Project Title:

MEET AUTOMATION

Using Blue Prism

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1 INTRODUCTION

1.1 Overview

In this new era where the pandemic has taken over our lives, everything has shifted from the regular offline mode to online mode. With this sudden shift in teaching and working, and each class/meeting having a separate link to join, remembering each URL and logging in at the specified time has become a tedious task. So this digital worker solves that problem by automatically logging in to the designated meeting at a particular time.

If it is for a student attending online classes, the digital worker follows the timetable and logs in to each class at the specified time through the class link, be it Google Meet or Zoom, with the student's user id or roll number. All these details are stored in different collections.

Some people who may not know how to log in to meetings or find it difficult, can also use this digital worker to login to their meetings/classes automatically.

1.2 Purpose

The human brain is often forgetful; and with so many things already piled up in a students mind, this digital worker makes it easier for students to attend all classes without fail.

The digital worker runs every day at the given time and checks for classes. If any classes are scheduled at that time then it logs in to the class link for the student automatically, with the student's user id and meeting password.

This digital worker can also be helpful for people who work in organizations who have regular meetings scheduled (on a daily basis). During this pandemic, WFH (work from home) has become the new work

routine for employees, from having major business deals to small daily meetings through online meeting platforms (such as Google Meet or Zoom). This digital worker can also be used to schedule particular meetings on particular days of the week.

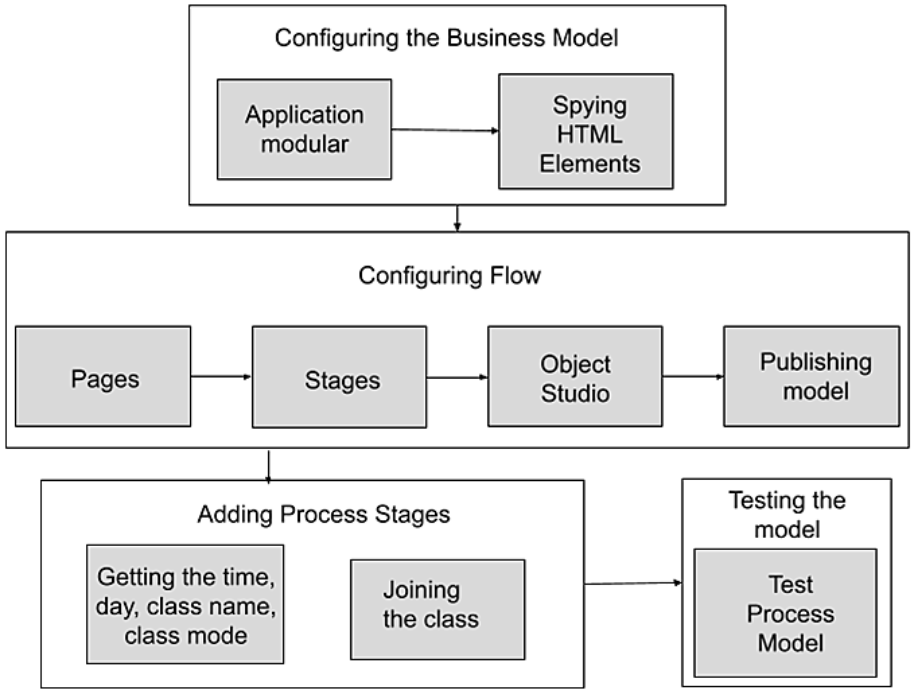
2 LITERATURE SURVEY

We looked through many articles, examples and mini projects from the Internet's resources and couldn’t find any that used software automation applications that would join meetings according to the given scheduling feed. So, taking those as inspiration, and moving a small step forward we decided to automate joining the meets which would ease the process by a bit.

The articles we referred, only mentioned the step by step process on scheduling or automation of scheduling or even joining the meetings by using python or other high level programming languages. And some other articles suggested using applications available in the market to schedule meetings.

3 THEORETICAL ANALYSIS

3.1 Block Diagram



3.2 Hardware / Software designing

Hardware required:

The following is the Hardware required to complete this project:

- Internet connection to download and activate
- Administration access to install and run Blue Prism
- Minimum 10GB free disk space
- Windows 8.1 or 10 (64-bit version only) OR Cloud: Get started free, *Cloud account required.

