

WEB SERVICES CHALLENGES OVERCOME BY APPLICATIONS IN GLASS MANUFACTURING INDUSTRY

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Abstract

This paper aims at developing a web application that provides services to fiberglass industry. This application maintains employee details, product details, achievements of fiberglass industry, job recruitment, product sales, etc. The employee details those who are working in fiberglass industry will be maintained in this paper. The industry manufactured products are viewed with description for public preview for improving business growth. Client can request to buy an existing product or new product from industry. The new product model can able to send by client to the industry. Job seeker can able to apply to the industry through this website. Those details can be referred by manager and call for an interview. Client can able to give reviews and rating to the industry. It provides description about our industry and location of the industry can be provided for reference.

Keywords: fiberglass industry, web application, web services and website.

I. Introduction

A web service is can be defined as client-server application and the method of communication between two computer devices over the internet. A web service is a software can be designed to carry out a certain communication services. The web services are categories into two types namely SOAP web services and RESTful web services.

This paper is used to develop an application to overcome the challenges faced by fiberglass industry. Fiberglass industry manufactures many new products such as play items, bus shelter, fiber boats, house decorations, industrial materials, chemical tanks, etc. These products details can maintain manually is very tedious task by industry. Employee details, achievements got by industry can maintain manually is very hard. So, to overcome these problems, an application will develop for this industry. An also to improve their business through online, a web service will provide. This website is used to request to buy an existing model of product and also able to request a new model of product. With the help of this website, people can apply for job in the industry.

1.Employee Record Management

Employee Record Management^[7] System application is used to manage the data of the employees such as personal details, Educational details and work experience, etc. this can be able to add a new data, update an existing data and delete an existing data of employees. This application is reduce the paper work of the company. Through this application, company can manage all data online.

2. Campus Recruit Management System

Campus Recruitment Management System is used to provide an easy way for the company to hire candidates and also provide the facility to candidates to apply for different jobs. In this application, PHP and MySQL are used for convenience application. This can be used for candidates to approach the company through online immediately.

II. Related work

Punyaban Patelet.,al.,[1], In this paper, mainly focusing on intensive study and analysis of the existing standards and protocols such as the service oriented architecture of the Web services, the role of XML, WSDL, SOAP, and the UDDI in the Web services architecture, security issues, challenges with its benefits has been is carried out.

FLORIJE ISMAILlet.,al.,[2] In this paper ,suggested a new XML & Web Services Framework which relies on the Service Oriented Architecture and is a way of reorganizing applications into a set of services.

Khalid Elgazzaret.,al.,[3] In this paper provided , we provide the state of the art of mobile service provisioning as it currently stands.

Azad Ali et.,al.,[4], In This paper discussed, the pedagogical considerations and the steps that have been taken by faculty members within a technology program to update their web design courses.

Aruna.S ,[5]In this paper focused on the major issues and challenges involved in handling and implementing security in web services. Like any software or web application, web services are also prone to security issues related to authentication, availability and integrity.

Pradepta Kumar et.al.,[6] In This paper proposed, a model which can be applied for the successful development of small scale web applications.

III. Challenges faced in fiberglass industry

Common Challenges of web services are network band width and database application maintenance over the web server, deficient in of assurance of trustworthiness, unavailability of sources and many other challenges are faced by industry day by day.

The following are the challenges faced by fiberglass industry are:

1. Employee details maintenance
2. Product details maintenance
3. Job recruiting
4. Less Customer relations
5. Achievements details maintenance

1. Employee details maintenance
In this industry, number of employees can be worked in different departments. Those employee's personal details and salary details can be maintained manually is very tedious task. If any error comes under maintenance of details, it can cause major problems.

2. Product details maintenance

In this industry, so many new products such play items, bus shelter, house decoration, chemical tanks, etc can be manufactured. All the products are made as creative. So, it is difficult to store the details as photo copy of images.

3. Job Recruiting

In this industry, there is a less employees worked in such department and it cannot be recruit employees in an easy way. By giving advertisement, it can recruit the candidates.It's give complex to company.

4. Less Customer Relations

The relationship between customer and company is less. Because of the customer needs to buy any products, they will come direct to the company. So, it is very difficult to get better relationship with new customers.

5. Achievements details maintenance

Fiberglass industry can maintain new products and many achievements.

