

EduBotiX



Cool Cyborgs

Prepared by: Nithesh M, Nishanth Subramanian E,
Mithelesh R, Parvathynathan K
Version No: 1.0.1

Table of contents

About This Document

1 Overview

1.1 Objectives

1.2 Tools used

1.3 Packages used

2 Business Process Flow

2.1. Scope

2.2 Exception scenarios handling

3 Workflows

3 A) Administration Workflow

3.1 Create Online Meetings

3.2 Generate Appointment letters

3.3 Generate Relieving letters

3.4 Send bulk messages on web WhatsApp

3 B) Teacher/Staff Workflow

3.5 Create Online Meetings

3.6 Collection of Attendance Data

3 C) Workflow for Students

3.7 Internship Viewer

3.8 Event/Hackathon Viewer

3.9 AI Integration for Data Search

4 Deployment Design

5 Developer Details

About This Document

The Process Design Document describes in detail .

The document describes the sequence of steps performed as part of the process, and the conditions, rules, and exceptions of the process prior to and after automation. This design document serves as base documentation under the details required for robotic automation of the same business process.

Document Revision History

This section records the history of significant changes to this document. Only the most significant changes are described here. Where significant changes are made to this document, the version number will be incremented by 1.0. Minor changes made for clarity and reading purposes, where no change is made to the meaning or intention of this document, will be indicated by a 0.1 increase in the version number.

1 Overview

This EduBotiX comes under the theme of **Innovation through Core Business Automation Solutions**. And also it includes Diversity and Inclusion. This EduBotiX helps to reduce the Carbon Footprints released in business processes in the field of Education.

EduBotiX is to assist and help the user segment that includes students, teachers , admins with their daily and repetitive tasks. It has multi-language support and a voice assistant for a better user experience. It is more secure and safer to use because it has two-step verification (password and OTP). It can do work faster than a human can. With the help of this EduBotiX, users can do their task faster, safer, and more efficiently.

EduBotiX can cover a wide range of tasks that can streamline and automate various processes:

1. For students, EduBotiX assists with tasks such as:

- Automating internship searches from websites like Internshala and Naukari.
- Assisting in finding events like hackathons , seminars ,webinars.
- Assisting through integration with chat GPT for data searching.

2.For teachers, EduBotiX helps with:

- Creating meetings on various platforms like Zoom, Webex, Google Meet, and Microsoft Teams.
- Collecting attendance data from these meetings.
- Sending attendance data to WhatsApp or email.

3.For admins, EduBotiX provides support by:

- Creating online meetings.
- Sending bulk WhatsApp messages.
- Automating the generation of relieving letters and appointment letters.

➤ Objectives

To reduce manual work, and increase the efficiency of the work. And useful for all language users.

End-User	Administrator, Teacher, Students
User Department	Educational Department
Industries	Educational industries, This bot is developed in order to help the students,staff and administration in educational industries.
UiPath Products / Packages	<ol style="list-style-type: none"> 1. UiPath Studio 2. UiPath Orchestrator 3. Storage Buckets 4. Speech 5. Language Translator 6. UiPath Apps 7. Entities
Other – Integrations / APIs / Technologies Used	<ol style="list-style-type: none"> 1. Web API(WhatsApp) 2. Bard(AI)

1.2 Tools Used

1. UiPath
2. Document Understanding

Application:

1. Google Meet

2. Zoom
3. Cisco WebEx
4. MS Teams
5. Web WhatsApp

1.3 Packages used

1. UiPath Studio
2. UiPath Orchestrator
3. Storage Buckets
4. Speech
5. Language Translator
6. UiPath Apps
7. Entities

2 Business Process Flow

2.1. Scope

We used UiPath and other free platforms that make our project cost-efficient. And in this documentation, the automation workflow/sequence with the explanation is listed.