Minimum System Requirements to run Office Excel 2013, your computer needs to meet the following minimum hardware requirements:

- 500 megahertz (MHz)
- 256 megabytes (MB) RAM

- 1.5 gigabytes (GB) available space
- 1024x768 or higher resolution monitor

  Software required:
- Blue prism software
- A tool which is required to build digital workers, multitasking software robots that work within your existing systems.

4 EXPERIMENTAL INVESTIGATIONS

4.1. Creating Business Object and Spying the Required Elements

In Blue prism, a Business object is an object that models the applications that the digital worker interacts with. Using a business object, we launch the browser site or application of the meeting. Then we tune down the Application Modular to launch then identify the required elements by using the spy elements option. For Google meet, we spy the HTML elements such as meeting code, join button, camera off and mic off buttons. For applications like Zoom, we make two separate business objects, one to launch the Zoom application and the other to spy elements such as entering the meeting id, username, passcode and join button.

4.2. Creating a Process Model

Process Studio is the area in which the Process Diagrams are created**.** In the process studio, we first create a collection to store the timetable, which has the list of classes for all six days of the week. Then we add a loop stage which loops through the timetable collection and checks whether there are any classes at that time or not. If there are classes scheduled, then the flow goes to the choice

stage which has the list of days. According to the time and day, the flow gets into the Get Class Details page (sub page).

In the Get Class Details subpage, we first make a collection (of data) to store the login details of each subject's class. We use four fields to store the data i.e subject name, mode (Google meet or Zoom), login details, password (if required). Then we add a loop stage which loops through that collection to find the required class's login details. If the class is in Google meet, then it links an action stage to the Google meet business object and if it is in Zoom, then it links an action stage to the Zoom business object.

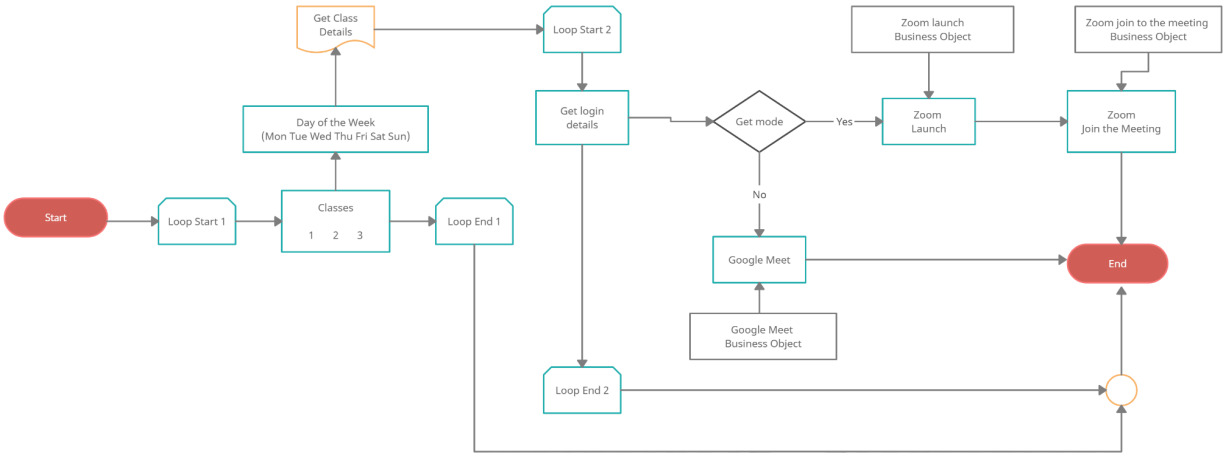
4.3. Publishing the Business object and Process Studio

After creating the business objects and process studio we need to publish them by going to the properties of the page. Publishing is done so that the process studio and business object can interact. By publishing, we will be able to access the process studio from the control room.

