

## Automatic Form Filler

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**Abstract** - Normally all the users depend on online applications for each and every purpose, even for a purchase. Generally users are required to provide information in the web forms for interacting with the web applications. In this case the user has to fill online forms for registration purpose. They have to type the same information repeatedly for filling forms. It could be a monotonous task for the user. In this paper we propose a new technique for filling online forms automatically. Our application takes a single input (i.e.) it may be a username, email id or a register number as a reference and fill out other fields automatically. For this purpose we collect information from the user and store it in a database which are used for later submissions. Our proposed system uses datamining technique for collecting and presenting information in the web forms. Through several experiments, we find that our approach is feasible and effective and it works well in filling different online application forms automatically.

### 1. INTRODUCTION

Nowadays web applications are being used for online websites like online shopping, reserving travel tickets, online application form filling etc., For filling any web applications it has been take a huge and time-consuming process. Generally, users are required to fill their information into web forms which often contains multiple data input fields and information to interact the web applications and services. Though web has been developed in many ways the manual form filling process consumes more time. To overcome this process the automatic form filling process has been introduced to fill any type online forms automatically by using data mining process. For example, to booking travel tickets the users sign into the applications the booking details can be asked from the users to fill the form. Each and every time the user must give their details to reserving their travel tickets. To overcome this process the automatic form filling is developed for the customers to enter the data's once in a time then the data has been stored the database with secured individual passwords and identification then that data has been automatically filled when they book the travel tickets. It has been saved according to the input fields.

This application can retrieve the user's details whenever the user login this page using Machine Learning Algorithms. If any required field in the form is new to the login database, once the new field is entered by the user then the field is automatically stored to the user's login and this field can also retrieved on next time whenever the online forms required this new field. This is the major advantage of our application. For the process of URL validation, the user can verify whether this form is required or not. And for the

security purpose, this application provides One-time password verification for the user. The OTP will be sent to the user through their email or phone number. This is software which is developed for reducing the manual work for both Staffs and Students in an Educational Institutions. The Institute will provide an Individual login and password for each and every Students. This login holds an appropriate Information of a student for filling the forms whenever needed. This application is used for filling online forms automatically. The user will be provided with an Individual login and password. Once the user logs inside the application the form will be filled automatically according to their data information that the fields are required. This is used mainly for a time-consuming process and also data security. Recently, web services are playing an important role in people's life. Various activities, such as booking airline tickets and reserving hotel rooms, are conducted by end-users using web applications. However, the end-users often have to repetitively type the same information into different services. A service often contains multiple input parameters receiving information provided by the end-users.

### 1.1 Existing System

Form filling applications that are available nowadays are used for filling static and dynamic forms. Those forms cannot handle the data that are not provided in the database i.e. the details that is new in the form cannot be filled automatically. Most of the existing work on form filling overlooks the problem of finding good values for these fields. Existing solutions for dealing with text fields usually rely on a list of values previously built by a specialist a sample of known values, or they entail the extraction and understanding of the fields (which depends on the language and on the domain of the forms). Furthermore, it can work with forms from any domain (i.e., books, jobs, hotels, fares, etc.). Domain often influences value selection for the fields. Although our method does not use domain knowledge explicitly, our experiments show that the values generated for the fields are domain-related. We carried out experiments using real Hidden Web data. The results show that in most cases, our approach achieves superior coverage compared to a baseline method.

### 1.2 Proposed System

In this work, we propose an automatic method for filling forms. Our method explores two strategies. The first, called FTF (Filling Text Fields), is how to fill the fields efficiently, specially the text fields, which do not have a set of determined values. The second strategy, called ITP (Instance Template Pruning), is how to select queries to submit to a

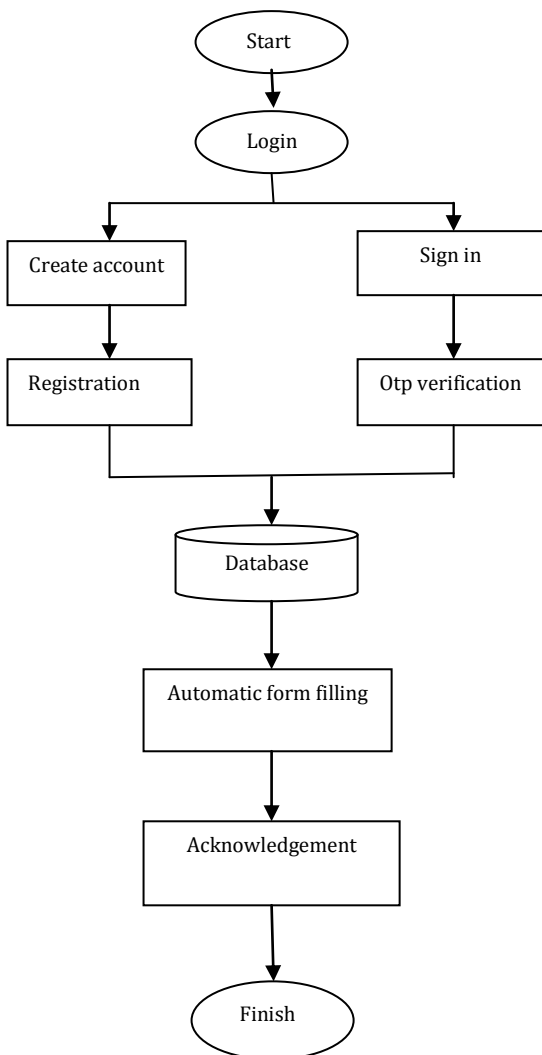
particular form in order to retrieve more data with fewer submissions. The strategy to minimize the set of queries. The number of form submissions, involves pruning the set of all possible queries. As each query is submitted, data extracted from the resulting page issued to identify wasteful queries and prune them.

