AIM : : Demonstrate Scheduler and trigger

OBJECTIVES :

1. To study about schedulers in Automation anywhere
2. To study about different types of triggers in Automation Anywhere and implement one of them.

TOOLS USED : Automation Anywhere

Problem Statement :

Demonstrate the types of Scheduler and triggers.

Controls used :

1. **Window trigger: Window**
   A Window Trigger is an event-driven mechanism that initiates actions based on specific window-related events or conditions within software applications or operating systems.

2. **Browser: Open**
   Open control opens the specific page on the browser. We can choose the browser from the given list and give URL to open for the bot

Solution:

Schedulers

Automation Anywhere Enterprise Edition provides a comprehensive scheduling feature within its Control Room. This scheduling feature allows users to schedule the execution of bots at specific times or based on predefined conditions. Here's how it works:

1. **Accessing the Control Room:**

   - Log in to the Automation Anywhere Control Room, which is the centralized platform for managing bots, users, and schedules.

2. **Creating a Schedule:**

   - Navigate to the Schedule section in the Control Room interface.

   - Click on the "Create Schedule" button to create a new schedule.

3. **Configuring the Schedule:**

- Specify the details of the schedule, including the bot(s) to be executed, the execution frequency (e.g., one-time, recurring), start date and time, and any additional parameters or conditions.

- You can also define dependencies between tasks, allowing sequential execution based on completion status.

4. **Defining Triggers:**

- Automation Anywhere Control Room supports various triggers, including time-based triggers (e.g., daily, weekly, monthly), event-based triggers (e.g., file arrival, database update), and user-initiated triggers.

- Depending on your requirements, you can choose the appropriate trigger type and configure the trigger conditions accordingly.

5. **Managing Schedules:**

- Once created, schedules can be managed and monitored from the Control Room interface.

- You can view the execution history, status, and logs of scheduled tasks, as well as make modifications to existing schedules as needed.

6. **Error Handling and Notifications:**

- Automation Anywhere Control Room provides options for error handling and notifications.

- You can configure actions to be taken in case of errors or exceptions during bot execution, and set up email notifications to alert stakeholders of any issues.

7. **Security and Access Control:**

- The Control Room allows administrators to define role-based access controls, ensuring that only authorized users can create, modify, or delete schedules.

- Users can be assigned specific permissions based on their roles and responsibilities within the organization.

By leveraging the scheduling capabilities of Automation Anywhere Enterprise Edition, organizations can automate repetitive tasks, optimize resource utilization, and improve overall operational efficiency. This centralized approach to scheduling ensures consistency, reliability, and scalability across automation workflows.

<u>Triggers</u>

In Automation Anywhere, triggers are events or conditions that initiate the execution of bots or automation workflows. There are several types of triggers used in Automation Anywhere, each serving specific purposes and enabling automation in various scenarios. Here are some common types of triggers in Automation Anywhere:

1. **Time-Based Triggers:**

- Time-based triggers initiate the execution of bots at specific times or intervals.

- Examples include scheduling bots to run hourly, daily, weekly, or monthly, as well as specifying exact times for execution.

2. **Event-Based Triggers:**

- Event-based triggers initiate bot executions based on specific events or conditions.

- Examples include file creation or modification, database updates, email arrivals, system alerts, API calls, and changes in application interfaces.

3. **Dependency-Based Triggers:**

- Dependency-based triggers initiate bot executions based on the completion of other tasks or processes.

- Bots may be scheduled to run sequentially or in parallel, depending on dependencies between tasks.

4. **User-Initiated Triggers:**

- User-initiated triggers allow users to manually trigger bot executions through interfaces like web portals, command-line interfaces, or chatbots.

- This enables users to initiate bots on-demand as per their requirements.

5. **Error-Based Triggers:**

- Error-based triggers automatically initiate bot executions in response to specific errors or exceptions detected within systems or applications.

- This helps in automated error handling and resolution, allowing bots to take corrective actions when errors occur.

