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FillMate-AutoFormFiller:An Intelligent RPA-Based System for Automated Online Form Filling

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Abstract- Online form filling is a repetitive and time-consuming task for students and job aspirants. Users are required to enter the same personal and academic information repeatedly on different platforms, which often leads to errors and missed deadlines. This paper presents FillMate – AutoForm Filler, an automated system based on Robotic Process Automation (RPA) and Python. The proposed system stores user data securely in a digital profile vault and automatically fills online forms with high accuracy. It also supports automatic document uploading, real-time submission tracking, and smart alerts through email and SMS. The system significantly reduces form-filling time and minimizes human errors, providing a secure and efficient solution for online application processes.

Key Words: RPA, Automation, Online Form Filling, Python, Data Security, Auto-Fill.

1.INTRODUCTION

In today's digital world, online forms are widely used for academic admissions, job applications, government services, and various registrations. Students and job seekers are required to fill multiple forms on different platforms with similar information. This repetitive task is time-consuming and mentally exhausting. Manual data entry also increases the chances of typing errors, which may cause application rejection. Existing browser autofill tools offer limited functionality and lack proper security. Therefore, there is a strong need for an intelligent and secure system that can automate form filling. FillMate is designed to address this issue by using automation techniques that save time, reduce errors, and improve user experience.

2. Body of Paper

The body of the paper describes the detailed working of the proposed system. It explains the background study, existing system limitations, proposed solution, system architecture, workflow, and implementation details of the FillMate – AutoForm Filler system.

2.1 Existing System

Currently, online forms are filled manually or by using basic browser autofill tools. Manual form filling is time-consuming and error-prone. Browser autofill tools support only simple fields and have security limitations. Consultancy services are expensive and not affordable for students.

2.2 Problem in Existing System

The existing systems require repetitive data entry and continuous user attention. High error rates, lack of document management, and absence of deadline tracking lead to missed opportunities. There is no centralized and secure data storage system.

2.3 Proposed System

FillMate – AutoForm Filler is an automated system based on RPA . It stores user data securely in a digital profile vault and automatically fills online forms. The system also supports document upload, submission tracking, and smart alerts.

2.4 System Architecture

The system consists of a digital profile vault, RPA automation layer, database, and web interface. User data is stored securely and retrieved by the RPA bot to fill forms automatically.

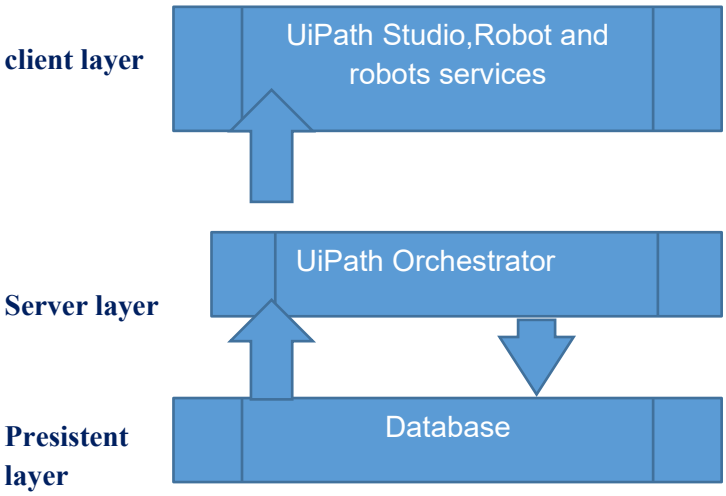

Fig – 1: System Architecture of FillMate

2.5 Advantages

The proposed system reduces form-filling time and minimizes human errors. It provides secure data storage, real-time tracking, and deadline notifications. The system is cost-effective and user-friendly.

3. CONCLUSIONS

FillMate – AutoForm Filler is an efficient and reliable solution for automating online form filling. The system reduces repetitive manual work and minimizes human errors by using RPA and Python-based automation. Secure data storage, automatic document uploading, and real-time alerts improve the overall user experience. The proposed system saves time, increases accuracy, and helps students and job aspirants submit applications without stress. Hence, FillMate proves to be a practical and cost-effective automation solution.

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