INTRODUCTION

1.1 OVERVIEW

In this project we will extract the data from the flipkart e-commercial by auto launching the website. This project is expected to perform the following operations:

- Auto Launch the website
- Extract the Data
- Store the Data Extracted

1.2 PURPOSE

The main purpose of this project is to extract or scrape the item searches of the flipkart website by automatically launching using the Blue Prism software. Also, helping to get the data from the web as it changes in real – time. It helps in building, deploying and managing software robots with digital systems and software. The main aim of this project is to collect data at any stage and save resources and time. Accelerating the process, boost the productivity, free people from repetitive tedium across several sectors. With RPA (Robotic Process Automation) as such fast technology, it makes it easier to build software robots with no – code, increasing employee satisfaction, engagement and productivity can lead to great implementation.

LITERATURE SURVEY

2.1 EXISTING PROBLEM

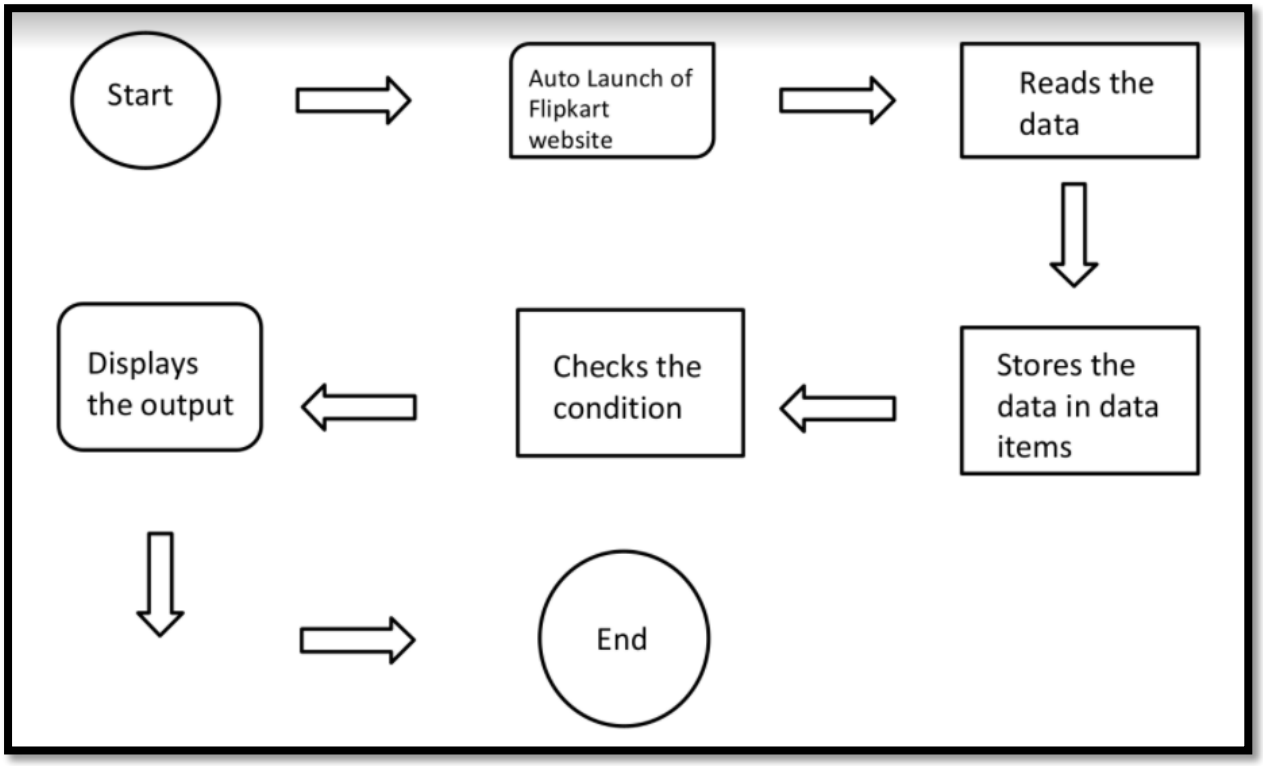
At times, in order to scrape the data from the real – time website we have to do a tedious task. We need to manually login to the website, look for the item search and then read the data and store it. This not only decreases the productivity level but also leads to time consuming, which is a tedious task after all.