- The application developed can fill any type of online forms automatically.
- Machine Learning and Data Mining algorithms are used for making the database to learn the current input fed by the user.

### 1.3 Advantages of automatic form filler

- User Friendly
- Save Time
- Compatible

## 2. SYSTEM BLOCK DIAGRAM



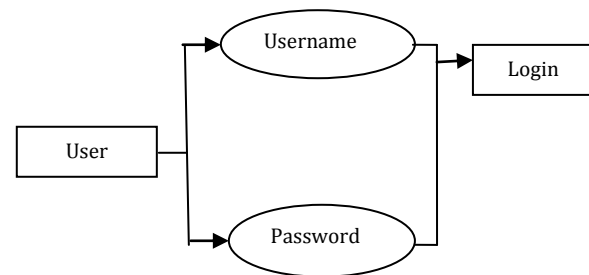
## 3. MODULES

- Login module
- Authentication module
- Form filling module.

### 3.1 Module Description

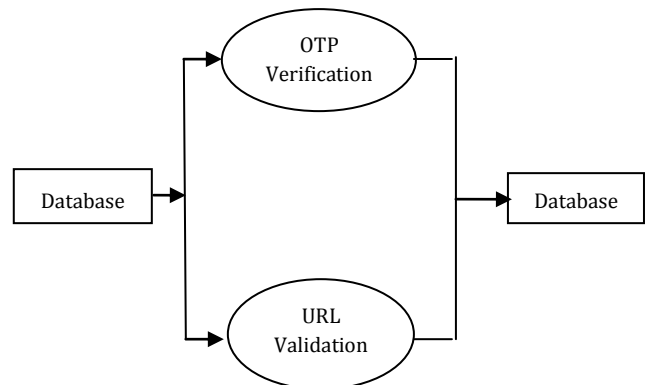
#### 3.1.1 Login module

Login Module is divided into two parts as Register module and login module. In login module, administrator as well as user will enter their credentials i.e. Login id and Password to access the system.



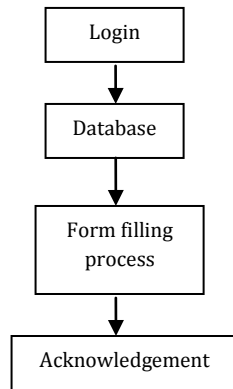
#### 3.1.2 Authentication module

The authentication module is to check whether the appropriate users and to provide access only to them. The authentication is based on the OTP(one time Password). The otp will be verified with the key which is provided in the database and also with the user entered detail. This authentication is used mainly for the purpose of verifying whether the authenticated user is accessing the website or not.



#### 3.1.3 Form filling module

In this module after the URL is provided the form will be validated automatically using Data Mining technique and it will be filled with the necessary details provided by the user already in the database. This module is the base of our web application because this is the one which fills the online forms automatically. The form will be filled based on the details entered by the user while registration process. Any type of online forms can be filled easily.



**4 UPSHOTS**



**Fig 4.1 User Login**



**Fig 4.2 Filled Form**

**CONCLUSION**

This application address the problem of automatic form filling by exploring the relationships between the fields and input values. It is an intelligent framework to help users to fill the web forms and save time by eliminating repeatedly entering the same information. This web application uses to fill any type online forms. This web application mainly used for reducing the manual form filling process. It also provides auto-complete features based on the field type. The browser helps users quickly view and fill out the documents that are already online at publicly available URLs. Our experiments demonstrate that our approaches are able to deal properly with text fields, inputs and the query selection and have verified to be useful as an alternative to automatically filling web forms. This web application is developed by using data

mining and Machine Learning algorithms to update the user’s data.

**FUTURE WORK**

Android plays a vital role in day-to-days life. Each and every individuals life is nil without smart phones. Android applications are widely used nowadays for easier access. Whatever the application it may be if it’s an android app it will be easy to use. So we have planned to develop this web application as an android app. This app helps the user to fill online forms automatically. The user can use the url of the online form which has to be filled to access the form in our mobile app and can fill the form. The form filling process will be same as of the web application. The response will be sent to the user by mail, so that the user can verify it.

**BIOGRAPHIES**



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- 6) Java Programming – Automatic form filling in PDF using JAVA codes, used it to convert your word files to PDF. But there's more you can do with the trial version to start with. You can actually create form fields in PDF documents. But that's one part. The real value of this post comes when you combine the JAVA snippets that I have given below to automate the hard way (<https://blog.trigent.com/java-application-development-automatic-form-filling-in-pdf-using-java-codes/>).
- 7) Complete user registration system using PHP and MySQL database, the complete process of creating a user registration system where users can create an account by providing username, email and password, login and logout using PHP and MySQL. I will also show you how you can make some pages accessible only to log in users. Any other user not logged in will not be able to access the page.