2.1.1 Activities in scope

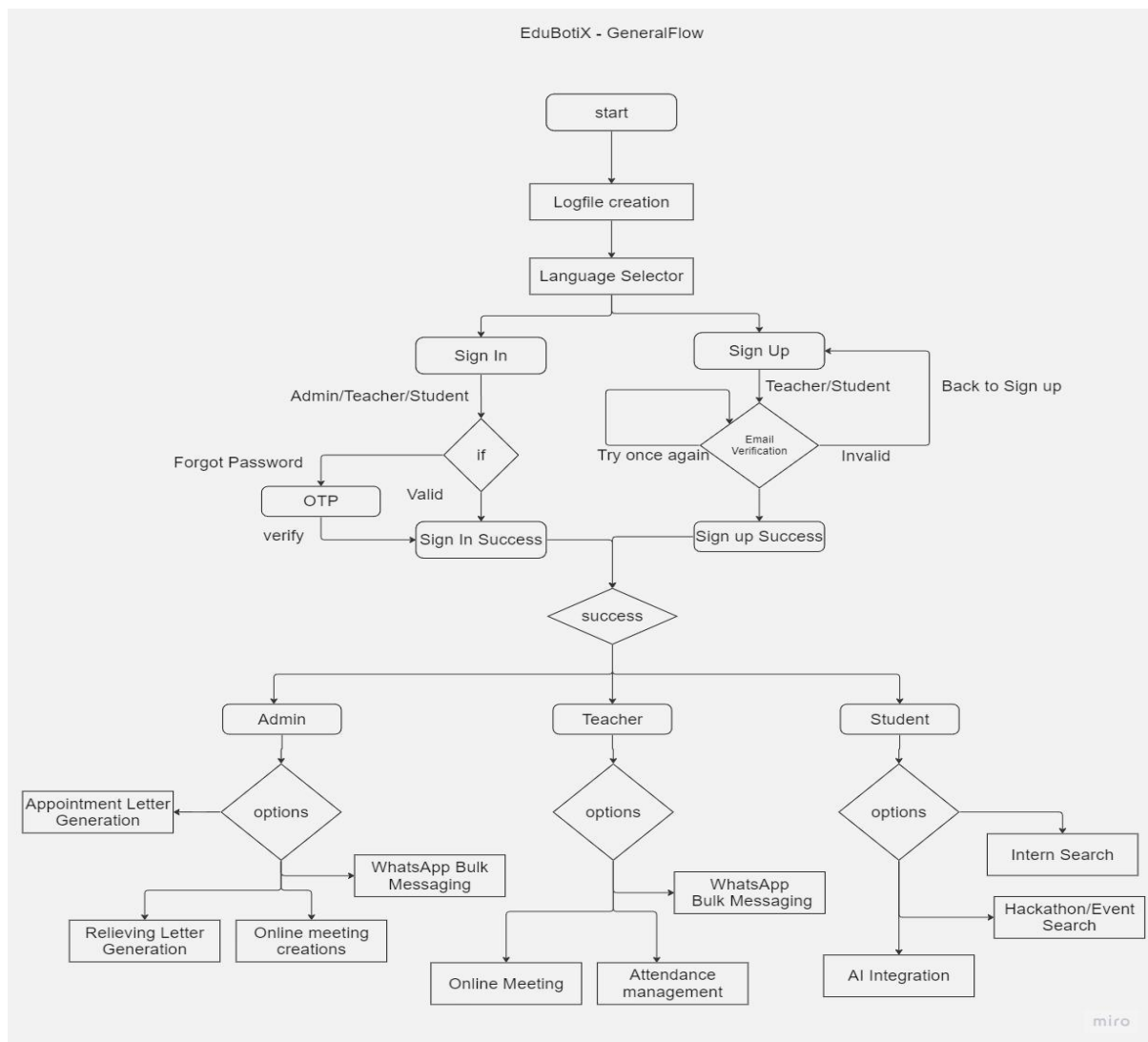
Process Name	Activities
Sign In	Ask the user to sign in by using their userID and password.
Log file creation	Collects every activity and interaction between the user and bot during the runtime.
Language Selection	Users can select the language to communicate /interact with the bot.
Voice Assistance	The users are requested to choose the voice assistant feature . This feature consists of both male and female voices.
Create meetings	The bot creates meetings in either one of the 4 platforms based on the user's needs.
Attendance Management	The vital key. data are collected from the resumes provided by the user.
Generate Appointment Letter	The bot generates appointment letters based on the inputs provided by the user.
Generate Relieving letter	The bot generates relieving letters based on the inputs provided by the user.
Send Messages on WhatsApp	The bot sends bulk messages based on the input phone numbers provided by the user.

AI Integration	The bot allows students to provide prompt messages to search from the AI sites.
Event Search	The bot searches and provides data on events like hackathon , seminar from various hosting sites based on their domain search.
Internship search	The bot searches for internships on various websites and provides data based on their salary expectation, time duration and domain specification.

2.2 Exception scenarios handling

#	Exception Description	Stage
1	When the user misclicks the close option of the window(s) platform during the runtime it returns to the previous stage and continues to work.	Stage 1
2	Even after the Stage 1 exception, if the error occurs again, then the bot provides the user with a set of operations to verify and validate for a smooth run.	Stage 2

3 General Workflow



Sign In:

The Sign-In process is a 2-step verification method.

First, the user needs to enter the password and if the password is valid an OTP will be generated and will be sent to the user's email id.

Log File creation:

Folder name: Date_(current_date), File name: Log_(hr & min).

In this log file, every action taken by both user and the bot will be noted with time.

In the future, anything a user needs to view back, or any occurrence in the workflow can be viewed in this log file and by this, we can find and clear the error easily. This Log file will be stored in the excel sheets.

Voice Assistant:

The users are requested to choose the voice assistant feature . This feature consists of both male and female voices.

Language Translators:

The EduBotiX is designed with a powerful language translation feature, enabling it to transcend linguistic barriers and provide diversified usage of the product.

1. Seamless Multilingual Communication:

The bot's translation capabilities facilitate smooth interactions and foster an inclusive and collaborative learning environment.