4.4. Testing the Model

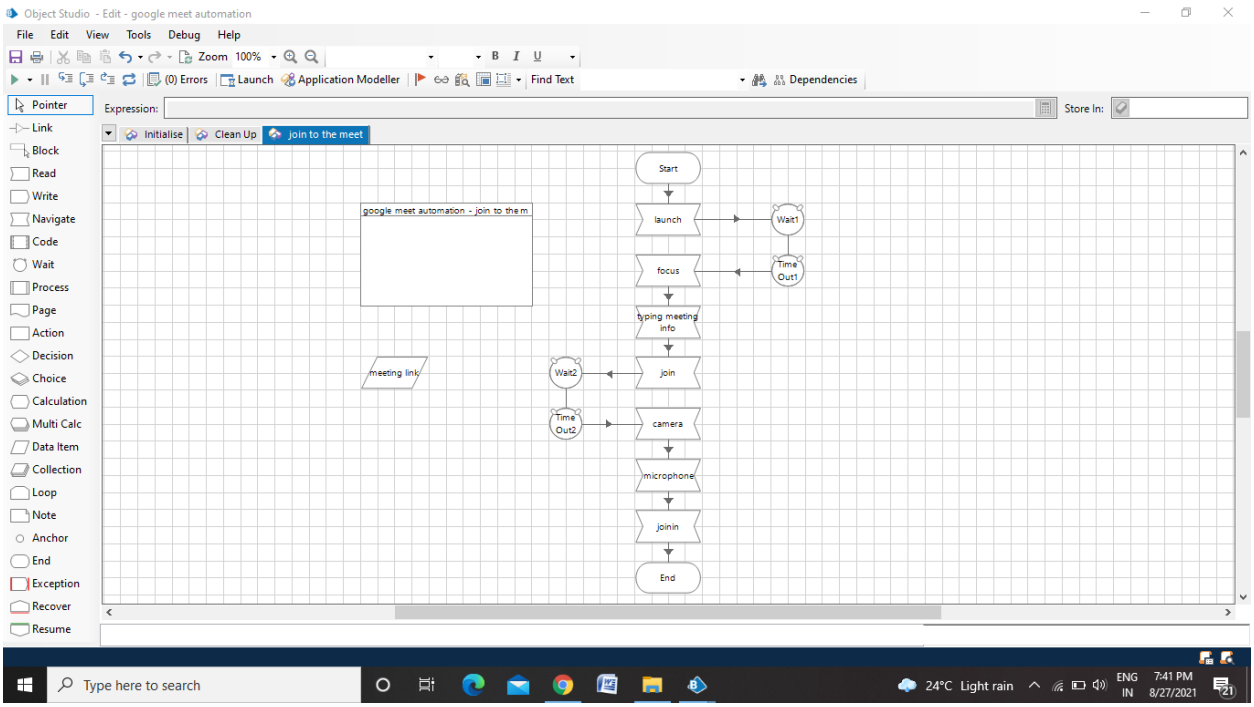
In the end, we run the process studio to test the digital worker to see if it runs without any errors. If errors show up, then we can rectify them.