Architectural Design for this Application^[3]

The Architecture design for this application is as below

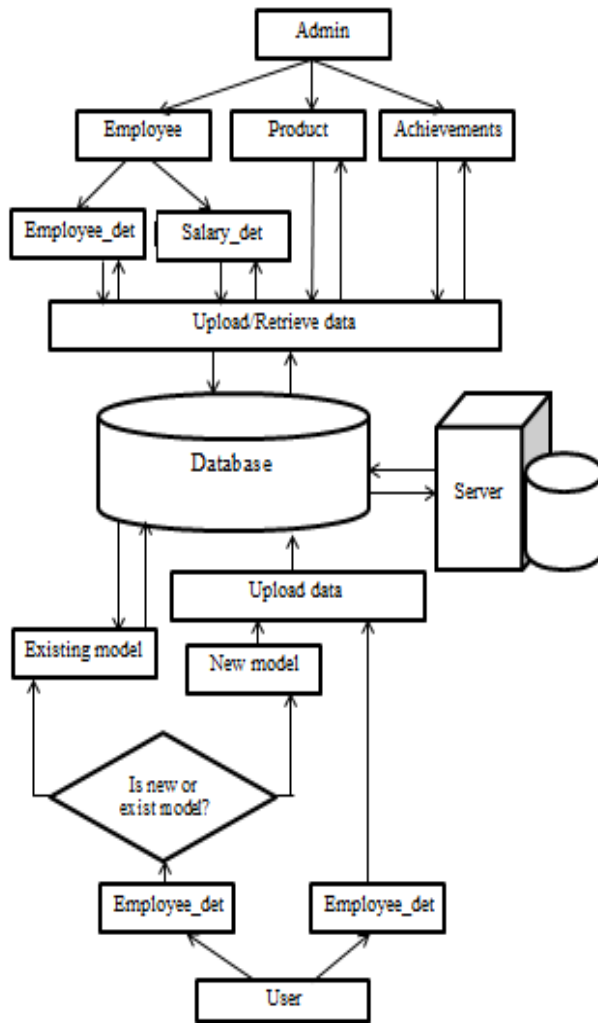


Fig.:1- Architecture of the application

IV. Implementation of Application and Web Services

To overcome the above challenges in fiberglass industry, this application uses to perform some process and maintain data by the company. There are two main modules as follows:

1. Admin module
2. User module

1. Admin Module

Admin module is maintained by company. This main module can be classified into four sub modules as below:

- i) Product module
- ii) Employee module
- iii) Job recruiting module
- iv) Service module
- i) Product module

In this module, list of products manufactured by company will be uploaded and maintained safely.

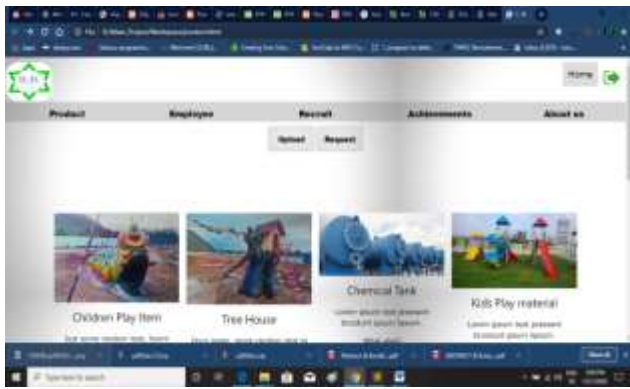


Fig.:-2 Product details

ii) Employee module

In this module, Employee details and salary details will be uploaded and maintained by company.



Fig.:-3 Employee details

iii) Job recruiting module

In this module, admin monitor the job seeking candidates who will be applied to the company and send reply to the candidates who are eligible for such position in the company.

iv) Service module

In this module, summary of the industry and achievements will be uploaded and maintained by the industry.

2. User module

User module is performed as a web service. This helps to view the product details, achievement details, location of the company can be viewed by the user. This can be classified into three sub modules as below:

1. Product module
2. Job seeking module
3. Service module

In this module, user/customer can able to view the images of various products done by industry. User can request a new model to manufacture for the user's/customer's use.

2. Job seeking module

In this module, user can able to apply for the vacancy in the industry directly through online by sending resume.

3. Service module

In this module, user can review about the industry and gives ratings with user convenience.

V. Tools used for application and web service

1. *Sublime Text*³

The Sublime Text is a shareware cross-platform source code editor with a Python application programming interface (API). This is the recommended version of Sublime text to user and is available for windows, OS X and Linux. *XAMPPServer*^[8]. XAMPP is an AMP stack which lets to install Apache, MySQL and PHP^[9] in your computer together with some other useful software

2. *Visual Studio Code*^[10]

Microsoft Visual Studio Code 2010 tools for the Microsoft Office System can help to create solutions by extending word 2003 documents and Excel 2003 workbooks using Visual basic.

VI. Conclusion

This paper has been used to overcome the challenges faced by fiberglass industry by using this application. The system has been built with the latest technology to make the best of all resources. It is very user-friendly, simple and interactive system thus makes work easier. This will helps to the company to maintain data and the users to request to the product and apply for the job friendly. Based on the future security issues, security can be improved using emerging technologies.

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