Automatic Reuse Of End Users Input

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ABSTRACT

End-users conduct various on-line activities. Quite often, they re-visit websites and use services to perform re-occurring activities, such as on-line shopping. The end-users are required to enter the same information into various web services to accomplish such re-occurring tasks. It can negatively impact user experience when a user needs to type the re-occurring information repetitively into such web services. In this paper, we propose an approach to prevent end-users from performing such repetitive tasks. Our approach propagates user inputs across services by linking similar input and output parameters. Our approach per-fills values to the input parameters for an end-user using his or her previous inputs. To increase the chance of identifying a proper value for an input parameter performed by one end-user, our approach also leverages the inputs from other end-users. We identify and link similar end-users to enable the propagation of user inputs among end-users. We have designed and developed a prototype. We also conduct an empirical study to evaluate our approach using the real world services. The empirical results show that our approach using an end-users previous inputs can reduce on average 41previous inputs from the similar end-users can improve our approach in reducing the repetitive typing for an end-user.

Keyword: - *Information reuse, service composition, input parameter pre-filling, multi-user, website.*

1. INTRODUCTION

Now a day, web plays a major role in our life. End-users can perform many tasks online such as hotels booking, buying flight tickets and online shopping. It may happen that, they revisit websites and use those services to perform re-occurring task, like online shopping. The end-users need to enter the repeated information into different web applications to complete such re-occurring tasks such as every time you sign up for a new web site with your email address or username, enter in your shipping address, or type in your credit card information for purchases, you waste precious time typing out the same information. Manually typing for filing such information every time is also error prone. It can negatively impact on users experience when a user requires filling the same information repeatedly into such different web services. To improve the user experience in different services and applications and to save time from filling redundant information there is an urgent need to implement method which prevents the end-users from such repeated actions. In this paper, we are going to implement an approach to prevent end-users from performing such redundant actions. Our method stores user inputs across multiple services by linking users input and output parameters. The end-users are required to enter the same information into various web services to accomplish such re-occurring tasks. It can negatively impact user experience when a user needs to type the re-occurring information repetitively into such web services. In this paper, we propose an approach to prevent end-users from performing

such repetitive tasks. Our approach propagates user inputs across services by automatically linking users input and output parameters.

2. LITERATURE SURVEY

Recently, several methods have been developed for filling web forms. Like Google Chrome Auto fill form, concept based on approach for automatic web form filling, input-output data flows of services. But that technique does not identify and link the same parameters for filing values. And they highly depend on the names of parameters for identifying related parameters. Ontology-driven service composition [2] for end-users is about an approach that hides the SOA standards and tools complexity from the end users and Composes services semi automatically to help an end-user accomplish their daily tasks. They implement a tag-based service description that helps end user to understand the service and add their own descriptive tags. Using their approach, an end-user only needs to specify the goal of their activities using keywords. some method on an ontology model[6] to express the common input parameters and the relations among them. In addition, they use a Word Net-based method to update the ontology which includes the unseen input parameters automatically. Furthermore, they use Meta-data Model for users previous inputs storage purpose. Their results show that on average 78 of the parameters are filled correctly. An Approach and Tool Support for Assisting Users consists of introduction of a new approach for assisting users[7] to filling personal information in Web forms. Their solution combines different existing technologies and proposes a new usage for them. A Probabilistic Approach[5] shows that their method is able to deal with different types of web applications fields, foe Ex text box, pull-down lists, check boxes and this method is to be useful as an alternative to automatically filling web forms. An Intelligent Framework[8] reuses their framework for the clustering previous users input by identifying similar UI components into semantic clusters. Based on the conclusion of empirical study, On average, this framework achieve a precision of 74.5 and a recall of 58 on pre-filling forms, and a precision of 82.25 and a recall of 68.4 on suggesting values to end-users. An Approach to Extract RESTful[3] Services from Web Applications they use meta-model to show tasks as RESTful services. Their approach migrates reusable tasks extracted from web applications towards RESTful services. They analyze client side web user interfaces and HTML representation developed with a combination of JavaScript, HTML and CSS code. More specifically, their approach has 89 of Precision and 90 of recall when identifying input/output parameters for tasks. Similarly, 86 of precision and 100 of recall are achieved when extracting task relations. Supporting Users Tasks with Personal Information Management and Web Forms Augmentation[4] focus or highlights the user tasks whenever that user interacting with Web forms. This is a new interaction technique for filling the forms. This paper gives possible solutions on problems. For that purpose they use an approach which is based on Web form augmentation for supporting users tasks when that user uses the web service. This system provides a better integration of the third-party Web forms and their personal information. For this purpose they combine many techniques. Deep Web Integration with VisQI[10] represent VisQI (VISual Query interface Integration system). This is a Deep Web integration system. VisQI is able to transforming Web query interfaces into hierarchically structured and classify them into application domains and matching the elements of different interfaces. Thus VisQI contains different solutions for the major challenges at the time of building Deep Web integration systems. This system comes with a full-edged evolutionary system which automatically compares generated data structures against a gold standard.