2.2 PROPOSED SOLUTION

In order to overcome the existing problem we have used Robotic Process Automation (RPA) technology to automate the process of data scraping. With the help of digital workers in Blue Prism software, the data scraping of the real time website will be automated and will lead to great productivity and less time consuming. In this proposed solution, our main aim is to understand what is there on the screen, complete the right keystrokes, navigate systems, identify and extract data, and perform wide range of defined actions. Since software robots can do it faster and more consistently than people, without the need to get up and stretch or take a coffee break. This project provides automation streamlines workflows, which will make organizations more profitable, flexible, and responsive. It also increases employee satisfaction, and productivity by removing the mundane tasks from their workdays. The existing solution may sometime lead to the incorrect data. But with the help of RPA technology, there is accelerated transformation, improved compliance, productivity, greater resilience, and higher accuracy of the data. It’s no wonder that RPA technology is rewriting the story of work.

THEORETICAL ANALYSIS

3.1 BLOCK DIAGRAM



3.2 HARDWARE / SOFTWARE DESIGNING

- HARDWARE REQUIREMENTS
  - Processor
  - Ethernet Connection (LAN) or Wireless Adapter (Wi-Fi)
  - Hard Drive
  - Memory (RAM)

- SOFTWARE REQUIREMENTS
  - Operating System: MAC OS, Windows, etc.
  - Web Browsers: Google Chrome, Microsoft Edge, etc.
  - Blue Prism Software + Licence Key

EXPERIMENTAL INVESTIGATIONS

4.1 BLUE PRISM SOFTWARE

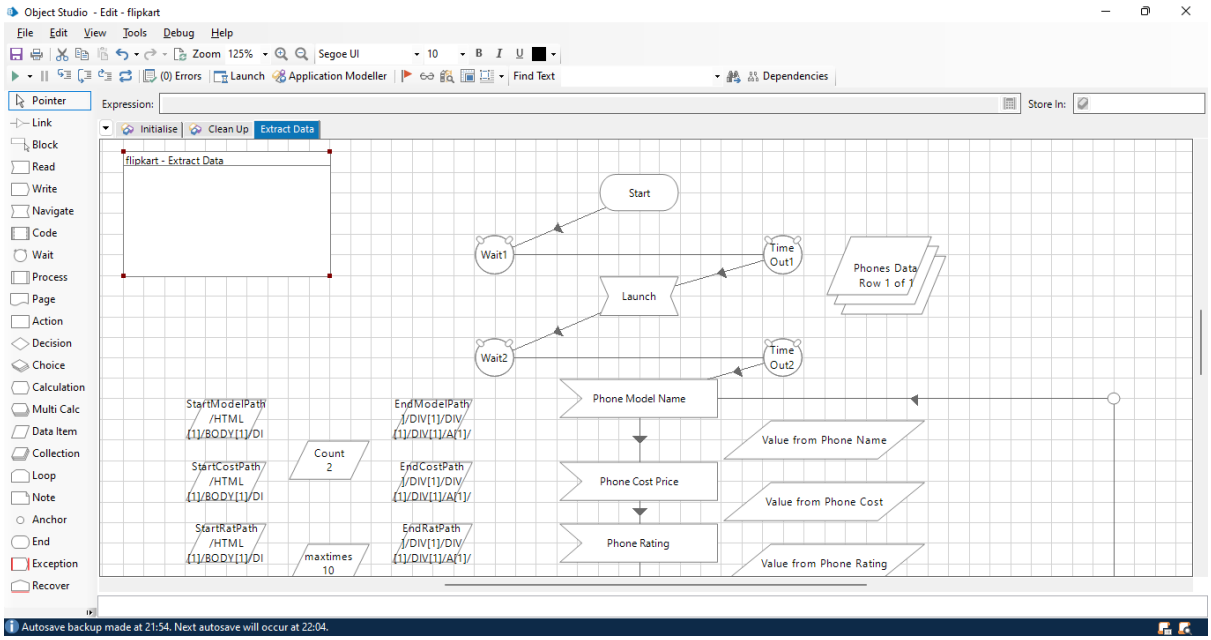
Blue Prism is an intelligent automation for the enterprise, transforming the way work is done. It helps organizations to accelerate operational efficiency and agility by making it easy for people to automate the processes that matter most. The intelligent digital workforce is smart, secure, scalable, and successful, freeing up humans to reimagine work. As a result, this software helps to gain better insight and control over the work, create new and transformative ways to operate, and empower people to focus on work that truly matters.

4.2 ROBOTIC PROCESS AUTOMATION

Robotic process automation (RPA) is a software technology that makes it easy to build, deploy, and manage software robots that emulate human 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 non – invasive 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.

