



Integrated Framework using SOA and Web Services

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Abstract— *SOA framework, web services and application programming in software industry have become a key role in providing business need based services . Framework has become more compatible and easy to work upon. issues such as interface and environment setup through remote interactions have become easy and efficient. the main utility of frame work has been studied and seen through implementing these frame works one can achieve security to sensitive data and can be more secure and allows independence from cloud and vmware. the implementation have been found in a web-related application :Integrated frame work using SOA and web services.*

Keywords— *SOA, Application programming, web services, data security.*

I. INTRODUCTION

while working on SOA ,web services ,application programming and frameworks the fact remains that Necessity for setting up models to support larger-scale environments and interface collaborations has lead to an increasing research interest in design techniques to enable and optimize interactions between clients and service providers. Such interfaces and environment related services that interact in different status and Evlove as units are difficult to model in a single approach. Challenges include, in every step of design including coding, interface set up ,utility of backend service, people interaction directly to the data on demand, dynamically changing project requirements in the very initial stages of project. web services enable not so user friendly and dependable . In particular, they provide the means to specify well-defined interfaces and let users and clients use an organization's resources through dedicated operations. However, offered resources are not restricted to information and software-based services. Services must be provided in a service-oriented approach .For that purpose, the Provider Service (PS) Framework [14] enables usage in order and security to data in a SOA environment.

A typical example is a testing service done on a embedded system that could be implemented in software too, but mostly only with insufficient quality. in this situation to provide services in the same manner by letting them receive and process requests through Web service interfaces. With the users in the loop, regular service oriented architectures (SOA) transform from pure technical systems into socio-technical systems . These systems are characterized by both technical and human/social aspects that are tightly bound and interconnected. The technical aspects are very similar to traditional SOAs, including facilities to deploy, register and discover services, as well as to support flexible interactions. Additionally, the social system includes people and their habitual attitudes, values, behavioral styles and relationships. In particular, considering drifting interests of people, evolving skills, and varying collaboration incentives requires enhanced technical infrastructures in terms of flexibility and adaptability this enables transfer of data in secured path and use of web services through user defined state. put toghther this develops a framework free from crash and dependable on time of need.

II. RELATED WORK TOWARDS PROJECT

Major software firms providing IT-enabled services have been working completely on standards addressing the Support in serviceoriented systems. using J2EE and .NET FRAME WORK. Were released to address the design related coding and in depth way to meet business processes. While J2EE based applications focus on complex and bottom up modeling of business processes,.NET Framework, application programming and service-oriented systems target flexible interactions and designs on Software-Based Services. This approach contribute services more efficiently. In such cases, participants(clients) will be provide services in a uniform way by using the framework . however, not focusing on the realization as a service-based system. Enhanced flexibility of complex systems is introduced by establishing a cycle that feeds back environmental conditions to allow the system to adapt its behavior. The MAPE cycle is considered as one of the core mechanisms to achieve adaptability through self-* properties. Based on the context of the environment, different adaptation strategies can be applied [to make interactions between actors, the parameters of those strategies, and actions to prevent inefficient use of resources and disruptions. While autonomic computing allows for autonomous elements and applies these principles to distributed systems, current research efforts leave the target usage of available coding element and resources included outside the loop. The availability of rich and plentiful data on application programming in social networks has opened an important loop , that allows to model social phenomena and to use these models in the design of new computing applications . In the context of multi agent systems (MAS), self-configuring social techniques were

introduced . A major challenge in adaptation and self-configuration is to dynamically find the most relevant adaptation parameter. also the management of data and environment provision where services are completely meet to launch a frame work are meet.creating a new area of work where data processing and high end security and transfer is no longer a challenge.

III. METHODOLOGIES INVOLVED

This paper is focused mainly on Study of how .NET framework and service orientedArchitecture are more Useful in designing and then developing a web application (online music store) using Asp.net and C#. This also helps in understanding the need and utility of framework and need to understand the SOA and web services which are always inter linked on launching a interface and environment through web applications with application programming done in .Net framework. .Net is also supported by SOA and is accepted as a logical business coding supported by the Microsoft .NET platform and is based on the principles of object oriented programming language. For any of the .NET languages, a very comfortable toolkit for software development and maintenance is provided- Microsoft .NET framework and Visual Studio.NET. Basically supportable with Microsoft’s visual studio 2005 to visual studio 2012.

IV. PROPOSEDWORK

Approach to Inegrated frame work design can be highlighted by the fundamental building blocks, and in particular the service layer itself.