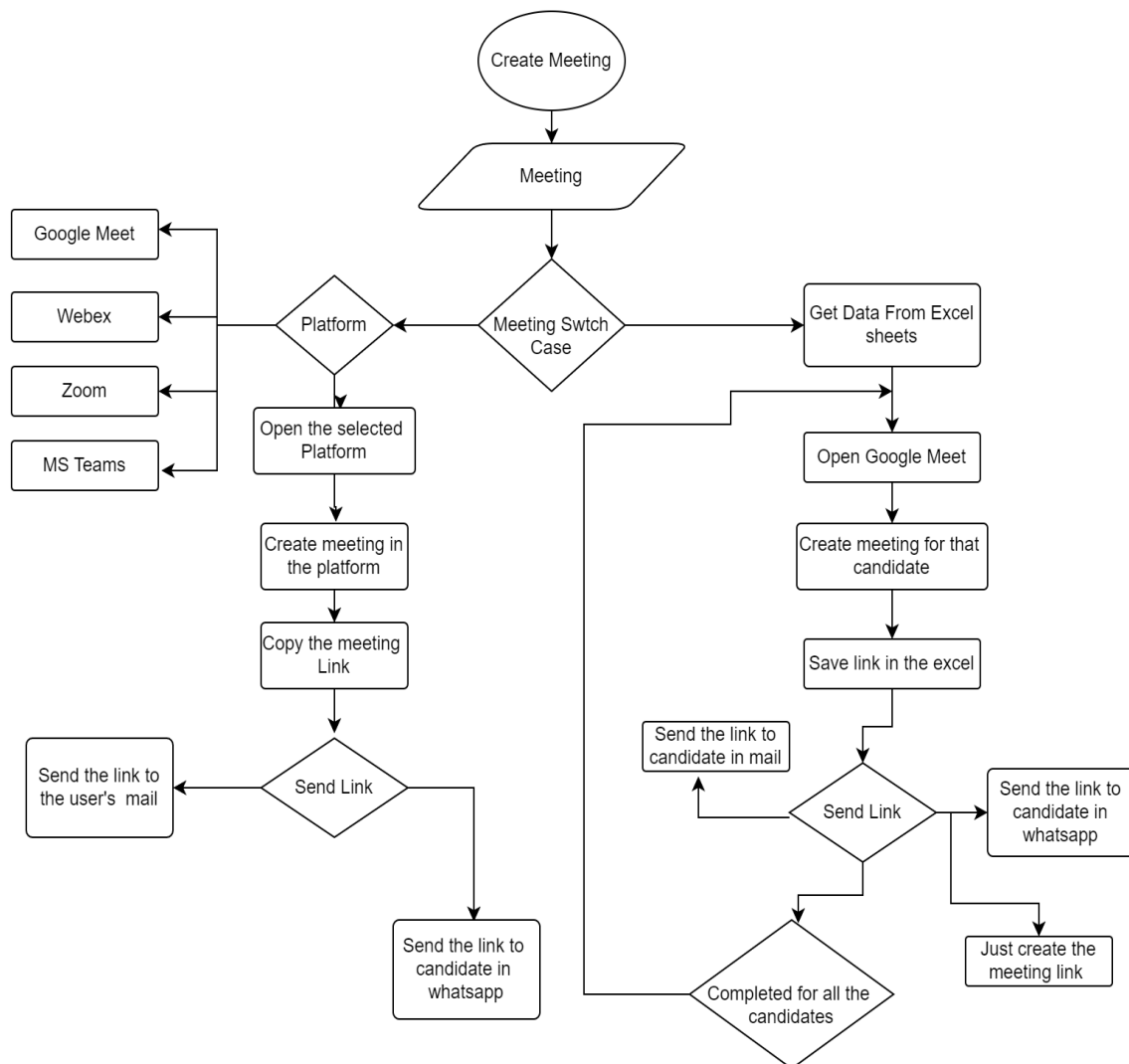
2. Global Internship and Event Opportunities:

With EduBotiX's language translation feature, students gain access to a broader range of internship opportunities and event information from various regions worldwide.

Then the bot enters its primary business automation tasks in the educational department at student , teacher and administration levels.

3a) Administration Workflow

3.1. Create online meetings



Create meeting has two types, Personal meeting and Interview meeting

1. Personal meeting:

In personal meetings, HR can create meetings on 4 platforms namely Google Meet, Zoom, Cisco WebEx, and MS Teams. The bot creates the meeting in the respective platform and copies the meeting link and sends the link to the mail or WhatsApp.

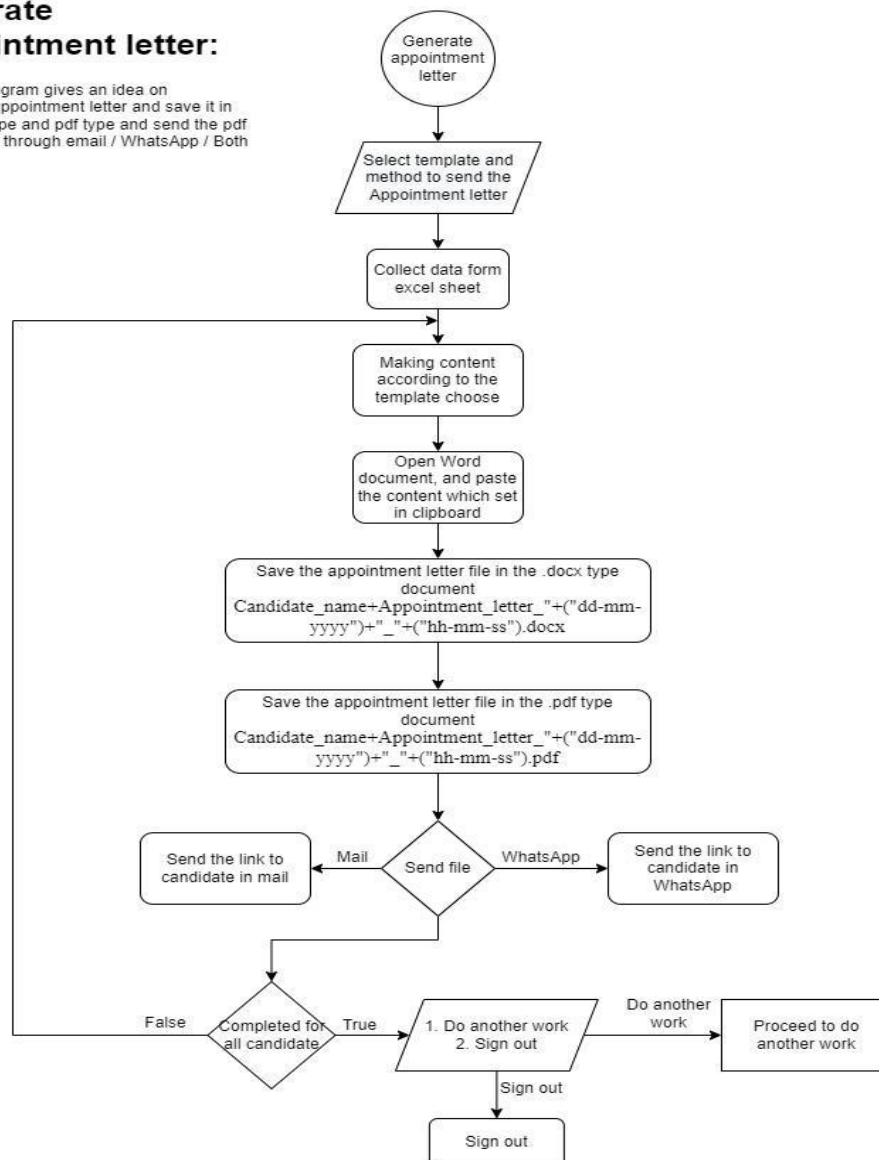
2. Interview meeting:

The bot creates a meeting for individual candidates in excel sheet 1 and saves the link in excel sheet 2 and sends the meeting link to the candidate's email / WhatsApp / both mail and WhatsApp / or just creates a meeting link.