FLOWCHART


Object Studio - Edit - flipkart
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Exception
Recover
Initialise
Clean Up
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flipkart - Extract Data
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Time Out1
Launch
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Wait2
Time Out2
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Phone Cost Price
Value from Phone Cost
Phone Rating
Value from Phone Rating
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EndModelPath /DIV[1]/DIV /[1]/DIV[1]/A[1]/
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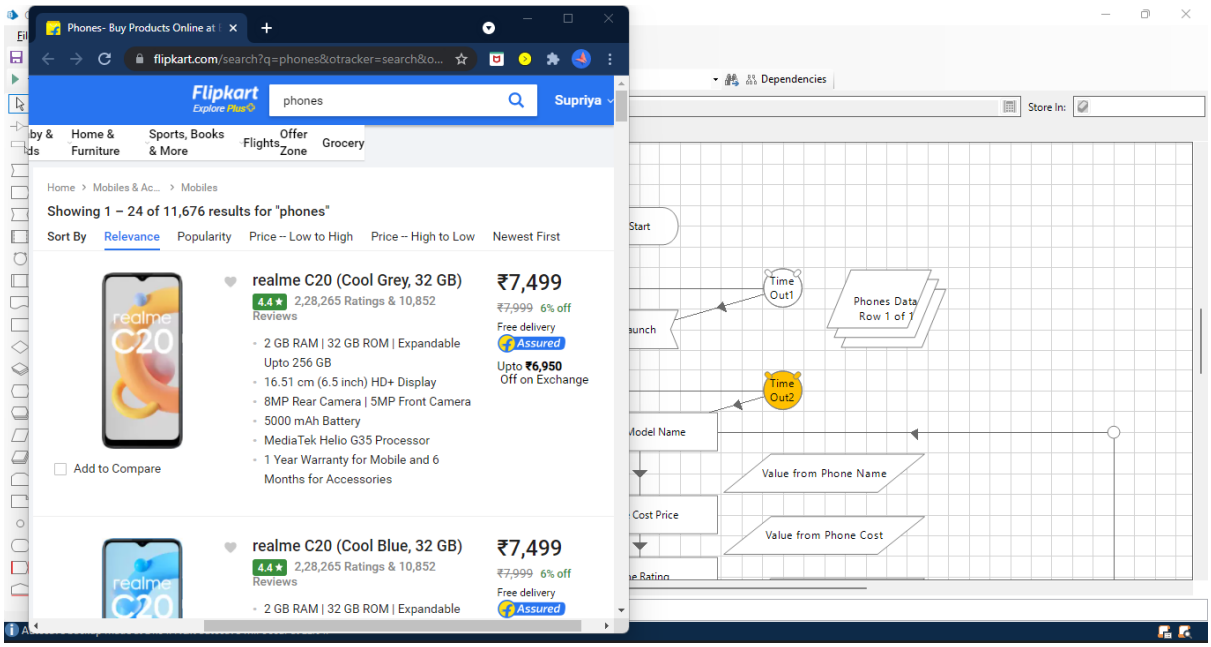
Phones- Buy Products Online at
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Flipkart
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Sports, Books & More
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Sort By
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Newest First
realme C20 (Cool Grey, 32 GB)
4.4★ 2,28,265 Ratings & 10,852 Reviews
2 GB RAM | 32 GB ROM | Expandable Upto 256 GB
16.51 cm (6.5 inch) HD+ Display
8MP Rear Camera | 5MP Front Camera
5000 mAh Battery
MediaTek Helio G35 Processor
1 Year Warranty for Mobile and 6 Months for Accessories
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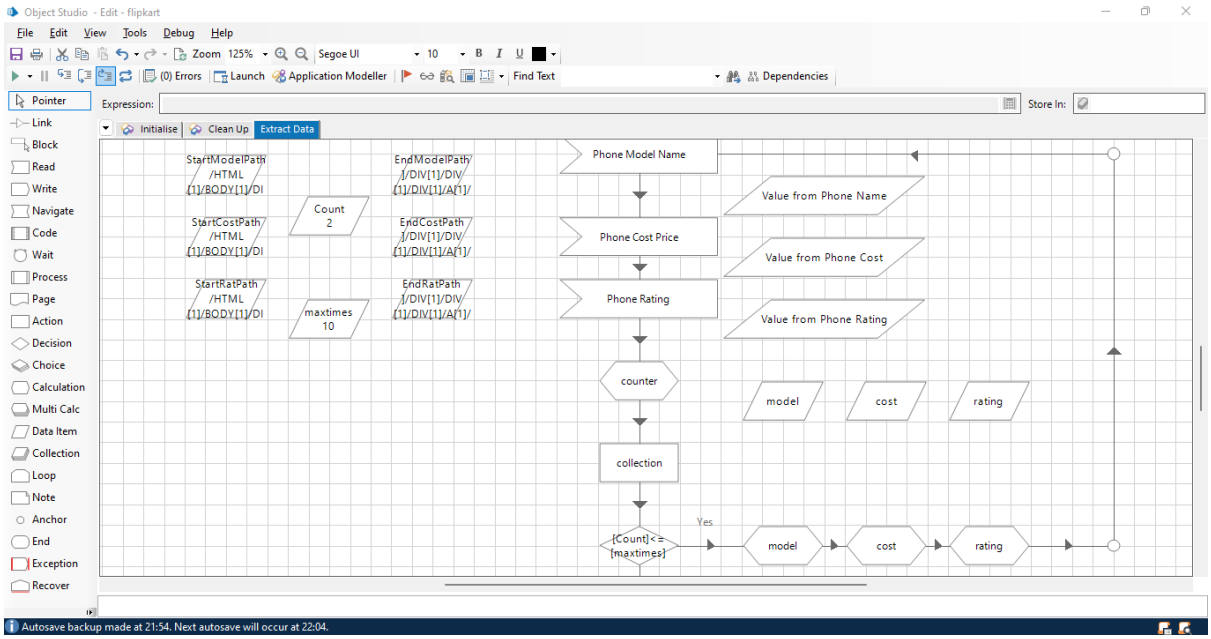
Phones Data Row 1 of 1
Time Out2
Value from Phone Name
Value from Phone Cost