5 FLOWCHART

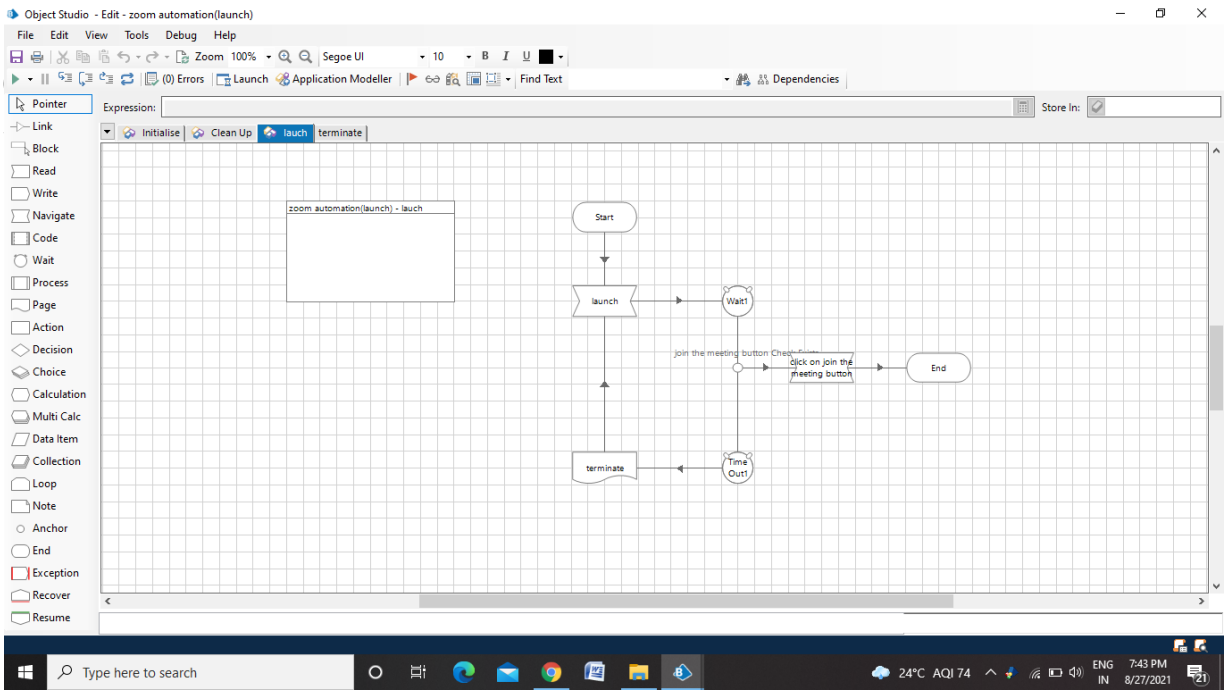


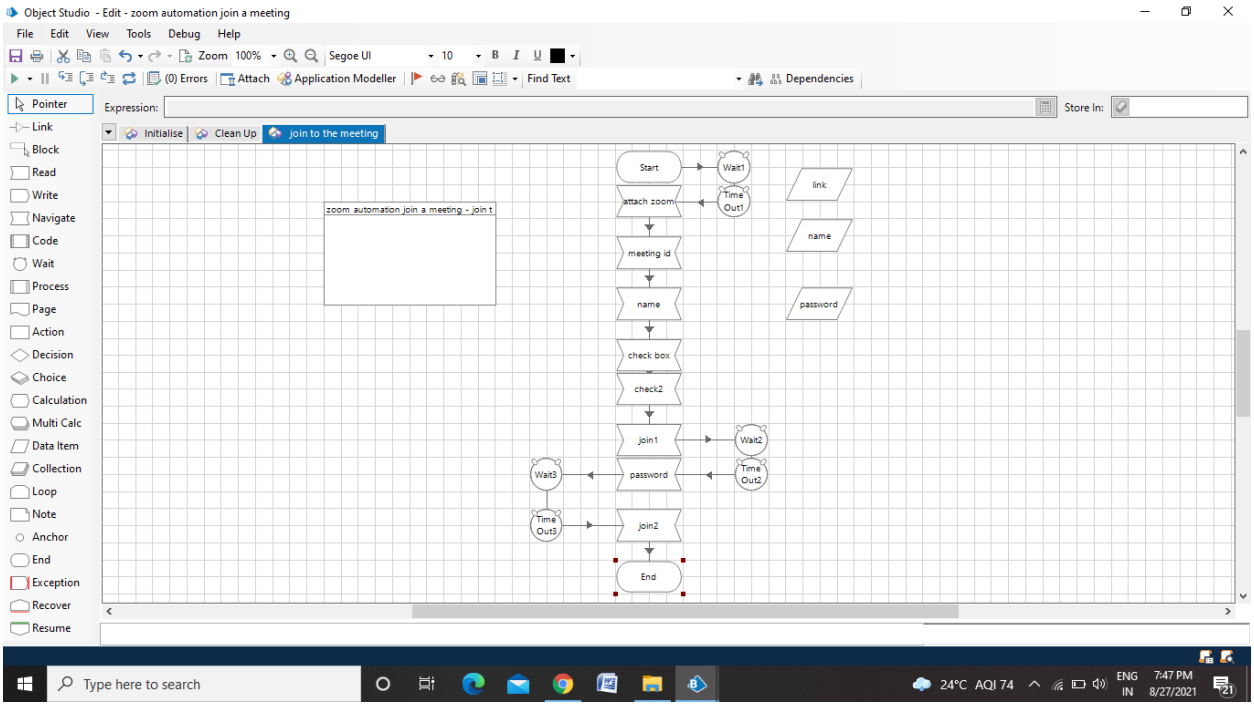
6 RESULT

- Created a business object for launching and joining the Google Meet and configured the business model for the flow.

