



Robotic Process Automation Tutorial for Beginners

Introduction

Overwhelmed by all these manual repetitive tasks? You are not alone! Beginners get confused with the world of RPA; however, it is the only way out from the never-ending data entry and tiresome work. RPA enables software robots to perform such work, clearing your schedule for strategic work. Ready to simplify your workday? View our complete [RPA Course Syllabus](#) and start your automation journey today!

Why Students or Freshers Learn Robotic Process Automation

Here are the top Reasons for Students & Freshers to Learn RPA:

- **High Job Demand:** There are numerous jobs with the required RPA skills for digital transformation: RPA Developer and Business Analyst.
- **Future-proof your career:** You can secure your career as automation is on the rise. RPA places you at the forefront of the AI and technology trend for long-term employability.

- **Competitive Salaries:** Most entry-level RPA roles promise above-average starting salaries in comparison with many other IT fields.
- **Industry Diversification:** RPA finds its applications in all sectors, from finance and healthcare to human resource management; therefore, RPA presents tremendous versatility across a wide range of industries.
- **Practical & Immediate Impact:** You learn to solve real-world business problems by instantly increasing efficiency and accuracy.

Want to get that dream job? Access and download our [RPA Interview Questions and Answers](#) today!

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Step-by-Step RPA Tutorial for Beginners

Robotic Process Automation is the technology that enables users to configure a software-a “robot” or “bot”-to perform as a human clicking on applications, typing, scraping data, and more in order to execute a business process. Think of the robot like a tireless, perfect digital assistant doing all the drudge work while you do creative and strategic things.

This Robotic Process Automation tutorial for beginners covers everything from installation to your first functional automation project using the best-of-industry, completely free-to-use UiPath Community Edition.

Step 1: Installation and Setup of UiPath Studio

The first step in RPA is to install the UiPath Studio application. We will use the Community License, which is free for individual developers, small businesses, and learning purposes.

1.1: Prerequisites and System Check

Before starting, make sure your system meets the following basic requirements:

- **Operating System:** Windows 10/11 (64-bit) or Windows Server (UiPath Studio is a Windows-exclusive application).
- **RAM:** 4 GB minimum, but highly recommended are 8 GB or more for smooth performance.
- **.NET Framework:** Minimum version 4.5.2 (usually pre-installed or updated via the installer).

1.2: Download the UiPath Installer

- Go to the UiPath official website and click on the “Try UiPath Free” or “Start Free” button.
- You will be requested to Sign Up or Log In to the UiPath Automation Cloud. You can use a Google, Microsoft, LinkedIn account or a corporate/personal email.
- Once signed in to the cloud portal, look for the Resource Center or a “Download Studio” button. Click it; this will begin to download the unified installer file, usually an .exe file like UiPathStudio.msi.

1.3: Run the Installation Wizard

- **Double-click** the setup file you downloaded to open the installation wizard.
- Read the **License Agreement** and accept it.
- **Choose the installation type:**
 - **Quick (Recommended for Community Users):** This is a user-mode installation that will not require administrator privileges. The installer sets

up the components – Studio, StudioX, and Assistant – to a default location.

- **Custom:** (Only for advanced or Enterprise users) This allows you to select the components and installation path.
- Click **Install**. Setup will continue by downloading and installing all the required files and dependencies.

1.4: First-Time Configuration and Activation

1. Once the installation is complete, the UiPath application should automatically open.
2. The first screen will prompt you to Connect to Cloud or activate a license.
 - Choose the Community License or Sign in connecting to your Automation Cloud account created in 2.2. This associates your local Studio with your cloud workspace, thus providing you with a free license.
3. **Choosing a Profile**
 - **UiPath Studio Recommended:** This is the developer profile, where you get to use the full range of activities, code, and advanced design capabilities. For learning, this is what you want.
 - **UiPath StudioX:** A simpler profile targeting business users, aka “Citizen Developers”, for smaller personal automations.
4. **Select the Update Channel:** The beginner should select the **Stable** channel for maximum reliability.
5. Click **Continue**. You will now be taken to the main UiPath Studio interface – the Start Screen. Congratulations, your environment is ready!