3.2 Generate Appointment letters

Generate Appointment letter:

This flow diagram gives an idea on generating appointment letter and save it in both docx type and pdf type and send the pdf to candidate through email / WhatsApp / Both



In this module the bot generates the appointment letter for the candidate in excel. Firstly the bot gets the data from excel and creates the appointment letter then saves the appointment letter in .docx type and also saves it in pdf type.

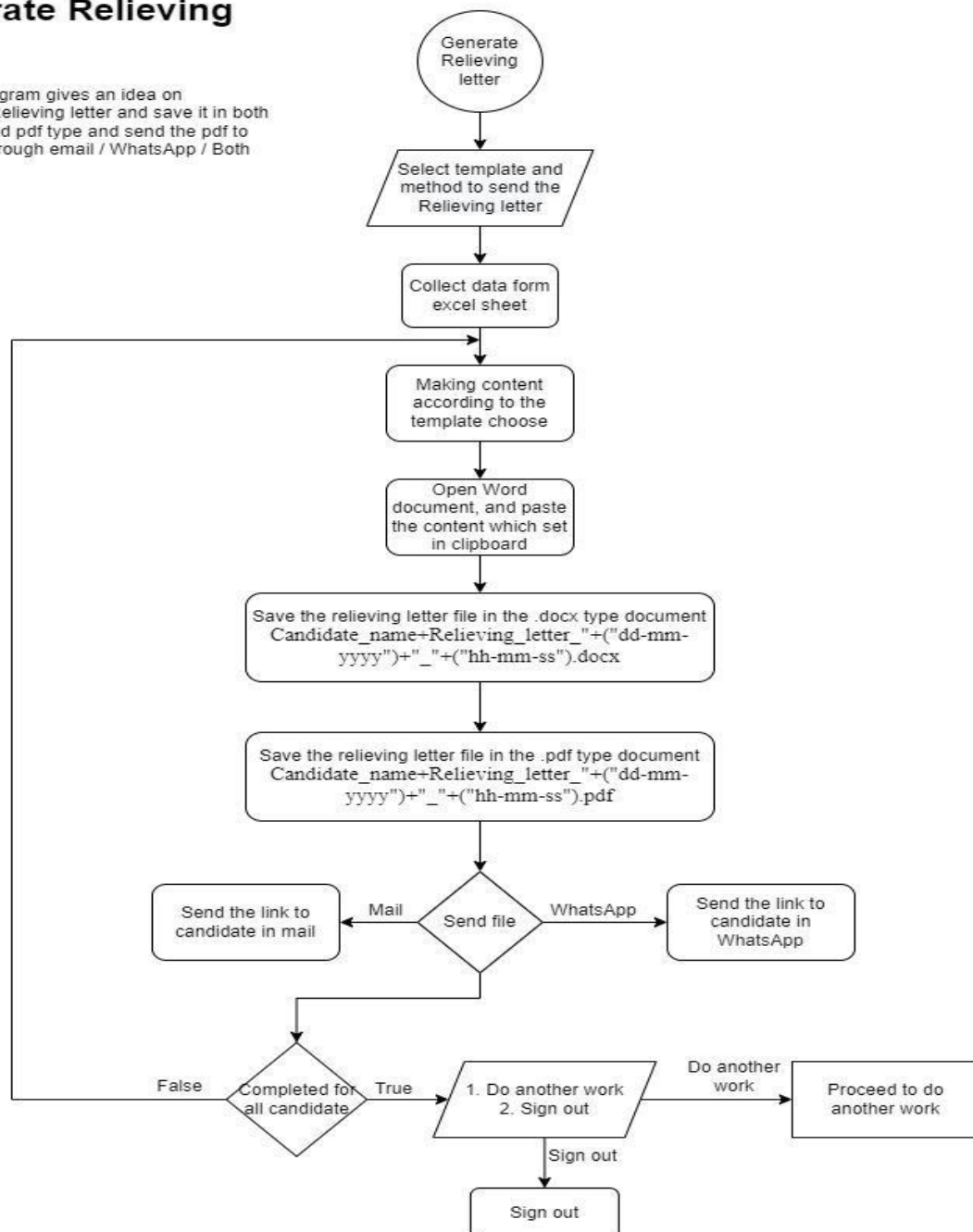
File Name : Employee_name+"_Appintment_letter_"+("dd-mm-yyyy")+"_"+("hh-mm-ss")

Once the letter generated is stored in both docx and pdf format, then it is mailed/sent in WhatsApp / or in both mail and WhatsApp.

3.3 Generate Relieving letters

Generate Relieving letter:

This flow diagram gives an idea on generating Relieving letter and save it in both docx type and pdf type and send the pdf to candidate through email / WhatsApp / Both



In this module the bot generates the relieving letter for the candidate in excel.

Firstly the bot gets the data from excel and creates the relieving letter then, it saves the Relieving letter in .docx type and also saves it in .pdf type.