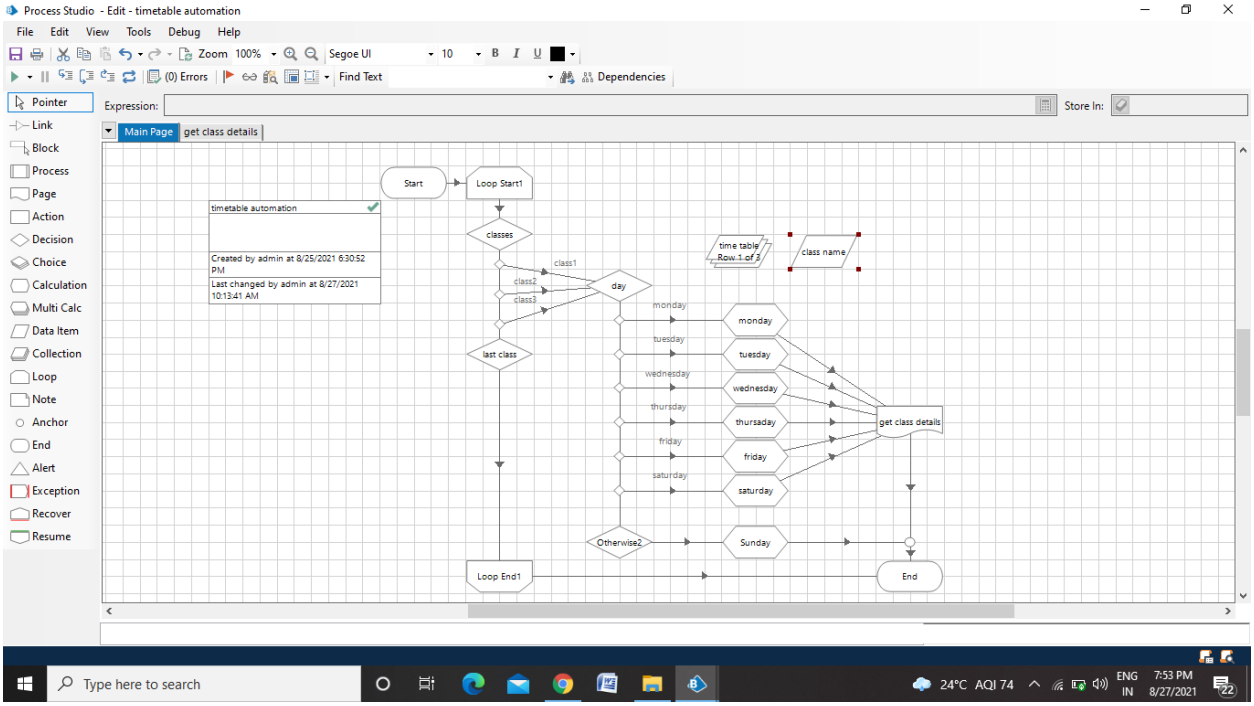


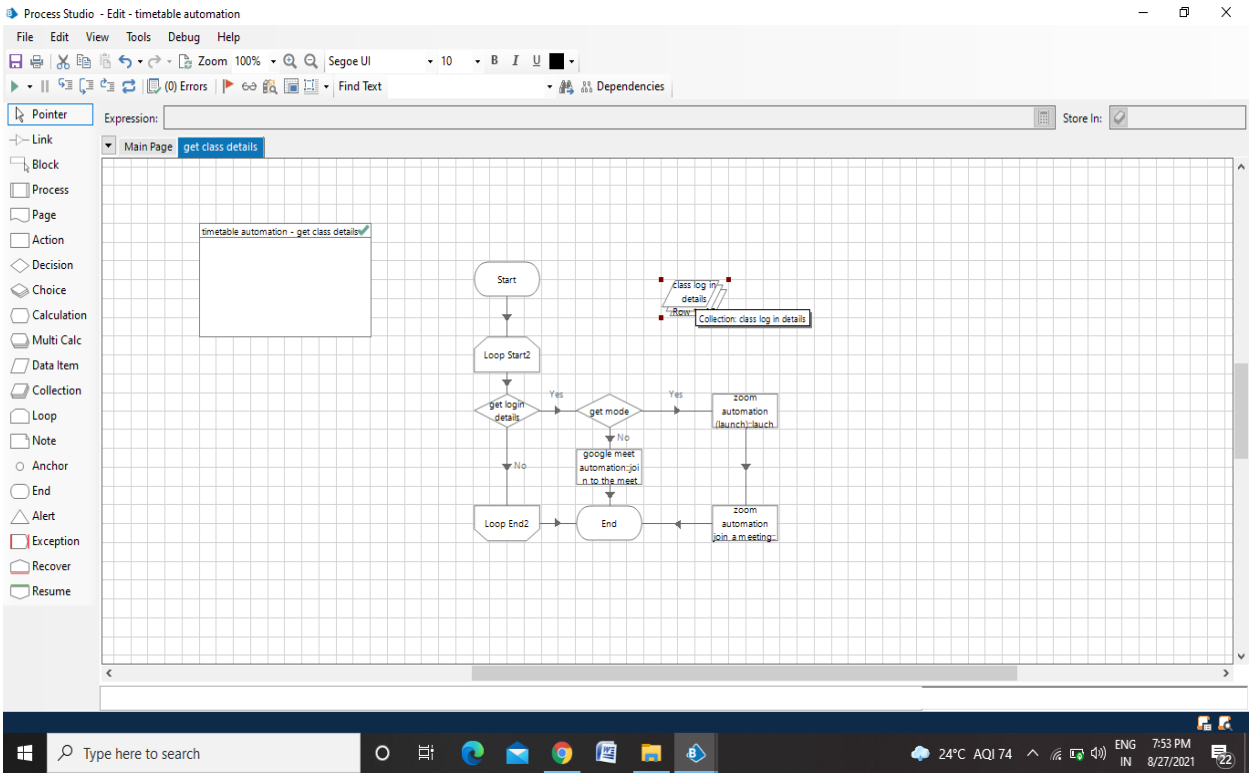
- Created a business object for launching the Zoom application and configured the