MyAutomationTime

UiPath & RPA Interview Q&A Handbook

250 practical questions and beginner-friendly answers, organized for quick interview preparation.

A quick-reference handbook covering UiPath, RPA fundamentals, Orchestrator, REFramework, selectors, Document Understanding, AI Center, APIs, Agentic Automation, and real interview scenarios.

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REFramework • Orchestrator • Queues • Document Understanding • AI Center • Agentic Automation

Introduction

This handbook brings together the most commonly asked UiPath and RPA interview questions into one consolidated, easy-to-scan reference. Each answer is written in plain language, with short steps used wherever a process is involved, so you can review a topic quickly the night before an interview or use it as an ongoing study guide.

Topics are grouped into 21 chapters, moving from core concepts such as REFramework, Exception Handling, and Orchestrator, through UI automation, data handling, Document Understanding, AI Center, APIs, and Agentic Automation, and finishing with real scenario-based questions used in technical interviews.

Content Summary

250	21	21	100%
Questions covered	Chapters	Topic areas	Beginner-friendly

Approach: source interview material covering these 21 topic areas was reviewed as a combined set, overlapping and duplicate questions were consolidated, and each answer below was written to be short, accurate, and easy for a beginner to follow. Project-specific questions (for example, exact transaction volumes or custom activities built) are marked as such, since the true answer depends on your own experience.

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Plus a Quick Reference section at the end of the handbook.

Chapter 1 — REFramework

Q1–Q18

What is REFramework?

ANSWER

REFramework (Robotic Enterprise Framework) is a reusable UiPath template for reliable transaction-based automation. It provides initialization, transaction processing, exception handling, retry logic, logging, and clean shutdown.

Why is REFramework considered a state machine?

ANSWER

It controls execution through defined states and transitions. Each state performs a specific responsibility and moves to another state based on the result.

What are the four states of REFramework?

ANSWER

The common states are Init, Get Transaction Data, Process Transaction, and End Process.

How does REFramework handle System Exception vs Business Exception?

ANSWER

A System Exception normally indicates a technical or application problem and can be retried. A Business Exception means the transaction violates a business rule, so retrying usually does not fix it.

What is the purpose of SetTransactionStatus.xaml?

ANSWER

It centralizes the logic used to mark a transaction as successful or failed and to apply the appropriate exception information.

How does Retry Number work in REFramework?

ANSWER

RetryNumber tracks how many times the current transaction has been retried. REFramework compares it with the configured maximum retry count before deciding whether to retry or move on.

How do you restart a failed transaction in REFramework?

ANSWER

If the failure is retryable, REFramework can reset the transaction flow and process the same item again until the retry limit is reached.

What modifications have you made to REFramework in your projects?

ANSWER

Typical project-specific changes include replacing queue transactions with DataRows, adding custom business rules, changing configuration loading, adding validation, and adding application-specific recovery or reporting.

How do you process multiple queue items in REFramework?

ANSWER

1. Get Transaction Data retrieves the next queue item.
2. Process Transaction handles it.
3. Set Transaction Status updates the result.
4. Repeat until no transaction remains.

How do you process multiple transaction types in a single REFramework?

ANSWER

Add a transaction-type field and route the item to the correct processing workflow. Keep common initialization, logging, exception handling, and cleanup shared.

Can REFramework work without queues?

ANSWER

Yes. REFramework can be adapted to use DataTables, DataRows, files, APIs, or other transaction sources instead of Orchestrator queues.

How do you implement parallel processing in REFramework?

ANSWER

Split the workload into independent transactions and run multiple workers or jobs against separate partitions. Avoid shared-state conflicts and ensure each transaction has a unique ownership rule.

How do you skip a transaction and move to the next one?

ANSWER

Classify the item as non-processable, log the reason, set the appropriate transaction status if using a queue, and return control to Get Transaction Data.

What is the role of Config.xlsx in REFramework?

ANSWER

It stores environment-specific settings such as URLs, paths, credentials or asset names, retry limits, and other configuration values so they do not need to be hard-coded.

How do you dynamically load configuration values?

ANSWER

Read the configuration sheet into a DataTable or dictionary during initialization and retrieve values by key. This allows the same workflow to use different settings in different environments.

How do you add custom states to REFramework?

ANSWER

Create the new state, define its entry and exit logic, add the required transitions, and update the state machine so the new state is reached only under the intended conditions.

What are the drawbacks of REFramework?