V. ARCHITECTURE

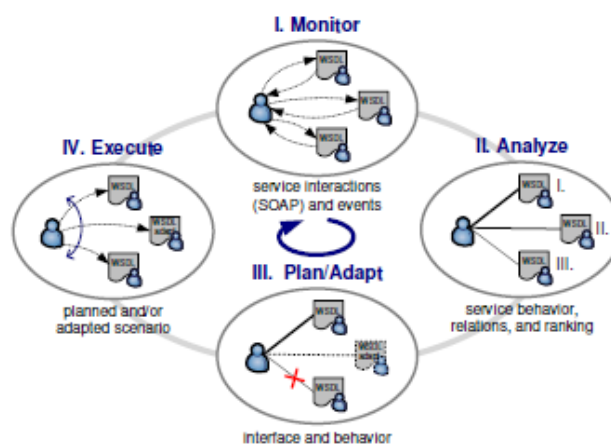
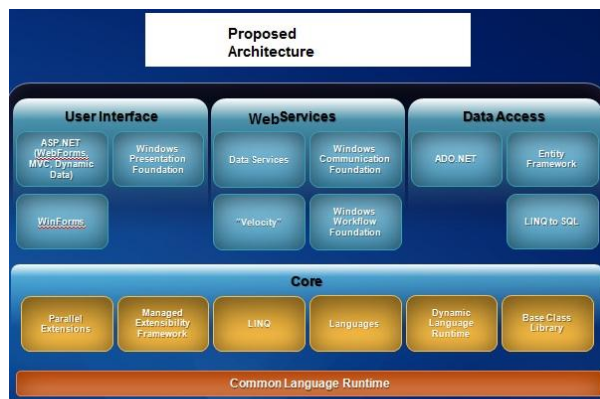


Figure2 Describes the process of the web on how a request is totally processed in a system once passed. With reference to base paper of human expertise on service oriented systems

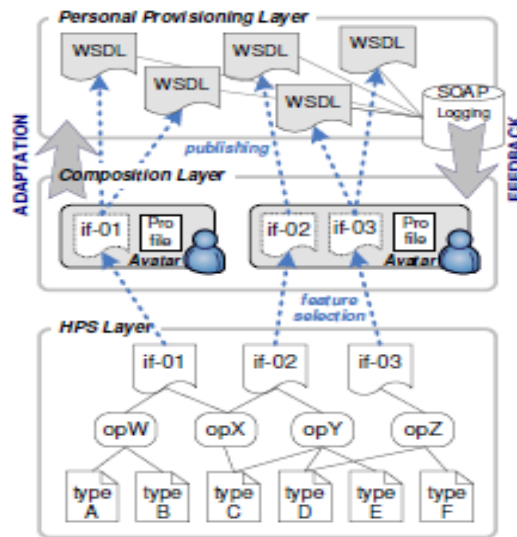


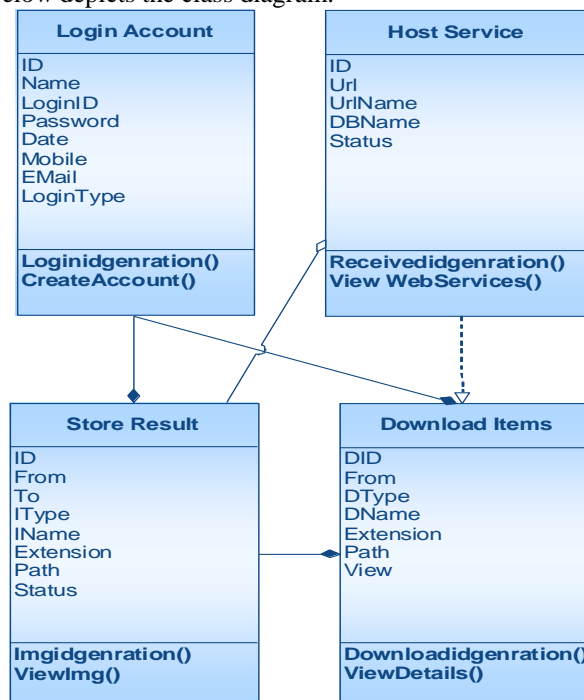
Figure 3: Describes the overall architecture and the type of service used and the adaption of the service in the web and the support of the high provision system and its layer. With reference to basepaper on human expertise in service oriented systems