business model for the flow.

- 



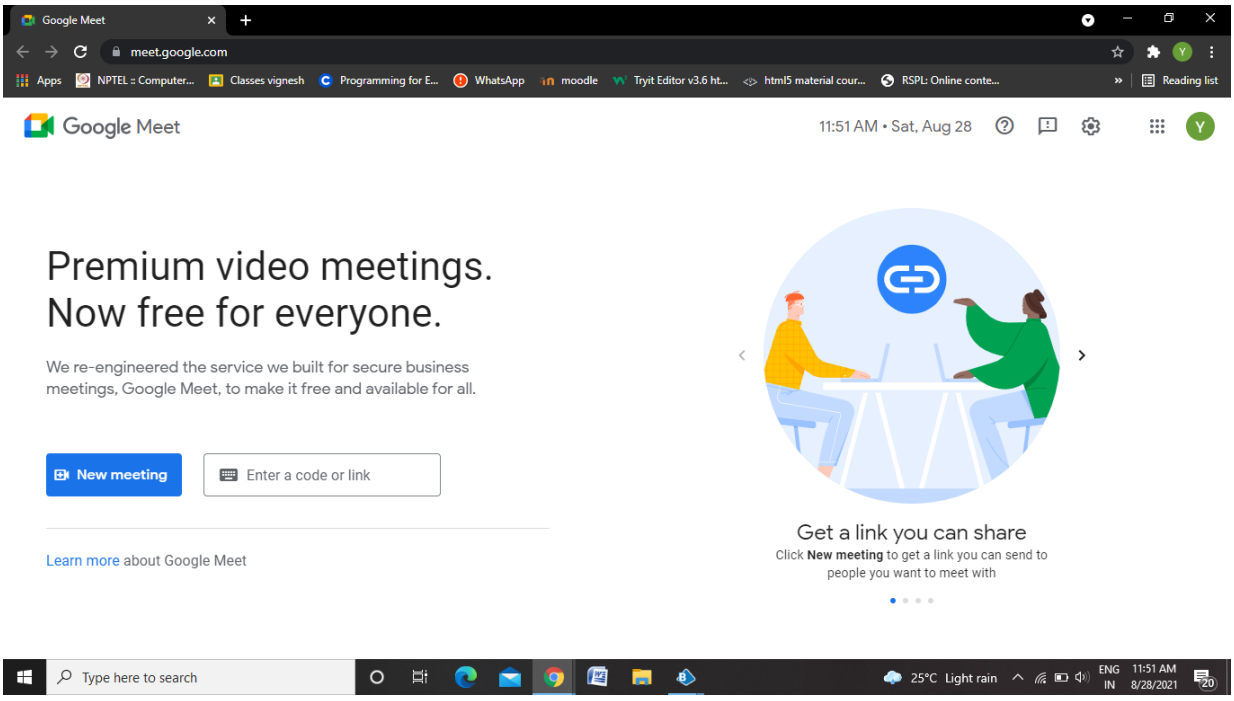
- Created the process studio with the control flow, linking all the business objects to it.