Step 2: Your First RPA Project: Web Data Extraction

With your Studio now set up, let’s create a simple yet powerful automation: **extract data from a public website and save it in an Excel spreadsheet.**

2.1: Create a New Project

1. From the **UiPath Studio Start Screen**, click **Process**.
2. In the pop-up window:
 - **Name:** *Beginner_Web_Scraping*
 - **Location:** Select a *local folder* for the project.
 - **Description:** *A simple bot to extract data from a table on a webpage.*
3. Click **Create**. This will initialize the Studio with your project, opening up the main design panel: the Workflow.

2.2: Introducing the Main Workflow Elements

The Studio interface is organized into key panels:

- **Activities Panel (Left/Docked):** Here you have your tool chest with all the pre-built actions, so-called “Activities”, you can use: Click, Type Into, Open Browser, and Message Box.
- **Designer Panel (Center):** This is where you’ll drag and drop activities to create your workflow sequence.
- **Properties Panel (Right):** After an activity has been selected in Designer, this is where configuration of that activity specific options is set, such as the URL for an Open Browser activity.

2.3: Recording the Web Automation

When it comes to repetitive UI tasks, such as web scraping, the integrated Recording Wizard is the fastest way for a beginner to create a robust workflow.

- Click the **Recording** button (it usually looks like a small video camera) in the **Design** tab of the **Ribbon** menu. Select **Web**.
- Open any **web browser** (Chrome or Edge) and go to any simple website that has an obvious data table, such as a sample stock price list, or a public demographic data page.

- In the **Recording toolbar** that opens, click **Open Browser**. Click the open browser window. Notice how UiPath will automatically create an **Open Browser** activity.
- The Recording toolbar gives you actions such as *Click*, *Type Into* and **Data Scraping**.

2.4: Setting up Data Scraping

1. Click the **Data Scraping** button on the Recording toolbar.
2. The **Extract Wizard** will open with a prompt to “Indicate the first element on the page.”
3. **Click the first cell** of the data table you want to extract, for example, the cell that is in position row 1, column 1.
4. The wizard next asks you to “**Specify the second element.**”
5. **Click the corresponding cell** in the next row for the same column, i.e., the cell in row 2, column 1.
6. UiPath will check the pattern and ask you, “Is the whole table/structure going to be extracted?” Click **Yes**.
7. A preview of the extracted data table will appear. You can configure:
 - **Maximum number of results:** Use 0 for all or a small number to test.
 - **Extract Correlated Data:** Not required for this basic project.
8. Click **Finish**.
9. UiPath will then ask: “**Is the data spanning multiple pages?**” – meaning is there a “**Next**” button?
 - If **Yes**, click **Yes**, and then visually click **Next** on the webpage. UiPath will record the logic to loop through all pages.
 - If **No**, click **No**.

2.5: Finalizing the Workflow

Now, the Designer Panel contains a series of activities consisting of:

- **Open Browser** – Opens the website.
- **Attach Browser** – A container for UI actions.
- **Extract Structured Data** – Actually performs the scrape, with the looping logic included if you select a “Next” button.

The scraped data is now stored in a special variable created by the wizard, usually named `ExtractDataTable`. This is a data type that holds tabular information.

2.6: Saving Data into Excel

The final step is to write data output.

1. In the **Activities Panel**, search for *Write Range*.
2. Drag the *Write Range Workbook* activity and drop it right after the **Extract Structured Data** activity.
3. Configure the *Write Range* activity using the **Properties Panel**:
 - **Workbook Path**: Click the folder icon and type a new name, such as *“Output\\Extracted_Data.xlsx”*.
 - **Sheet Name**: *“Scraped Data”*
 - **Data Table**: Type the variable name where your data is stored: *ExtractDataTable*.
 - **Add Headers**: Check this box so that your Excel file includes the column names, such as **“Company Name,” “Price,” etc.**

2.7: Run and Test Your Bot!

