



Students will code 24 Software Robotics Projects using the Web Automation, Web Recording, Excel, Advanced Email Automation, PDF, Mobile Automation, Robot Troubleshooting, Orchestrator and Scheduling, AI & ML, OTP Authentication and App Integration Applications by participating in the following activities:

1

#### Web Recording

Student will learn how to create Robot to automate any website using **Web Recording method.**

- ✓ The concept of recording
- ✓ Different recording methods
- ✓ OCR engines
- ✓ H/W: Create a Robot to automate Microsoft word using Desktop recording.



7A

#### AI and ML

Student will learn how to develop Robot to analyze the sentiments of any sentences using **Sentiment Analysis Robot.**

- ✓ Introduction about AI center
- ✓ How to create ML skill
- ✓ Sentiment Analysis ML skill



2

#### Advance Level Selectors

Student will learn how to create Robot to handle advance level selectors using **RPA Challenge Robot.**

- ✓ Excel Application Scope Activity
- ✓ Read Range Activity
- ✓ Open Browser Activity
- ✓ Type Into Activity
- ✓ Find Element Activity
- ✓ For Each Row in Data Table Activity
- ✓ Anchor Base Activity
- ✓ Selector handling
- ✓ H/W: Create an RPA Challenge Robot to fill the employee details in RPA Challenge website and compare the timings.



7B

#### AI and ML

Student will learn how to developed Robot to find the summary of any paragraph using **Paragraph Summary Robot.**

- ✓ How to create Text Summarization ML skill
- ✓ How to import the required packages



3

#### PDF Automation

Student will learn how to create Robot to Automate the PDF application using **PDF Automation Robot.**

- ✓ Read PDF text.
- ✓ Write text file.
- ✓ Export PDF page as image
- ✓ Extract images from PDF
- ✓ Extract PDF range.
- ✓ Get PDF page count.
- ✓ Join PDF files.
- ✓ H/W: Create a robot to extract information from PDF and save it in text file.



7C

#### AI and ML

Student will learn how to develop a Robot to find the answer of any paragraph based question using **Question and Answer Robot.**

- ✓ How to import the required packages
- ✓ How to create Question and Answer ML skill
- ✓ How to apply ML Skill on user entered paragraph-based question



4

#### Email Automation

Student will learn how to create Robot, 1) To Send email with text body with or without attachments 2) To Send email with HTML body with or without attachments 3) To Send bulk email 4) To extract information from email using **Email Automation Robot.**

- ✓ Read Text File Activity
- ✓ Send SMTP Mail
- ✓ Messages Activity
- ✓ Get IMAP Mail
- ✓ Messages Activity
- ✓ Write Range Activity
- ✓ Build Data Table Activity
- ✓ Add Data Row Activity
- ✓ Assign Activity
- ✓ For Each Activity
- ✓ H/W: Create a Robot to extract an email body from Email.



7D

#### AI and ML

Student will learn how to develop a Robot to detect any object in given images using **Object Detection Robot Development.**

- ✓ How to import the required packages
- ✓ How to create Object Detection ML skill
- ✓ How to apply ML Skill on given images
- ✓ How to decode the images

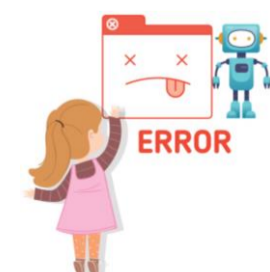


5

#### Troubleshooting

Student will learn how to Develop a Robot to troubleshoot the runtime exception 1) Handle the exception using try-catch 2) Handle the business level exception 3) Handle the exception using Global-Handler using **Exception Handling Robot.**

- ✓ Close Browser Activity
- ✓ Maximize Window Activity
- ✓ Get Password
- ✓ Input Dialog Activity
- ✓ Type Into Activity
- ✓ Click Activity
- ✓ Try Catch Activity
- ✓ For Each Row in Data Table Activity
- ✓ If Activity
- ✓ Log Message Activity
- ✓ Throw Activity
- ✓ Write Cell Activity
- ✓ Global Handler
- ✓ Open Application Activity
- ✓ Close Application Activity
- ✓ H/W: Create a robot to throw business level exception if Profit Gained is negative in any business.



8

#### Robot Scheduling

Student will learn how to schedule a Robot in Orchestrator using **Robot Scheduling in Orchestrator Robot.**

- ✓ Introduction about Orchestrator
- ✓ How to set up the orchestrator
- ✓ UiPath Assistant
- ✓ Robot scheduling in orchestrator
- ✓ H/W: Create a Robot to display system date and time automatically and schedule the same in Orchestrator.



6

#### Mobile Automation

Student will learn how to create Robot to automate mobile phones for Flipkart website using **Flipkart Mobile Automation Robot.**

- ✓ Connection with "browserstack.com"
- ✓ Adding mobile device using Mobile Device Manager
- ✓ Adding application using Mobile Device Manager
- ✓ Mobile Device Connection Activity
- ✓ Swipe Activity
- ✓ Tap Activity
- ✓ Set Text Activity
- ✓ Get Text Activity
- ✓ Message Box



9

#### UiPath Apps

Student will learn how to develop a Robot to create Apps in UiPath using **OTP Robot Using UiPath App.**

- ✓ Introduction about UiPath Apps
- ✓ App creation
- ✓ App integration
- ✓ Matches
- ✓ Use of regular expression
- ✓ H/W: Create a robot to insert student information through UiPath Apps in database