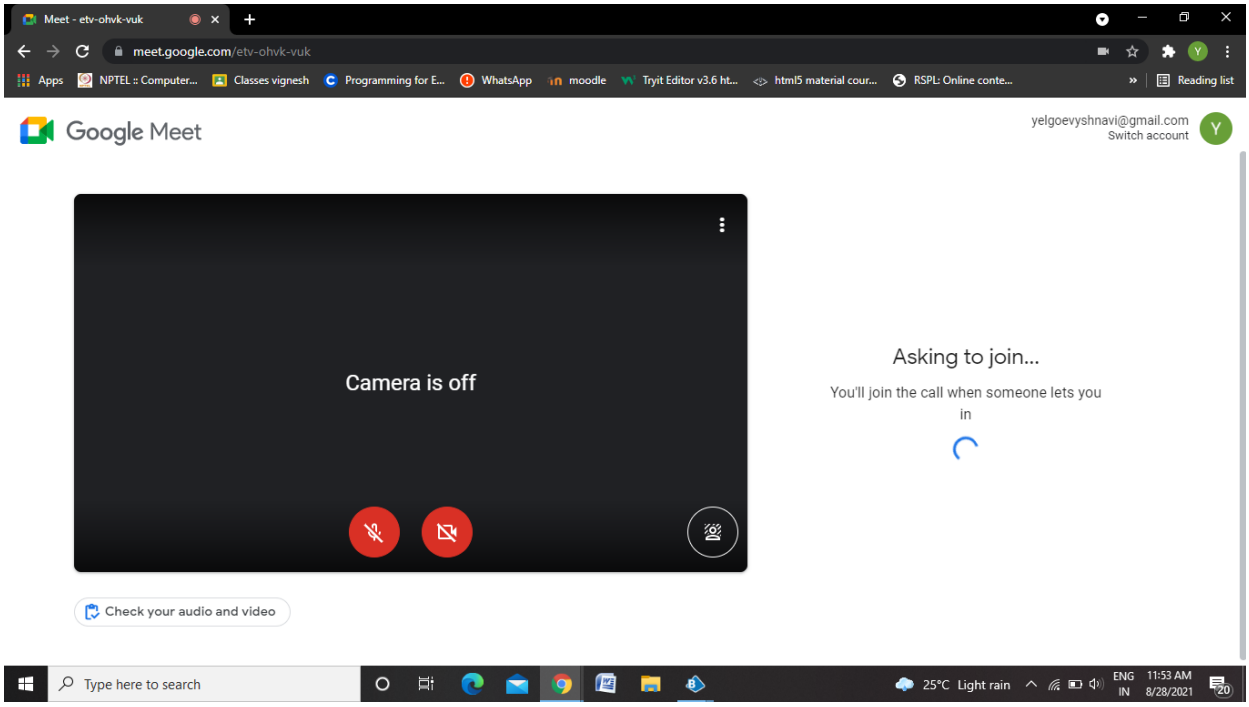




- Digital worker runs successfully by logging into the scheduled classes at the given time.

Google Meet:




Meet - etv-ohvk-vuk
meet.google.com/etv-ohvk-vuk
Google Meet
yelgoevyshnavi@gmail.com
Switch account
Camera is off
Asking to join...
You'll join the call when someone lets you in
Check your audio and video
Type here to search
25°C Light rain
ENG IN
11:53 AM
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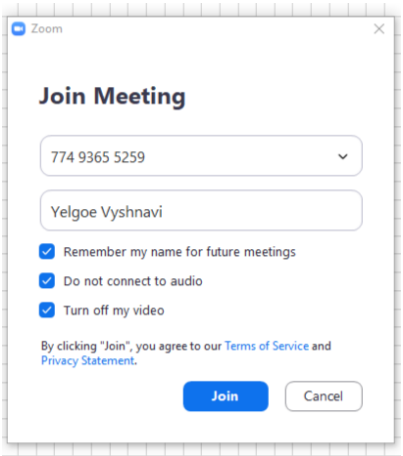
Zoom:


