RESEARCH ARTICLE   OPEN ACCESS

Internet Data Synchronization Tool

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ABSTRACT

Internet data synchronization uses gears and html5 to avail the facility of working off line, and providing the data synchronization when connection get re-establish. Data synchronization application provides APIs for offline application access and data storage. These APIs let developers build applications that can run even if the web server can't be contacted, and allow those applications to store data offline using SQL syntax.

While working online the single point of failure, a user may face getting disconnected or not getting the net access. For this purpose offline data synchronization application client provide the data base schema on the client side by creating a local server and worker pool which make your web applications more responsive by performing resource-intensive operations asynchronously. The function of the gears in this project is providing data synchronization with the server and hence the project provides the facility of working offline.

Keywords:- Internet data synchronization, Gears, HTML5.

I.   INTRODUCTION

In modern times, human daily activities almost cannot live without web application in many ways. They need to access web application to check their emails, browse their calendar appointments, prepare presentations with their online tools, update with the latest news, or chat with their friends. There are many reasons why web application has been extensively widespread. People do not need to have their own computers to use web application. Students can use computers at school labs, office workers can use ones at their offices, and other groups of people can use ones at Internet Café.

Not only web application is suitable for people who do not have their own personal computer, it is also appropriate for people who have multiple machines. Furthermore, people can browse their

web application through mobile devices, such as a smart phone and a PDA. Web application can be viewed as its own computing platform. It is accessible no matter what operating systems of the machines are. It is coded in browser executable language such as HTML, PHP, Java, and JavaScript. Using web browser to access the application provides cross-platform compatibility.

When using traditional web application, users have to go online. Consider a business man who uses online applications to access his emails, keep a tab of his appointments and to store his contact information while he travels to meet with his customers. Since he will be travelling most of the time, he may not access to Internet connection all the time. When he is offline, he can no longer access his favorite online applications. In real situation, it is possible that we cannot access the web application because of several reasons such as

overloading web server and unreliable Internet service provider. Therefore, accessing web application when users are offline becomes important.

II.   BACKGROUND AND MOTIVATION

In today's world of globalization, the Information Technology sector is trying to make the world as small as possible. By saying 'as small as possible' we mean to say IT sector wants to connect world via internet, telecommunication & other means of mass media communication. Due to all these mobility and time management has become a subject of greater concern because to survive in this competitive industry people don't want to waste even their single minute and they also try to save their money as far as possible.

In the centralized system we don't have the facility to work offline. So As such there is no existing system which provides the facility to work offline. So at this point of time the need of DST arises. Using IDST we can save our time in great extend.

III.   PROBLEM STATEMENT

People while travelling are bound to face problems like net disconnection or no access. So IDST avails the facility to work offline while travelling. As work and technology are improving them self our work and work pattern should also improved Using IDST we can save our time in great extend. Consider in a office if the main server goes down then the application will not run further, for instance a BPO can make use of this project for caching the customers contact information on local server rather than accessing it every time from the remote server.

Internet Data Synchronization Tool will help to solve these problems to a great extent. Using the IDST user can use his web based application offline while on the move as the local server will make the web application run offline.

IV.   REVIEW OF LITERATURE

A.   *Research and Design of Smart Client Data Synchronization Engine.*

Smart Client is a new technology based on .Net platform which is introduced by Microsoft. This article designs one kind of data cache and data exchange strategy, and proposes data synchronization engine's design proposal based on XML and the Web Services, in view of the smart client's online/offline working pattern.

Now that basic offline access has been enabled, you need to figure out a way to keep the state of data on the client and server synchronized. Data synchronization is hard—providing a generic synchronization framework that works in the majority of use cases is even more so gears don't, as yet, attempt to provide a synchronization framework, so data synchronization is left to the application developer.
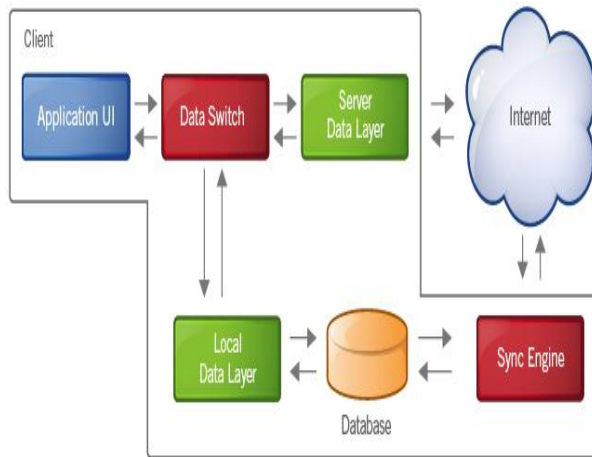
B.   *Developing Offline Web Application.*

Nowadays a large number of software is increasingly available in the form of web application. The web is where most software is moving for cost, convenience, agility, and increased overall business value. Millions users rely on web application to perform their work such as using web mail and web calendar. On the other hand, Internet is not always reliable. Therefore, web application users are seriously affected by disconnected Internet connection. Developing web application that can be accessed both online and offline is thus necessary.

Gears is an open source web browser extension that enables users to use web application even though they are in offline mode and enables more powerful web applications features. Nevertheless, the goal of Gears is not just to enable offline application, but to bridge the gap between web application and desktop application. Users can view the browser as a standard, but powerful,

virtual machine for applications which make the operating system irrelevant.

V. PROPOSED SYSTEM

The proposed system is developed in the modal and modeless strategies. The strategies are represented in modules where each module has a significant importance in the entire method evaluation & development. The implementation of each module gets a step closer to the final data of user that is sync to server even if user is offline.

VI. CONCLUSIONS

As such, there is no facility of working offline in existing system when internet connection is get disabled. Internet connection is get disabled when server connection fails or because of some internal domain problem. Hence we implement Internet Data Synchronization Tool which helps us to work offline. Using this tool we can continue our work offline and that work or data get buffered in database till we get internet connection back. Google Gear supports this facility of working offline here in every few seconds tool check for internet connection if connection gets re-establish

then buffered data automatically gets synchronized in online work.

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