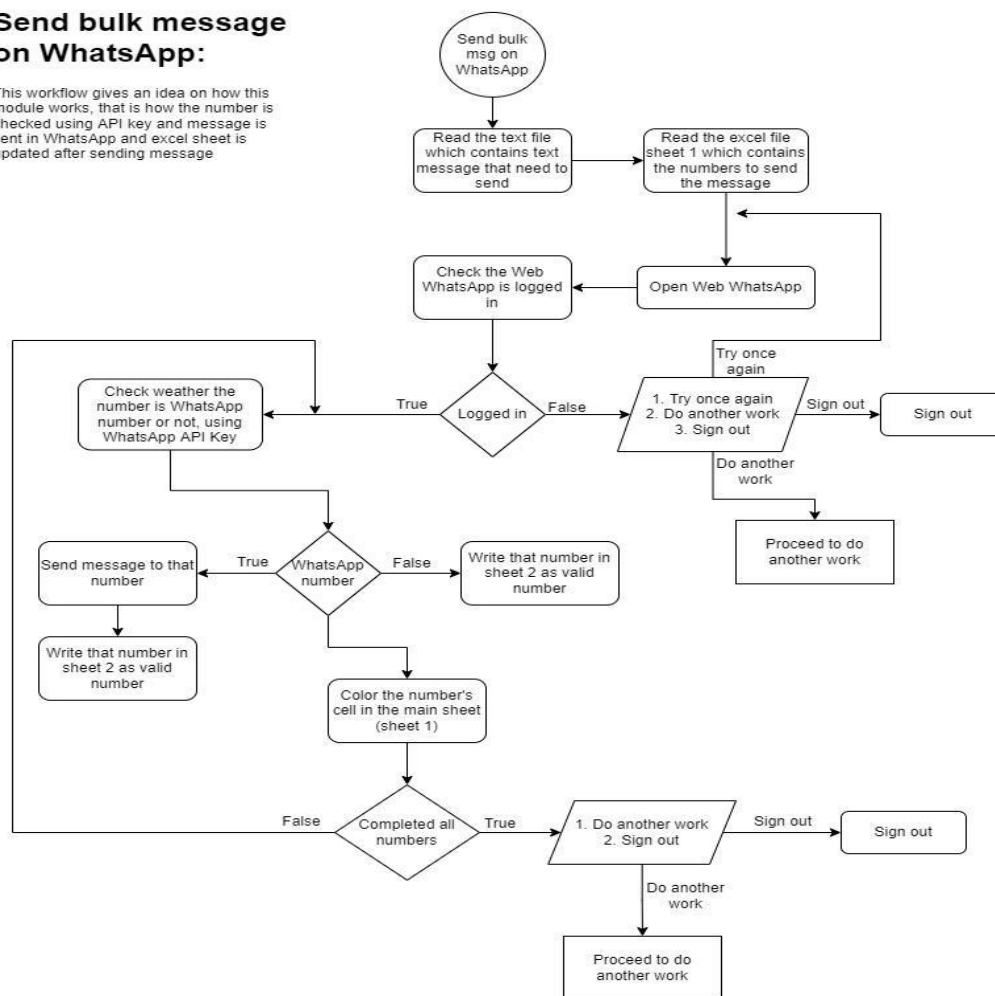
File Name : Employee_name+"Relieving_letter_"+("dd-mm-yyyy")+ "_" +("hh-mm-ss")

Once the letter generated is stored in both docx and pdf format, then it is mailed/sent in WhatsApp / or in both mail and WhatsApp.

3.4 Send bulk messages on web WhatsApp

Send bulk message on WhatsApp:

This workflow gives an idea on how this module works, that is how the number is checked using API key and message is sent in WhatsApp and excel sheet is updated after sending message



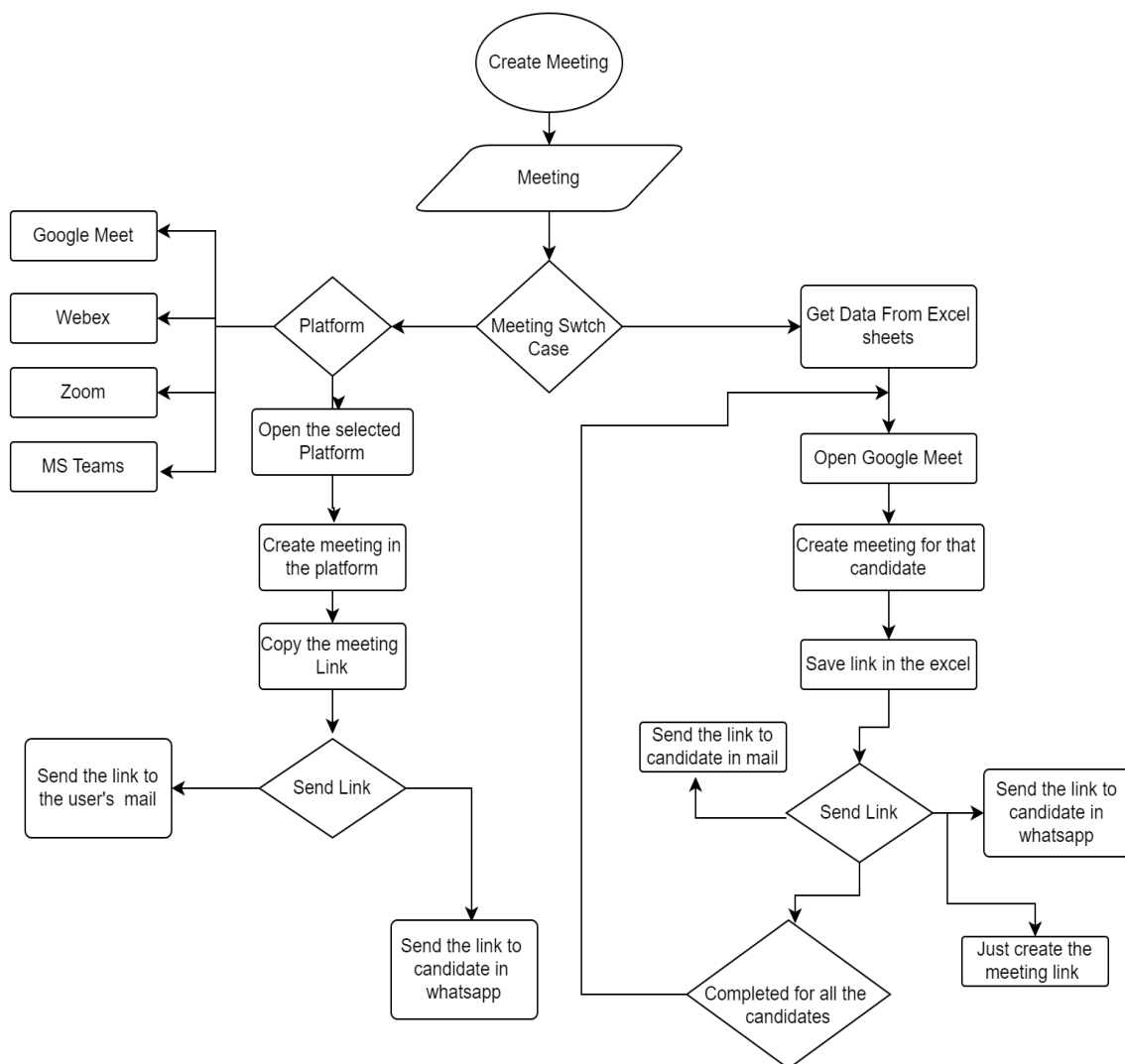
Sending bulk messages in the WhatsApp module,