Zoom Cloud Meetings
zoom
Join a Meeting
Sign In
Version: 5.7.5 (939)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Join Meeting
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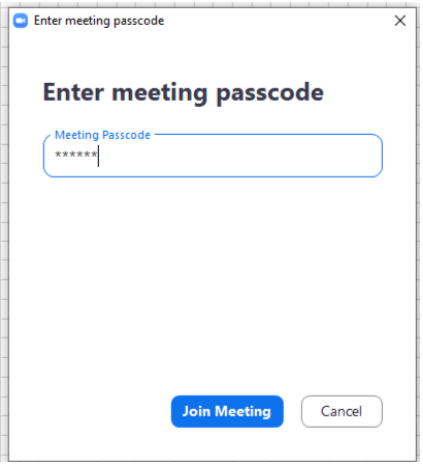
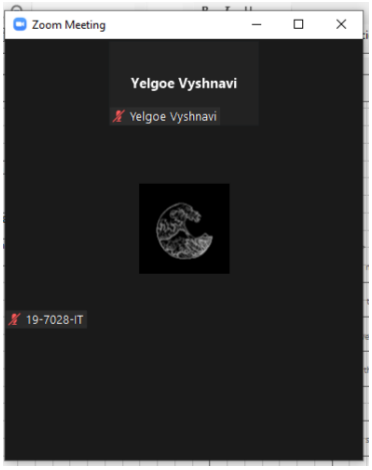
Remember my name for future meetings
Do not connect to audio
Turn off my video
By clicking "Join", you agree to our Terms of Service and Privacy Statement.
Join
Cancel





7 ADVANTAGES & DISADVANTAGES

7.1. Advantages

- Makes it easy for users to login to meetings automatically and not miss any.
- Consumes much less time than it would take for the user to manually login to the meeting.
- Requires less effort from the user as the process is done automatically.
- Consistency of the digital worker.

7.2. Disadvantages

- Software of Hardware issues may cause the digital worker not to function properly.
- Spontaneous changes in the timetable may not be reflected in the system.

8 APPLICATIONS

This digital worker can be used by different users in different fields.

Students can use this digital worker to easily login to all their classes, without missing any class due to forgetfulness. The digital worker follows the timetable and automatically logs in to each class at the specified time through the class link, be it Google Meet or Zoom, with the student’s user id or roll number.

Since in these times, everything is online, office employees can also use this digital worker to schedule meetings from daily progress report meetings to big business deals.

This digital worker can also be helpful for people who find it hard to login to meetings they need to attend. By simply running the digital worker, they can automatically join their respective meetings on time.

9 CONCLUSION

We have created three separate business objects and linked them to the process studio. On running the digital worker, it automatically checks the given timetable for scheduled classes and logs in to the designated class links at the specified time in the timetable. If the class is in Google meet, then it opens google meet in a new browser window, enters the meeting code and joins the meet automatically. For user convenience, the camera and mic buttons also switch off automatically. If the class is in Zoom, then it opens the Zoom application in the system and enters meeting id and user name. Then it also checks the “turn off audio” and “turn off video” checkboxes, enters the passcode and joins the meeting. All of this is done automatically without the user having to do anything.

With this we were able to achieve our project’s goal.

10 FUTURE SCOPE

Additional features can be added to the digital worker to enhance its functions and to widen its scope. For example, we can add links to other meeting platforms as well apart from only Google meet and Zoom (such as BigBlueButton Microsoft Teams, Go to Meeting etc). Manual effort of a person may be reduced to a significant amount when this model will be embedded with suitable softwares.

11 BIBLIOGRAPHY

- https://smartinternz.com/assets/docs/Automation-of-Zoom-and-G-meet.pdf
- https://www.youtube.com/watch?v=XN_ZAhXVtM0
- https://github.com/shubhadeepmandal394/google-meet-automation
- https://zapier.com/blog/best-meeting-scheduler-apps/
- https://automate.io/integration/google-meet/schedule-once
- https://calendly.com/blog/meeting-automation-platform/