ANSWER

It adds structure and complexity. For a very small, linear automation, the framework can require more setup and maintenance than the actual business logic.

When would you avoid using REFramework?

ANSWER

Avoid it when the process is simple, short, non-transactional, and has little exception or retry complexity. A sequence or small flowchart may be easier to maintain.

Chapter 2 — Exception Handling

Q19–Q27

What is Exception Handling?

ANSWER

Exception handling is the mechanism used to detect and manage runtime errors so an automation can recover, report the problem, or stop safely.

Difference between Throw and Rethrow?

ANSWER

Throw creates and raises an exception. Rethrow sends the current exception back up the call stack while preserving the original exception context.

When would you use a Finally block?

ANSWER

Use Finally for cleanup that should happen whether the Try block succeeds or fails, such as closing applications or releasing resources.

What is a Global Exception Handler?

ANSWER

It is a project-level handler used as a last line of defense for unhandled exceptions. It can log the error and decide whether execution should continue or stop.

How do you handle application crashes?

ANSWER

Detect the application failure, close or kill the affected process if safe, reopen the application, restore the required state, and retry the transaction when appropriate.

How do you handle selector failures?

ANSWER

Validate the target, inspect the selector, replace unstable attributes with reliable ones, use variables or wildcards where appropriate, and add suitable waits or recovery logic.

What are common exception types in UiPath?

ANSWER

Common categories include BusinessRuleException, system or application exceptions, timeout-related exceptions, selector or element-not-found errors, and workflow or invocation errors.

What happens if the Init state fails in REFramework?

ANSWER

Initialization is critical. If it cannot complete, the framework normally cannot safely process transactions and moves to the end or failure path rather than processing bad data.

Can a Business Rule Exception trigger a queue retry?

ANSWER

Normally, business exceptions are not retried because the same business condition is expected to fail again. Queue retry behavior should be designed so only appropriate technical failures are retried.

Chapter 3 — Orchestrator

Q28–Q49

What is UiPath Orchestrator?

ANSWER

Orchestrator is UiPath's central platform for deploying, scheduling, monitoring, and managing automations, robots, queues, assets, and related resources.

What is a Robot in UiPath?

ANSWER

A Robot is the execution identity or runtime used to run UiPath automations on a machine or environment.

What is a Job in Orchestrator?

ANSWER

A Job is one execution instance of a published process.

What is an Asset in UiPath?

ANSWER

An Asset is centrally managed information that automations can use, such as configuration values or credentials.

What is a Queue in UiPath?

ANSWER

A Queue is a centralized work container that stores transaction items for one or more robots to process.

Difference between Process, Job, Package and Robot?

ANSWER

1. Package: the published automation files.
2. Process: the Orchestrator configuration pointing to a package version.
3. Job: an actual execution of that process.
4. Robot: the execution identity or runtime that runs the job.

Difference between Modern Folder and Classic Folder?

ANSWER

Modern folders use current Orchestrator concepts such as user, machine, and robot associations with dynamic allocation. Classic folders use the older environment-and-robot model and are mainly relevant to legacy setups.

What is the difference between Personal Workspace and Shared Folder?

ANSWER

A Personal Workspace is intended for an individual user's work and resources. A Shared Folder is designed for resources that need to be accessed and managed by multiple users or teams.

How do you deploy a process to Orchestrator?

ANSWER

1. Publish the project from Studio.
2. Create or update the Orchestrator process.
3. Select the required package version.
4. Configure the machine and runtime.
5. Run or schedule the process.

What is High Density Robot execution?

ANSWER

High-density execution allows multiple unattended executions to run on the same Windows Server environment, subject to licensing, machine capacity, and isolation requirements.

How does Robot authentication work in Modern Folders?

ANSWER

Modern folders associate users, machines, and runtimes rather than relying only on the older explicit robot-object model. The machine connection and user or runtime permissions determine execution access.

What is Machine Runtime?

ANSWER

A Machine Runtime is an execution capacity assigned to a machine. It determines how many robot runtimes can be supported concurrently according to the licensed runtime type.

What happens when Machine Runtime is exhausted?

ANSWER

A new job cannot obtain the required runtime and remains queued, pending, or fails to start until runtime capacity becomes available, depending on the configuration.

Difference between Floating Robot and Standard Robot?

ANSWER

A floating robot or runtime can be associated dynamically with a user or machine when needed. A standard robot is tied more directly to a specific machine or user configuration.

What are Personal Workspaces?

ANSWER

Personal Workspaces are individual work areas in Orchestrator where users can manage their own automation resources without putting everything in a shared folder.

