Creation of a Chatbot and Automation of Forms

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Introduction

At DrFirst, I worked alongside the Information Security team to complete my two projects.

Over the summer, I worked on two projects at DrFirst. The first was a Webex chatbot that aided potential vendors in learning more about our products. The second was PAR (privileged access request) form automation, which I achieved using Microsoft Flow (Power Automate).
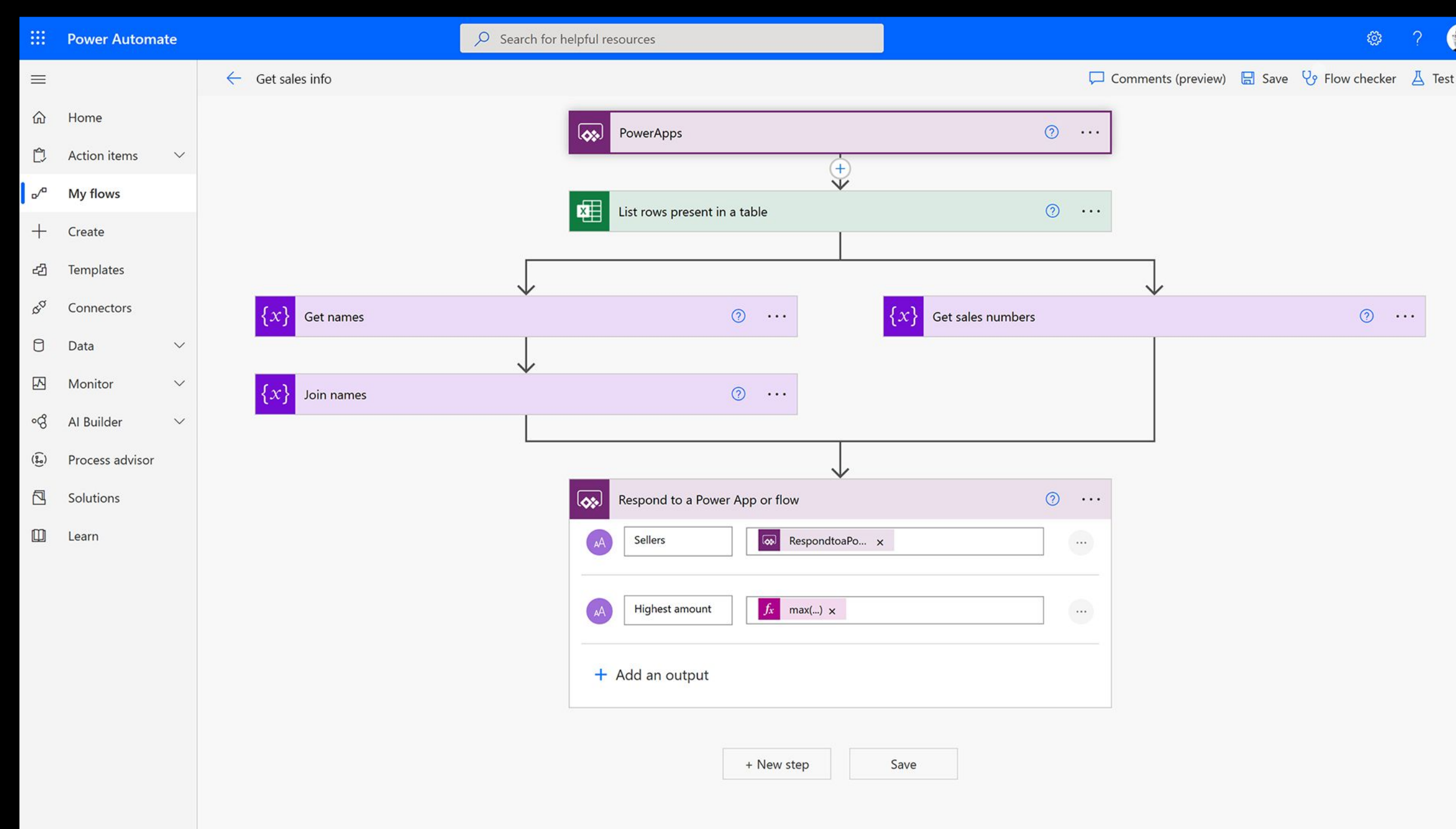
Activities:

For my chatbot, I worked extensively with a Linux Virtual Machine, which we used to run the chatbot and I gained experience with the basics of https encryption, load balancing, process control other networking concepts.