The bot gets the text message and stores it in the clipboard. Then the bot gets the number from the data excel sheet. And checks the number if it is a Whatsapp number or not using the Web WhatsApp API key. If it is a valid number it sends the message to the number and adds that number to sheet 2 known as the valid sheet, else if it is not a valid number then it adds that number to sheet 3 which is known to be the invalid sheet. Once this is done the bot colors the cell.

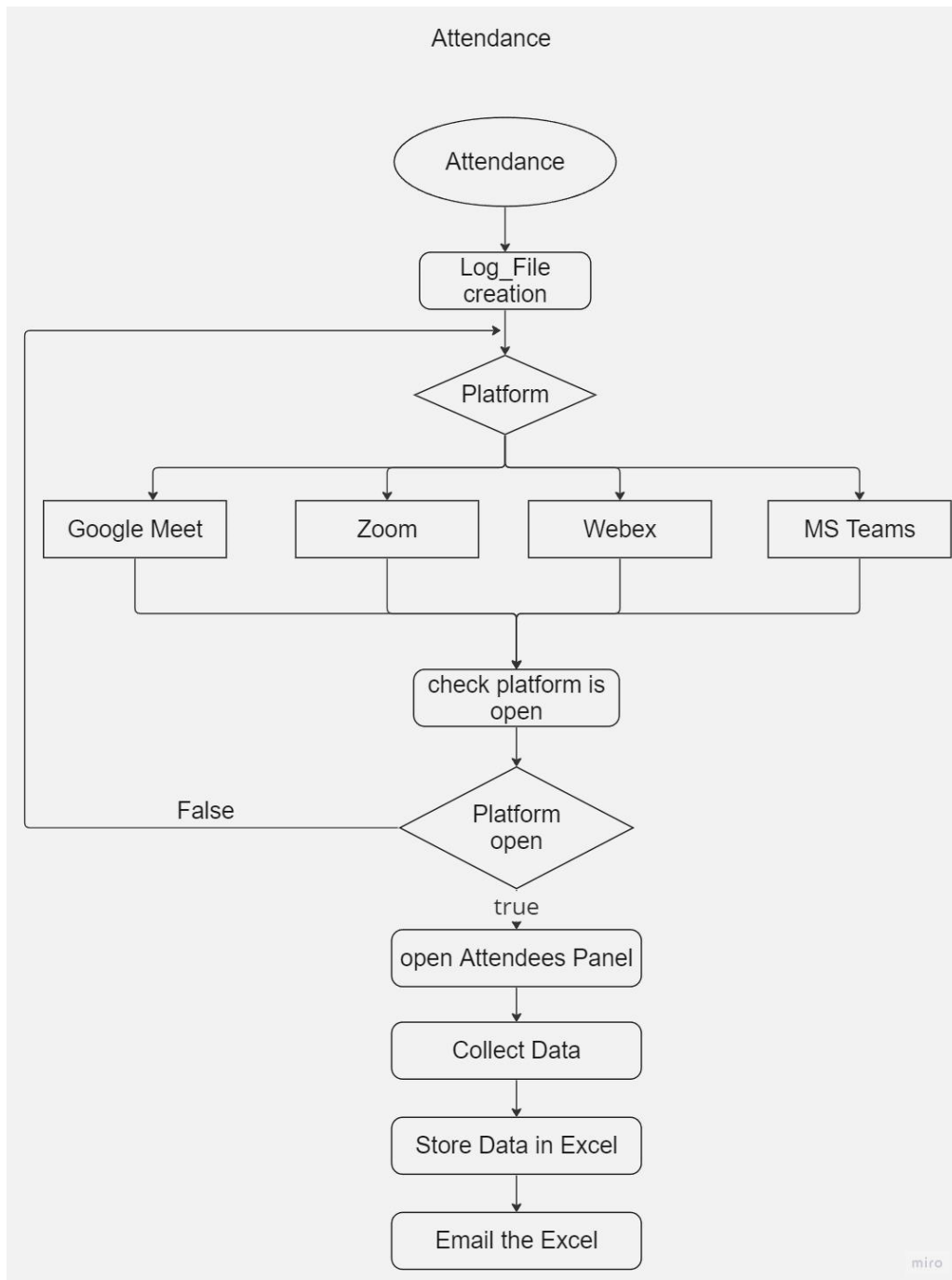
The advantage of this is that the admin has no need to save any number in his / her contact. And another pro is if the bot stops in the middle, the admin can find how many numbers have been completed by the bot using this cell coloring method.