- Click the **Run** button (usually a blue Play icon) in the Ribbon menu.
- Observe the robot performing the tasks of opening the browser, navigating to the URL, scraping the data, iterating through Next pages if any are present, and then closing

- Once the run is complete, navigate to your project folder's *Output* subdirectory (or the path you specified) and open *Extracted_Data.xlsx*. You will see the full data table extracted by your first RPA bot!

Step 3: Why RPA is the Future: Tools and Benefits

As you continue in your studies, you will learn about many of the different tools and explore the enormous advantages of this technology within just about any sector.

Key RPA Tools in the Market

The landscape of RPA is dominated by a few powerful platforms, each with its own strengths:

UiPath:

- Strengths include great community support, an enormous activity library, and a complete platform covering Studio, Orchestrator, and AI/Document Understanding. Highly scalable for enterprise use.
- Best For: Everyone, from individual beginners up through full enterprise installations.

Automation Anywhere:

- **Strengths:** Highly focused on cloud-native architecture through Automation 360, featuring a Bot Store with pre-built automations and incorporating AI/ML natively.
- **Best for:** Cloud-focused organizations looking for a robust and scalable platform.

Microsoft Power Automate (Desktop):

- **Strength:** Seamlessly integrates natively with the entire Microsoft 365 and Azure ecosystem, including Excel, SharePoint, Teams, and more. Low-code approach is highly accessible.
- **Best for:** Companies heavily invested in the Microsoft stack.

Blue Prism:

- **Strength:** Emphasizes strong governance, security, and scalability. It uses a visual object-based approach that separates the business logic from application interfacing.
- **Best For:** Highly Regulated Industries (Finance, Healthcare) requiring high security and control.

Core Benefits of RPA Implementation

RPA provides immediate, measurable value throughout an organization:

- **Increased Efficiency & Productivity:** Robots can work 24/7/365 without taking breaks, greatly expediting the execution of repetitive tasks.
- **Higher Accuracy & Quality:** RPA has near-perfect execution, since human errors in data transcription, calculations, and inputs are eliminated.
- **Cost Reduction:** Due to the automation of tasks, the need for manual resources lowers the OpEx.
- **Improved Compliance & Auditability:** All bot activities are tracked and thus offer a full audit trail that is helpful in meeting regulatory compliance standards, such as HIPAA, GDPR, etc.
- **Improved Employee Morale:** Employees can now focus on creative, value-added tasks requiring judgment and human interaction instead of merely dealing with dull and soul-crushing work.
- **Faster Digital Transformation:** RPA is a non-invasive technology, meaning it can automate processes without necessarily replacing the underlying legacy systems. This speeds up the wheel of DX.

Are you ready to take your automation skills to the next level? Learn how to handle errors and create unbreakable bots with our guide to [RPA Challenges and Solutions!](#)

Real Time Examples for Robotic Process Automation for Learners

Following are some real-time examples of Robotic Process Automation, which will be ideal for learners to understand the practical application of RPA:

Automated Invoice Processing (Finance/Accounting):

Employees are opening email attachments of invoices and downloading the PDF, extracting important information such as an invoice number, amount, and vendor name, into an ERP system like SAP or Oracle. Slow and prone to errors.

- **The RPA Solution:** There is an invoicing e-mail inbox monitored by an RPA bot. Upon receipt of an e-mail, it:
 - **Downloads** an attached invoice.
 - Has built-in **Optical Character Recognition**, which is able to read and extract structured and unstructured data fields.
 - **Logs** into the ERP system.
 - **Enters** the extracted data into the correct fields, validates against a master vendor list.
 - **Sends** a confirmation email.
- **Benefit:** Saves hours daily, ensures 100% accuracy of data, and speeds up the payment cycles.

Customer Onboarding and Verification – Banking/Insurance

Most new customer applications require entering data into several different systems and verification of applicant status on different government or industry portals for KYC or fraud checks.

- **RPA Solution:** Upon receipt of a new online application, a bot is initiated. It automatically:
 - **Extracts application details:** *name, ID, and address.*

- **Calls external public or secure APIs/websites**, like credit bureau or government ID verification sites.
- **Enters the required data** to perform checks.
- **Captures the resulting validation screenshots** or files.
- **Updates the customer record status** in the bank's CRM system, for example, Salesforce.
- **Benefit:** Dramatically reduces the time it takes for verification from days down to minutes, improving customer experience and compliance.

