



EVALUATION OF INTERNSHIP REPORT

B.Tech: III Year

Department of Computer Science & Information Technology

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Year 2022-23

**Department of Computer Science & Information Technology
AITR, Indore,**



ACROPOLIS INSTITUTE OF TECHNOLOGY & RESEARCH, INDORE

Department of Computer Science & Information Technology

CERTIFICATE

Certified that training work entitled “*Robotic Process Automation*” is a bonafied work carried out after fourth semester by “*Jaydeep Singh Chouhan*” in partial fulfilment for the award of the degree of Bachelor of Technology in Computer Science and Information Technology from “Prof. Simarjeet Singh Bhatia” Acropolis Institute of Technology and Research during the academic year 2022-23.

Name and Sign of Training Coordinator

Name & Sign of Internship Coordinator

ACROPOLIS INSTITUTE OF TECHNOLOGY & RESEARCH, INDORE

Department of Computer Science & Information Technology

ACKNOWLEDGEMENT

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Jaydeep Singh Chouhan

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INTRODUCTION

Robotic process automation (RPA) is a software technology that makes it easy to build, deploy, and manage software robots that emulate humans actions interacting with digital systems and software. Just like people, software robots can do things like understand what's on a screen, complete the right keystrokes, navigate systems, identify and extract data, and perform a wide range of defined actions. But software robots can do it faster and more consistently than people, without the need to get up and stretch or take a coffee break.

Robotic process automation streamlines workflows, which makes organizations more profitable, flexible, and responsive. It also increases employee satisfaction, engagement, and productivity by removing mundane tasks from their workdays.

RPA is noninvasive and can be rapidly implemented to accelerate digital transformation. And it's ideal for automating workflows that involve legacy systems that lack APIs, virtual desktop infrastructures (VDIs), or database access.

In order for RPA tools in the marketplace to remain competitive, they will need to move beyond task automation and expand their offerings to include intelligent automation (IA). This type of automation expands on RPA functionality by incorporating sub-disciplines of artificial intelligence, like machine learning, natural language processing, and computer vision.

Intelligent process automation demands more than the simple rule-based systems of RPA. You can think of RPA as “doing” tasks, while AI and ML encompass more of the “thinking” and “learning,” respectively. It trains algorithms using data so that the software can perform tasks in a quicker, more efficient way. As artificial intelligence becomes more commonplace within RPA tools, it will become increasingly difficult to differentiate between these two categories.

OBJECTIVES

1. To prepare students with the technical knowledge and skills needed to automate the repeated tasks performed with the help of a software.
2. To prepare students that can plan, implement, and automate the mechanisms to reduce the workload of users.
3. To prepare students that can identify, analyze, and design the automation where the task is continuously repeated by a user.

PROJECT DETAIL

Project Proposal:- GitBot (Github Automation Software Robot)

Project Category:

- a) Automation
- b) Desktop Application

Problem Statement:

Generally a person completes his work or task and then publish his work on github. He spend a lot of time on his work and after that many find the publish of the same on git bit tedious task. So, **GitBot** is a software automation bot, which performs the task of publishing automatically.

Scope :

As we enter the era of artificial intelligence, one of the emerging trends already impacting our teams and workflows is robotic process automation. RPA bots are able to perform the same actions much faster than humans and they don't take breaks. Github Robot (GitBot) is technically a RPA (Robotic Process Automation) process which automatically add, commit and push your files to initialized repository. It make the life of every github user way easier as compare to traditional way of adding, committing and pushing files using a terminal.

Specific Objectives:

By their very nature, RPA projects have clear benefits. You are replacing specific human effort by automation. It is common for a bot to replace the equivalent of three to four FTEs when it takes over a process. You can calculate how long it takes to complete a simple, repetitive task that uses known business rules and structured data. From this, you get a clear estimate of man-hour savings.