6. **Remote Triggers:**

- Remote triggers enable external systems or applications to trigger bot executions through APIs or webhooks.

- This facilitates integration with external systems and allows bots to be invoked from external applications or platforms.

7. **Web Triggers:**

- Web triggers allow bots to be triggered by events occurring on webpages or web applications.

- Bots can interact with web elements and respond to user actions or changes in webpage content.

These triggers provide flexibility and versatility in orchestrating automation workflows within Automation Anywhere. By leveraging different types of triggers, organizations can automate diverse processes, streamline operations, and improve overall efficiency. It's essential to choose the appropriate trigger type based on the specific requirements and objectives of each automation scenario.

Steps to create and execute bot to achieve above task:

Step 1: Create a new bot by clicking on Home page of Automation Anywhere, Click on Create bot option. Give the bot name and click on "Create and edit".

Step 2: Add a **Window trigger: Window** action from the triggers section and select a file by which you want to trigger the bot. In **Window action that starts the bot**, select Close option.

Step 3: Add a **Browser: Open** control and select Chrome browser and add https://www.spit.ac.in in **Link to open**.

Browser: Open

Opens the specified web page in the browser.

Required bot agent version: 21.210 or above

What to open

Existing tab   New tab   New window

New window in selected browser

Browser

Google Chrome ▼

Link to open

" https://www.spit.ac.in   (x)
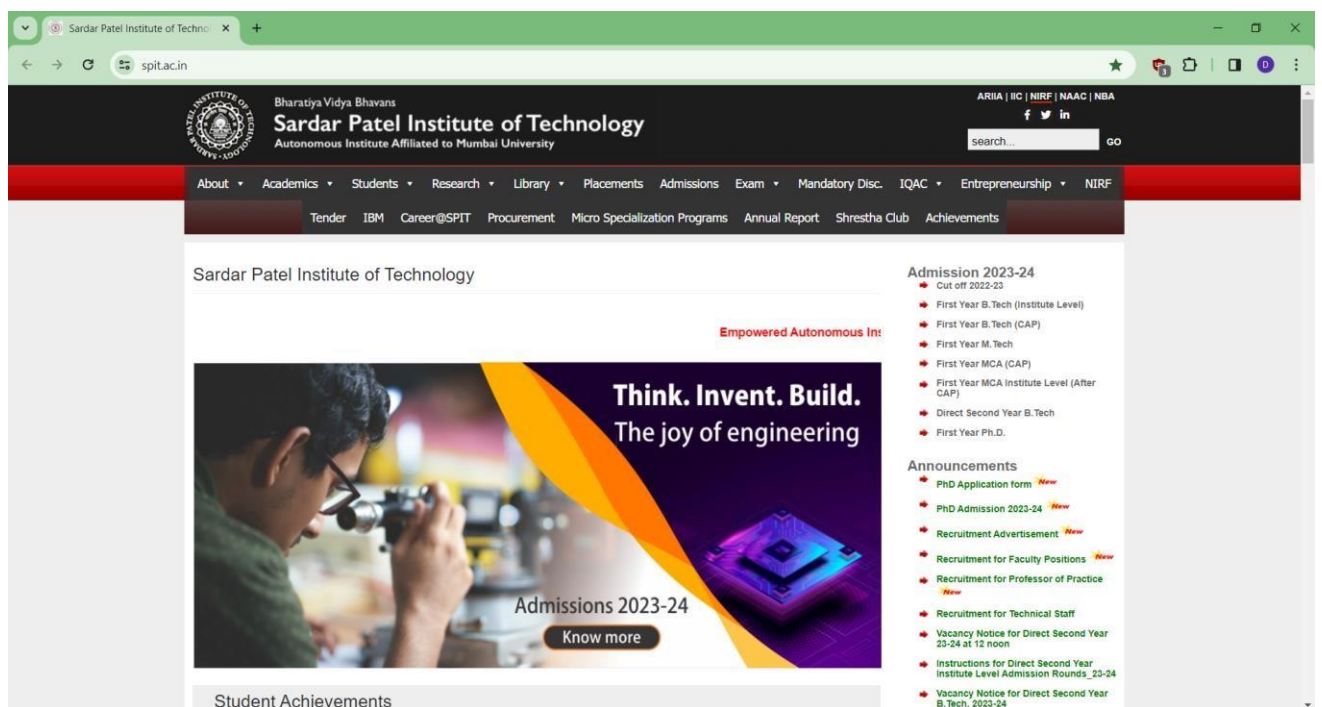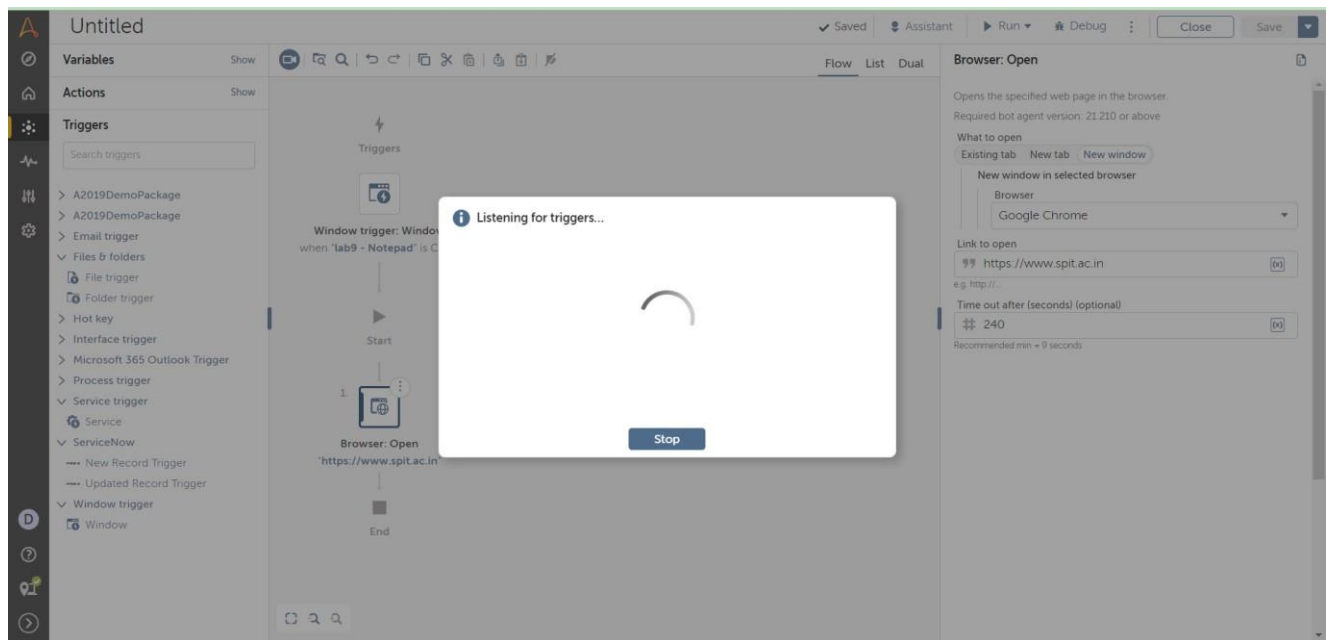
e.g. http://...

Time out after (seconds) (optional)

240   (x)

Recommended min = 9 seconds

This is how the final flow should look like

Triggers

Window trigger: Window
when "**lab9 – Notepad**" is Close

Start

1.

Browser: Open
"**https://www.spit.ac.in**"

End

Observation:

Through this experiment, I discovered how to set up schedules within Automation Anywhere's Control Room, which helps automate when bots run. By creating schedules, I can make bots start at specific times or when certain events occur. This lets me automate tasks like file processing, report generation, and data updates without manual intervention.