For the PAR form automation, I worked with Microsoft Power Automate, which is similar to pseudocode, where it simplifies the actions of automation in the form of logic blocks.

Site Information:

Name of Site: DrFirst (drfirst.com)

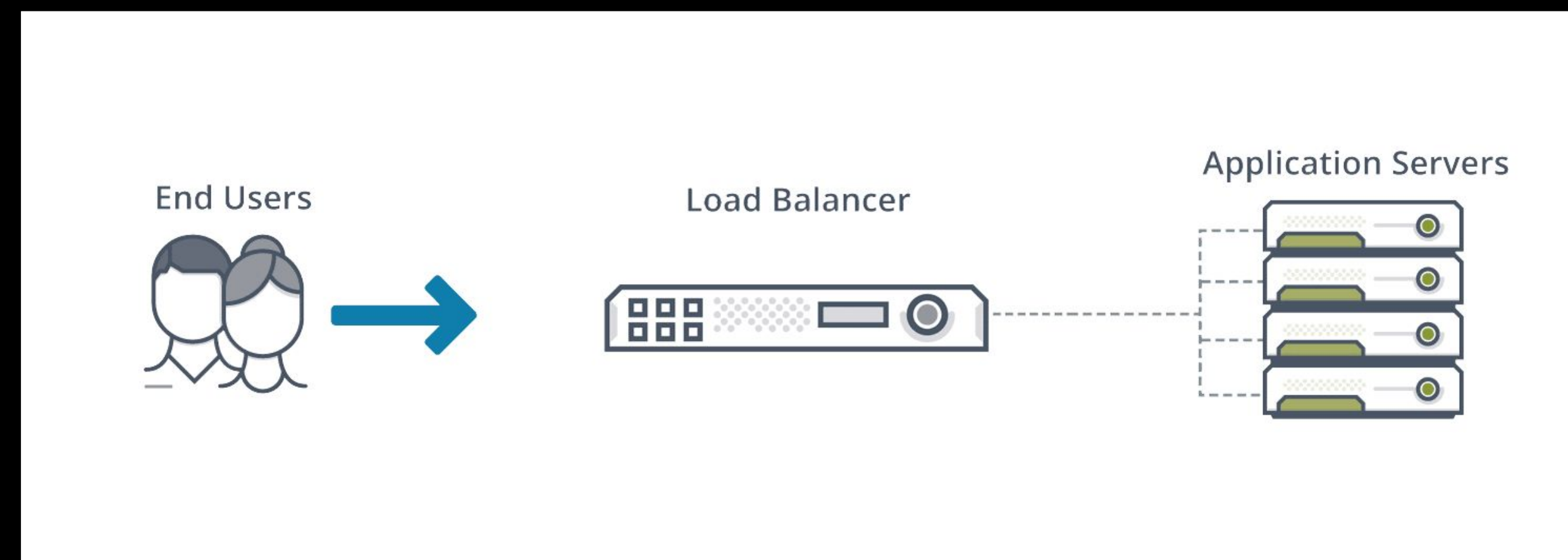Address: 9420 Key W Ave Suite 230, Rockville, MD 20850

Your supervisor: Chris Ke

The site mission: Empowering Providers and Their Patients to Achieve Better Health

The particular goals of the site you were at: Be able to deliver easily accessed and faster information for doctors and patients in the medical field.

Issues Confronting Site:

There was no specific issue confronting the site, but rather a project meant to create more efficiency and productivity at DrFirst.

Impact:

Previously, the vendor process and PAR form process was mostly conducted manually, which resulted in large amounts of manual labor for each task. By automating both of these processes, I helped reduce the amount of manual labor.

An image of the Microsoft Power Automate interface I worked with. Unable to include pictures of my actual work for security reasons. Image from https://powerapps.microsoft.com/en-us/automate-processes/

This is a simple diagram of a Load Balancer, which connected our chatbot to Webex and enabled messages to be sent to-and-from the user. Handles the https encryption/decryption. Image from https://avinetworks.com/glossary/hardware-load-balancer/

Future Work:

My goal was to ensure that DrFirst were able to use my products in the future, both for PAR form automation and for vendor chatbots. Over time, this will decrease the amount of manual labor for these two specific tasks, and should save DrFirst a lot of time and resources in the long run.