3B) Workflow for Teacher/Staff

3.5 Create online meetings



3.6 Collection of Attendance Data



The Attendance Collection feature of EduBotiX:

1. Seamless Integration with Virtual Meeting Platforms:

EduBotiX seamlessly integrates with popular virtual meeting platforms like Zoom, Webex, Google Meet, and Microsoft Teams. When teachers schedule meetings through EduBotiX, the bot automatically syncs with the chosen platform to track attendance.

2. Automated Attendance Recording:

During virtual meetings, EduBotiX actively monitors participants' presence and records attendance in real-time. It identifies attendees based on their unique identifiers

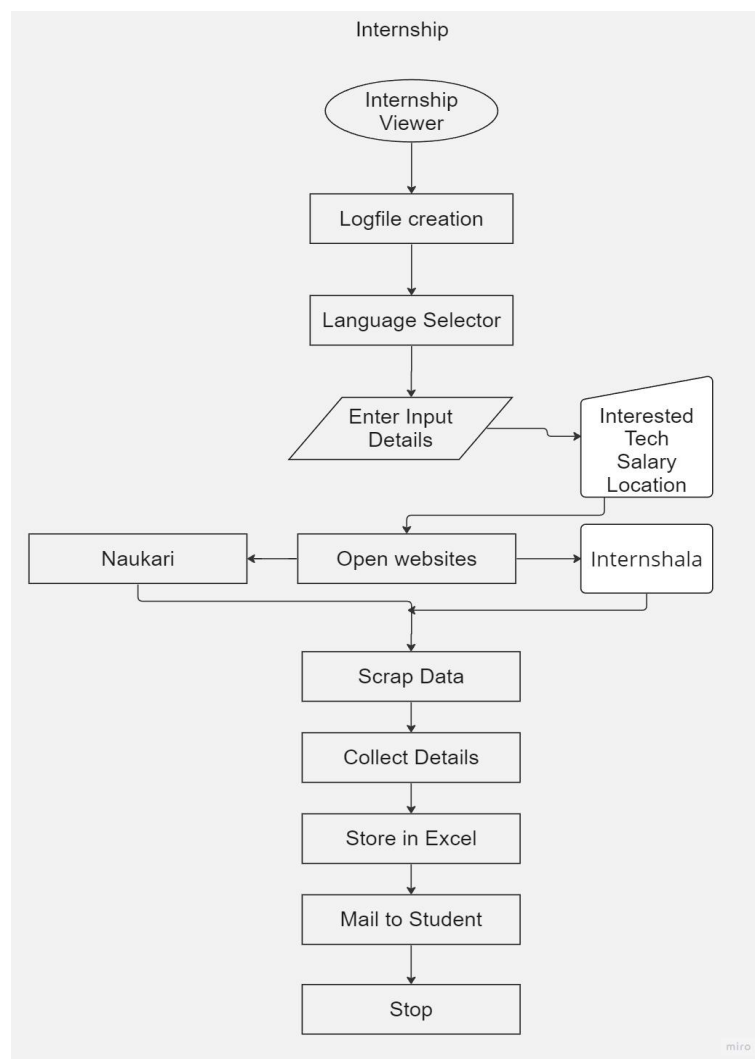
3.Attendance Reports Generation:

After each virtual meeting, EduBotiX generates comprehensive attendance reports automatically. These reports provide a detailed overview of participants, their attendance in excel are later mailed or whatsApped to their respective user.

