96.
- [5] Booth, D., Haas, H., McCabe, F., Newcomer, E., Champion, M., Ferris, C., Orchard, D.2004. Web Services Architecture, W3CWorking Group Note 11, February, W3C Technical Reports and Publications, http:// www.w3.org/TR/ws-arch/.Casola, V., Fasolino, A.R., Mazzocca, N.P., Tramontana, P., 2007. A policy-based evaluation framework for quality and security in service oriented architectures. In: *Proceedings of the IEEE International Conference on Web Services* ICWS 2007,Salt Lake City, UT, USA, pp. 1181–1190.