Stake Holders of Project:

Once RPA software has been skilled to capture and understand the actions of specific processes in existing software applications, it can then manipulate data, trigger and initiate tasks/activities and communicate with other systems

unconventionally. RPA benefits not just large and medium but also small-scale organizations. It can speed up tasks in a wide range of industries such as insurance, HR, finance, banking, CRM, BPO/KPO services, etc. Across these industries, organizations usually outsource such tasks to third parties/vendors. Outsourcing helps them mitigate risks in quality, time and employee-shortage.

Background:

RPA technology offers companies a more profitable alternative to outsourcing. It results in lower operating costs, decreased time cycles and increased productivity. It also helps companies become more audit- and regulatory-compliant, as the technology monitors all the tasks that it automates.

A widely held belief is that automation is going to replace full-time employees. But, a number of high-quality jobs will be created for those skilled in the areas of RPA.

Review of Literature:

Title	Reference	Date and year of publication/release of project	Features
Github Desktop	Github	2008	Not a bot but it provide GUI to user to upload the files.
VS Code source control	Visual Studio Code	2019	User Interactive and direct file upload feature in VS Code.

Whether the Implementation and deployment of the project idea (yes/no):

a) Has Social benefits. (yes)

b) Has Environmental Benefits. (yes)

- c) Considers health, safety, legal and cultural issues (no)
- d) Considers sustainable development (economic development that is conducted without depletion of natural resources) (no)
- e) Applies ethical principles while selecting project (not to steal other's project idea, code and documents) (yes)
- f) Commits to professional ethics and responsibilities and norms of the engineering practice. (yes)
- g) Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools. (yes)
- h) Identify, formulate, review research literature, and analyze engineering problems reaching substantiated conclusions. (yes)

TECHNOLOGY :-

1. RPA
2. SQL DATABASE
3. Github

HARDWARE REQUIREMENT :-

1. i-5 10th generation / ryzen-3
2. 10-gb free internal space
3. 8-gb RAM
4. Stable Internet Connectivity

Key Personnel and their expertise :-

Student Name and Enrollment No.	Technical Expertise
Jaydeep Singh Chouhan (0827CI201086)	RPA and Github
Guide- Prof. Simarjeet Singh Bhatiya	RPA Expert

Timetable:

	Description of Work	Expected no. of weeks to complete the module
Module One	Github Connectivity	1
Module Two	Framework, AI	1

Project Benefits:

RPA benefits not just large and medium but also small-scale organizations. It can speed up tasks in a wide range of industries such as insurance, HR, finance, banking, CRM, BPO/KPO services etc. Across these industries, organizations usually outsource such tasks to third parties/vendors. Outsourcing helps them mitigate risks in quality, time and employee-shortage.

RPA helps not just in eliminating repetitious tasks but allows employees to spend more time and effort in valuable & logical work. RPA helps with repetitive tasks that demand quality processing at any time of the day in a quick and inexpensive way.

CERTIFICATE



Diploma of Completion

Proudly presented to:

Jaydeep Singh Chouhan

For successfully completing the course:

Meet the UiPath Platform

07 / 08 / 2022

Date of issue

A handwritten signature in black ink, reading "Thomas P. Clancy".

Thomas P. Clancy

Chief Learning Officer



GITHUB LINK

GitBot - <https://github.com/jaydeepchouhan20808/GitBot>

CONCLUSION

With the influx of venture capital funds and the need for process owners to optimize internal processes and to cut costs, RPA offers a low-hanging fruit solution. A lot of companies have done pilot RPA projects and some of them have scaled beyond that. This means that as a project manager you are very likely to come into contact with RPA bots directly or indirectly, especially as the field scales.

As we have seen RPA provides many opportunities and new backlog options for your projects. At the same time, it poses many challenges: from data corruption to the creation of legacy systems. As a project manager, you will have to be mindful of how to develop products or software that take RPA into consideration. Doing even a little bit of extra planning will save you a lot of headache down the road and deliver the results your stakeholders are expecting.

REFERENCES

- <https://academy.uipath.com/>
- <https://cloud.uipath.com/>
- <https://www.uipath.com/>
- <https://docs.github.com/en>