3 c) Workflow for Students

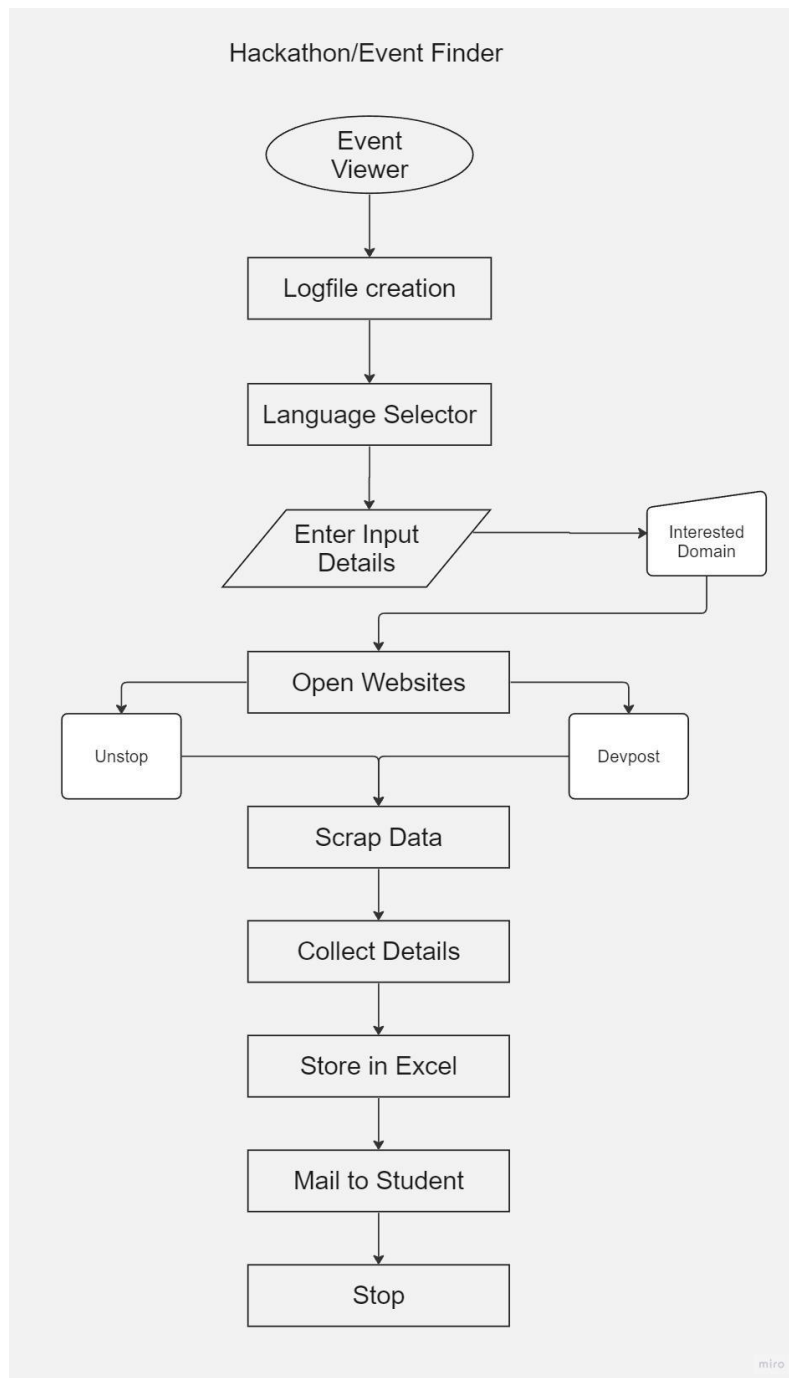
3.7 Internship Viewer

EduBotiX should offer students an all-in-one solution to access vital educational resources and opportunities. It must efficiently automate the process of searching for internships from prominent job portals like Internshala and Naukari, presenting students with relevant and tailored options.



3.8 Event/Hackathon Viewer

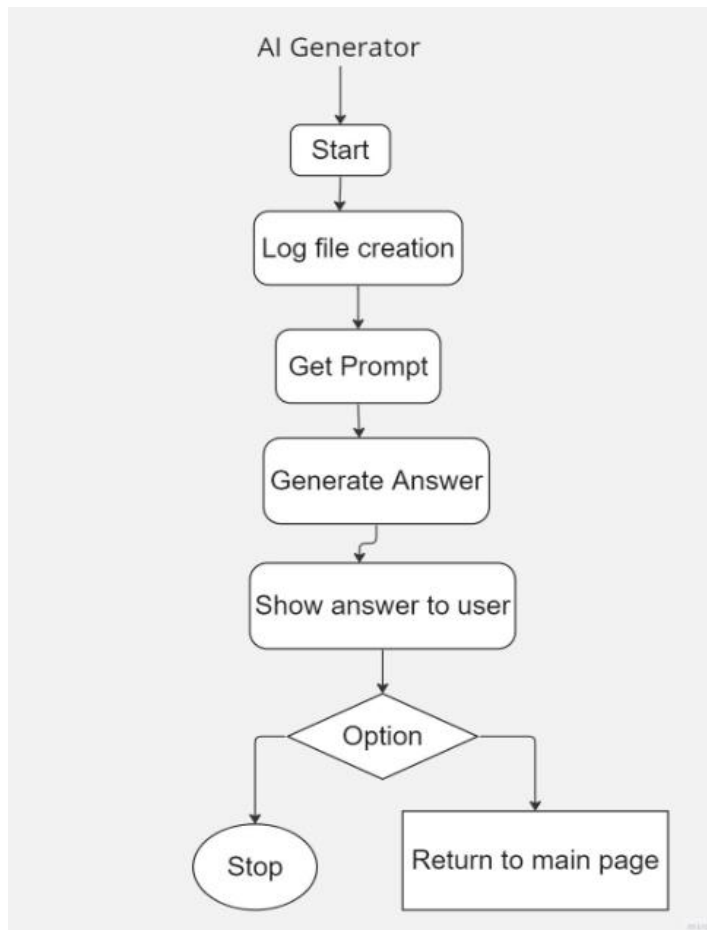
A product module which assists the school / college students and staff, also the researchers for searching information on Hackathon, Presentation, Internships, Workshops, etc.,



HACKFO bot module comes under the theme of sustainability, which fulfills the needs of current generation. Since without compromising the needs of the new future generation, while ensuring a balance between economic growth, environmental care, and social well being.

Since it is an automation bot, the bot practice or quality of including or involving people range of different social and ethnic background ,and of different genders. So our HACKFO Assistant bot also comes under the theme of Diversity and Inclusion.

3.9 AI Integration for Data Search



Integrating chat GPT (Generative Pre-trained Transformer) capabilities into EduBotiX introduces a sophisticated natural language processing component that significantly enhances the user experience. With this advanced feature, students can interact with the bot in a conversational manner, making inquiries and receiving automated responses tailored to their specific queries.

Personalized Query Handling:

EduBotiX leverages chat GPT to understand and interpret the context of student inquiries. By recognizing patterns in language and user behavior, the bot delivers personalized responses, addressing individual queries effectively.


4 Deployment Design

Robot will be packaged and deployed in the user's personal system to run the workflow.

This robot can be accessed with the help of UiPath Apps.

5 Developer details


5.1 Nithesh M

 +91 99441 68071

 nitheshm1705@gmail.com

 <https://www.linkedin.com/in/nitheshm/>


5.2 Nishanth Subramanian E

 +91 95856 87224

 nishanth03subramanian@gmail.com

 <https://www.linkedin.com/in/nishanth-subramanian-232a6622a/>


5.3 Mithelesh R

 +91 94898 78182

 mrmithil03@gmail.com

 <https://www.linkedin.com/in/mithil-r-b95b4b24a/>

5.4 Parvathinathan K

 +91 97906 88241

 aj3681528@gmail.com

 <https://www.linkedin.com/in/parvathy-nathan-30553a259>