Object Studio - Edit - flipkart
File Edit View Tools Debug Help
Zoom 125% Segoe UI 10
(0) Errors Launch Application Modeller Find Text Dependencies
Pointer Link Block Read Write Navigate Code Wait Process Page Action Decision Choice Calculation Multi Calc Data Item Collection Loop Note Anchor End Exception Recover
Expression: Store In:
Initialise Clean Up Extract Data
StartModelPath /HTML /[1]/BODY[1]/DI
EndModelPath /DIV[1]/DIV /[1]/DIV[1]/A[1]/
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StartCostPath /HTML /[1]/BODY[1]/DI
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maxtimes 10
Phone Model Name
Value from Phone Name
Phone Cost Price
Value from Phone Cost
Phone Rating
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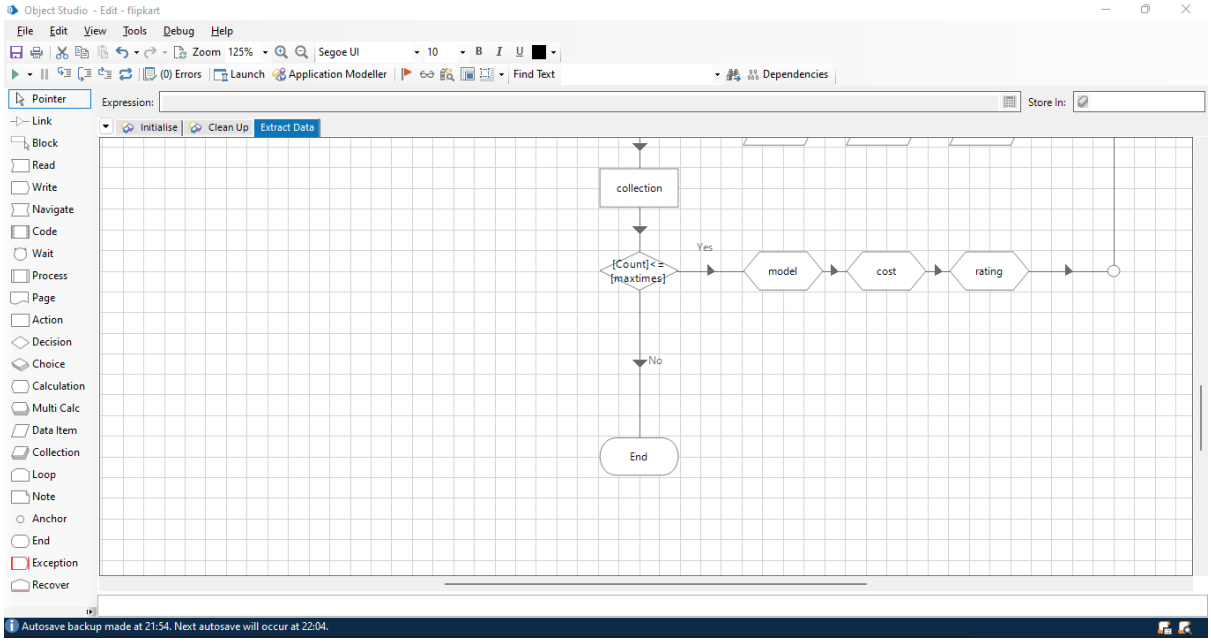
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Expression: Store In:
Initialise Clean Up Extract Data
collection
Yes
{Count}<= {maxtimes}
model
cost
rating
No
End
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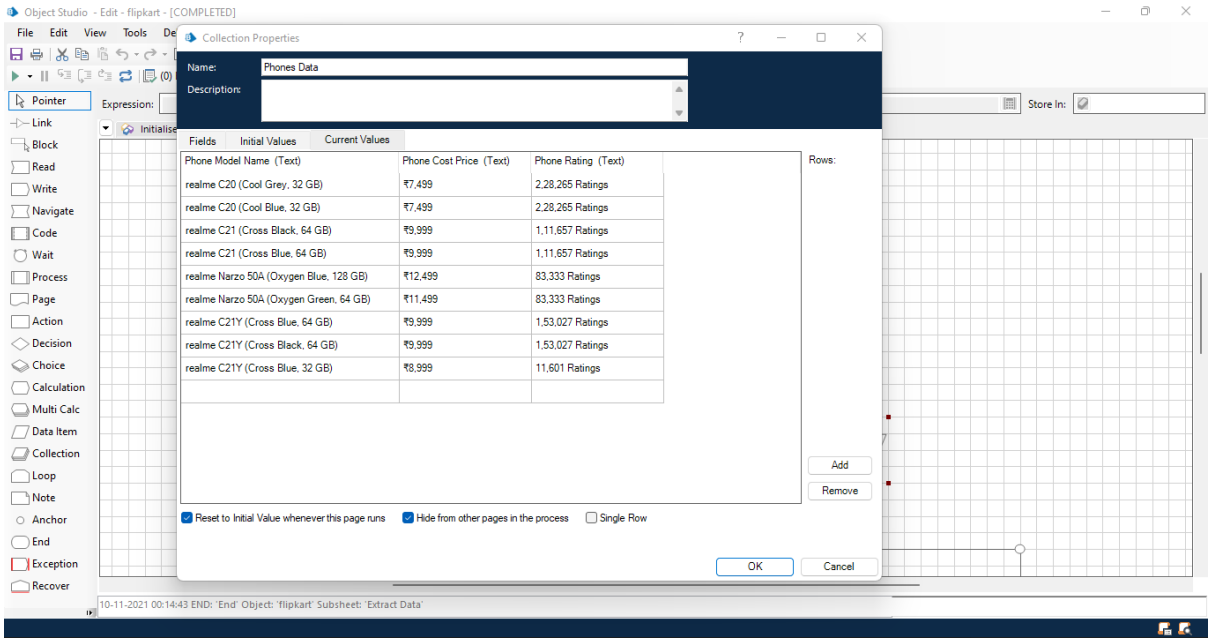
RESULT