IT Service Desk Triage and Password Reset:

Service desk agents spend a lot of time processing simple, high-volume requests related to password resets, account unlocks, or the status of a particular server.

- **RPA Solution:** A bot is monitoring the ticketing system, for instance, ServiceNow. In case of a "Password Reset" request:
 - The bot verifies the user's identity with a secure, set process (e.g., checking a database).
 - It logs into the Active Directory or identity management system.
 - Resets the password and sends a temporary one to the user's alternate contact method.
 - Closes the ticket with an automated resolution note.
- **Benefit:** Frees human agents to focus on more complex, higher-value technical issues and immediately serves the end-user.

Want to build a bot yourself? Get inspired to start automating with our list of [RPA Project Ideas](#).

FAQs About Robotic Process Automation Tutorial

1.Can I learn RPA on my own?

Yes, A great amount of free online tutorials, and UiPath's Community Edition make self-learning very accessible. RPA is considered a low-code/no-code field; with dedication and practice. However, you can quickly develop your skills even without a strong programming background through RPA online courses with hands-on exposure.

2.What is Robotic Process Automation?

RPA uses software robots (bots) to emulate human interactions with a digital system. It automates high-volume, repetitive, rule-based tasks such as data entry, form filling, and extraction by improving speed and accuracy without changing the underlying systems.

3.What is the RPA salary?

The [RPA Developer's salary in India](#) is highly competitive, especially by location, experience, and specific skills. In India, it can range widely, generally from ₹6.5 Lakhs for mid-level to ₹16-30+ Lakhs for senior/lead roles.

4.Is AI better than RPA?

No, they complement one another. RPA is the “hands” that follow strict rules for repetitive tasks, while AI is the “brain” handling complex decisions, unstructured data, and learning. Combining them creates Intelligent Automation, or IPA, which is much more powerful.

5.Which RPA tool is best?

There is no single “best” tool, but UiPath is often considered as the best for beginners due to its free Community Edition, extensive learning resources, and its market-leading position. Other top tools include Automation Anywhere and Microsoft Power Automate.

6.What are the 4 D's of automation?

The 4 D's are the categories of work that robots are best suited to take over: Dull (repetitive), Dirty (unpleasant/hazardous environments), Dangerous (risky tasks), and Dear (expensive tasks that yield cost savings when automated).

7.Is RPA a BPO job?

RPA is not a BPO job; rather, BPO is a major user of RPA. RPA is the technology used to automate processes that have usually been outsourced to BPO firms. The learning of

RPA will result in high-value IT roles-supporting BPO services as a developer or architect.

8.What are three types of RPA?

The three important types of RPA, based on the mode of robot execution, are as follows: Attended RPA, which works on a desktop with a human user; Unattended RPA, which runs independently on a server with schedules or events as triggers; and Hybrid RPA, which does both.

9.What is the salary of RPA developer in TCS?

Salaries differ greatly with respect to experience and location. However, generally, [**the salary of an RPA Developer in TCS**](#) would be around ₹6.5-₹12 Lakhs per annum for entry- to mid-level positions, on average, which increases with seniority.

10.What is Elon Musk's robotics company?

The main robotics effort from Elon Musk is inside Tesla, Inc., where the company is developing the Optimus, also known as the Tesla Bot, a general-purpose, bi-pedal humanoid robot capable of performing both factory and other general-purpose work.

Conclusion

We reached the end of our beginner RPA journey! You installed UiPath Studio and created your first working bot for Web Data Extraction. Now, you have learned that Robotic Process Automation is an accessible, powerful technology driving efficiency and career growth.Practice is the key to mastery. Don't stop here! Get ready for the automation of complex processes and a highly recognized certification as an RPA professional. Enroll in our comprehensive [**Robotic Process Automation Course in Chennai**](#) today to unlock advanced skills and career opportunities!