Proposed Architecture Pattern

ASP.NET XML WEB SERVICES	Windows Forms
Base Class Libraries	
Common Language Runtime	
Operating System	

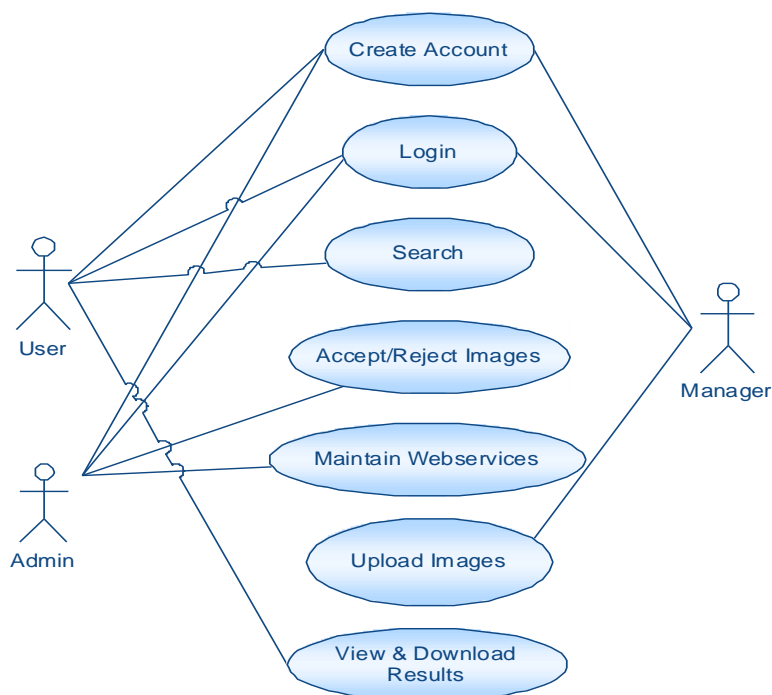
VI. INTEGRATED FRAME WORK USING SOA AND WEB SERVICES.

The main objective of this project is to design a web application with user interface which will enable participants such as project manager, admin and user to upload data, provide service through web, select the needed and demanded information and upload in web for the user, using browse, search, get data downloads and recommendations. This study focuses on modeling a representative model for the web users. A user can browse and download data of his choice anytime on internet. The Fig. 1 below depicts the class diagram:



The class diagram explains the total work flow of the project and the personal provisioning of the client and the business need through user and web application utility.

USE CASE DIAGRAMS:



The use case diagrams can be used to understand the total work flow.

VII. CONCLUSION

In this paper we tried to bridge the application programming, web Services and SOA. In such environments social implications must be handled carefully as these Social aspects require personalized service provisioning by establishing peer-to-peer relations between clients and service providers on demand. these services are always delicate in establishing and play very important role in many areas of IT enabled services.

REFERENCES

1. Human expertise in service oriented system-basepaper by Florian Skopik, Daniel Schall, Harald Psailer, Schahram Dustdar
2. **Beginning ASP.NET 4: in C# and VB** by Imar Spaanjaars.
3. **ASP.NET 4 Unleashed** by Stephen Walther.
4. **Programming ASP.NET 3.5** by Jesse Liberty, Dan Maharry, Dan Hurwitz.
5. Data Communications and Networking, by Behrouz A Forouzan.
6. Computer Networking: A Top-Down Approach, by James F. Kurose.
7. Operating System Concepts, by Abraham Silberschatz.
8. **Beginning ASP.NET 3.5 in C# 2008: From Novice to Professional, Second Edition** by Matthew MacDonald.
9. Amazon Web Services (AWS), Online at <http://aws.amazon.com>.
10. Google App Engine, Online at <http://code.google.com/appengine/>.
11. Microsoft Azure, <http://www.microsoft.com/azure/>.
12. A. Agrawal et al. Ws-bpel extension for people (bpel4people), version 1.0., 2007.
13. M. Amend et al. Web services human task (ws-humantask), version 1.0., 2007.
14. D. Brabham. Crowdsourcing as a model for problem solving: An introduction and cases.
15. A. Cherns. The principles of sociotechnical design. *Human Relations*, 29(8):783–792, August 1976.

SITES REFERRED:

1. <http://www.asp.net.com>
2. <http://www.dotnetspider.com/>
3. <http://www.dotnetspark.com>
4. <http://www.almaden.ibm.com/software/quest/Resources>
5. <http://www.computer.org/publications/dlib>
6. <http://www.developerfusion.com/>