The above diagram shows the final output of the project. In this screenshot, it has been shown that the data is scraped from the real time flipkart website of the item searched. It reads the Phone's Model Name, Cost price and Ratings of the particular model. Here in this project it has scraped 9 data from the real time website with higher accuracy.

ADVANTAGES AND DISADVANTAGES

7.1 ADVANTAGES

- More efficient
- Improved Accuracy by eliminating human error.
- Increased agility as it makes it easier for us to adapt if any changes are to be made.
- Accelerated transformation
- Major Cost Savings.
- Greater Resilience
- Improved Compliance
- Boosted Productivity
- More value from personnel
- Happier employees

7.2 DISADVANTAGES

- Added the complexity as when RPA is not managed and documented properly, it can make the task in hand more complex.
- Managing and maintaining of bots can be a tough job if not done with expertise.

APPLICATIONS

Today, RPA is driving new efficiencies and freeing people from repetitive tedium across a broad swath of industries and processes. Enterprises in industries ranging from financial services to healthcare to manufacturing to the public sector to retail and far beyond have implemented RPA in areas as diverse as finance, compliance, legal, customer service, operations, and IT. And that’s just for starters.

RPA has become so widespread because it is broadly applicable. Virtually any high-volume, business-rules-driven, repeatable process is a great candidate for automation—and increasingly so are cognitive processes that require higher-order AI skills.

CONCLUSION & FUTURE SCOPE

Software technology (RPA) makes it easy to build software robots with no - code. It can do things like understand what is there on screen, complete the right keystrokes, navigate systems, identify, extract data and perform wide range of defined actions. On successful implementation of the project it can be implemented in all major applications which can make organizations more profitable, flexible and responsive. Increased employee satisfaction, engagement and productivity can lead to great implementation.

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