3. PROPOSED SYSTEM

We propose method to prevent users from performing redundant tasks. This approach pre-fills values to the Parameters automatically by using his or her previous inputs across different web applications and services among many users. Here user needs to register their information into our main web site which he or she wants to use frequently. After registration users data will get store into data base server. Whenever that user want to reuse their information at that time the particular users data will get fill automatically through API by finding similar parameter and using unique ID.
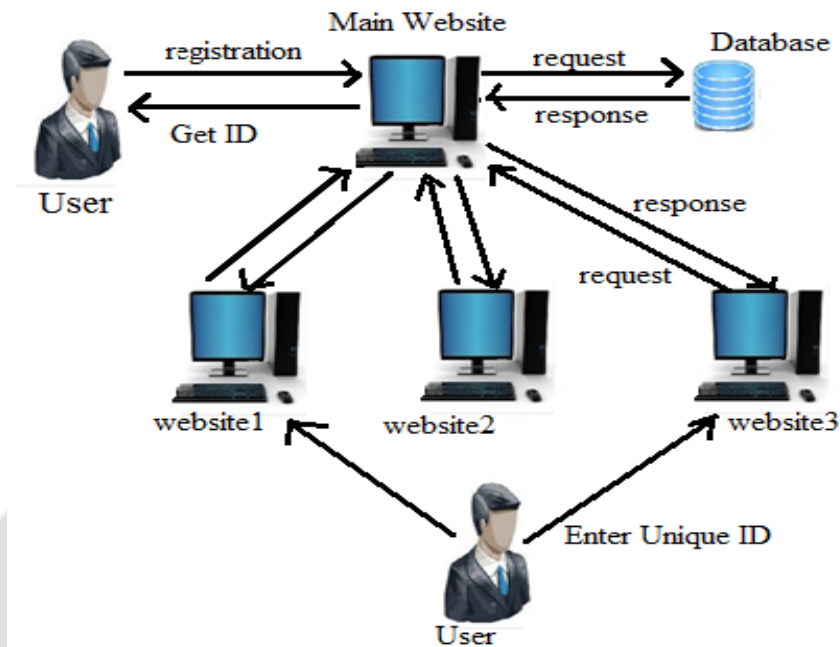
4. SYSTEM FRAMEWORK

Fig: System Architecture

This system consists of four main steps:

1. User Registration and Validation.
2. JavaScript Object Notation (JSON) API creation.
3. Website Creation.
4. API Usage in Website.

In our system first user need to register their data into our main website that he or she Required frequently. After that users data will get store into database server through web server. Whenever that particular user wants to use any web service and fill their in- formation automatically, at that time the user can use our system to fill their information automatically.

At the time of filling information on another web service, the web service needs to use API of our main website. And using API the particular user's data can easily extract from the database through the web server of our website. And after extracting the data, by using JSON parsing JSON encoding the similar parameters and their respective values will get match and link automatically.

5. CONCLUSIONS

In this way, we propose method for preventing users from repetitive data entry tasks. Our approach propagates user inputs to different services among multiple users by identifying similar parameters and linking users who perform similar tasks. It also increases the efficiency of service execution.

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