How does Orchestrator manage package versions?

ANSWER

Published packages are versioned. A process can be configured to use a specific package version, allowing controlled deployment and rollback.

What is a Long Running Workflow?

ANSWER

A Long Running Workflow is designed for processes that may pause for hours or days and later resume, often around human actions, approvals, or external events.

What is Persistence in UiPath?

ANSWER

Persistence allows a workflow to save its state and suspend execution so it can resume later without restarting the whole process.

How does Action Center integrate with Persistence?

ANSWER

A workflow can pause for a human task in Action Center, persist its state, and resume after the user completes the required action.

What happens when a suspended job resumes?

ANSWER

The persisted workflow state is restored and execution continues from the point where it was suspended, subject to the workflow's state and external dependencies.

What happens if Orchestrator is unavailable?

ANSWER

Central operations such as starting, scheduling, queue access, logging, or status reporting can be affected. The exact behavior depends on the process and whether Orchestrator resources are needed at that moment.

Can an unattended robot work without Orchestrator?

ANSWER

An unattended robot is designed for centrally managed execution, so Orchestrator is normally required for the enterprise unattended operating model. Some local execution scenarios exist, but they are not equivalent to full Orchestrator-managed unattended execution.

Chapter 4 — Queues

Q50–Q68

What is Queue Item Reference?

ANSWER

It is the business reference used to identify a queue item. A good reference makes the transaction easy to trace and report.

What is Unique Reference in a Queue?

ANSWER

A unique reference is a business identifier configured so duplicate references can be prevented or detected according to the queue settings.

What is Auto Retry in a Queue?

ANSWER

Auto Retry allows eligible failed queue items to be automatically retried based on the queue's retry configuration.

What is Queue Transaction Analytics?

ANSWER

It is the monitoring and reporting of queue transaction volumes, statuses, processing times, failures, and related operational metrics.

What happens when a robot crashes during queue processing?

ANSWER

The transaction may remain in a non-success state until Orchestrator determines its final status or retry behavior. Proper transaction handling and retry configuration are important for recovery.

What is Deferred Queue Processing?

ANSWER

Deferred processing means a queue item is assigned a future processing time instead of being immediately eligible.

How do you design a queue for high-volume processing?

ANSWER

Use small independent transactions, meaningful references, idempotent processing, appropriate retry rules, bulk loading where useful, and enough robot or runtime capacity.

What is the difference between Queue Reference and Specific Content?

ANSWER

Reference identifies the business transaction. Specific Content stores the transaction's actual business data, usually as key-value fields.

Can two queue items have the same Reference?

ANSWER

They can only be added as duplicates if the queue configuration permits duplicate references. If uniqueness is enabled, duplicate references are rejected.

How do you prevent duplicate transactions?

ANSWER

Use a stable business key as the queue reference, enable uniqueness where appropriate, and make the downstream process idempotent.

What is Queue SLA monitoring?

ANSWER

It tracks whether queue items are being processed within expected service-time targets and highlights aging or overdue work.

How do you reprocess failed queue items?

ANSWER

Review the failure reason, correct the root cause, then retry or re-add eligible items according to the queue's retry and operational policy.

What are the queue statuses?

ANSWER

Common transaction states include New, In Progress, Successful, Failed, Abandoned, Retried, and Deferred, depending on the Orchestrator version and workflow.

How do you prioritize queue transactions?

ANSWER

Use queue priority mechanisms where available, or separate work into appropriately designed queues and processing rules.

How do you process dependent queue items?

ANSWER

Track the dependency key and ensure the prerequisite transaction completes before the dependent item is released or processed.

How do you archive old queue data?

ANSWER

Use an operational retention or archive strategy supported by the Orchestrator environment and reporting requirements, rather than keeping unlimited historical transaction data in active operational views.

What are Queue SLA and Queue Analytics?

ANSWER

SLA focuses on whether work is completed within expected time limits. Analytics focuses on operational measures such as volume, processing time, success rate, and failures.

How do Queue Retries work?

ANSWER

When an eligible transaction fails, Orchestrator can create another processing attempt according to the configured retry policy. The retry count is tracked separately from the business processing result.

Can multiple robots process the same queue item?

ANSWER

No. A queue item is acquired by one robot at a time. Multiple robots can process different items from the same queue concurrently.

Chapter 5 — Selectors & UI Automation

Q69–Q84

What is a Selector?

ANSWER

A selector is the structured description UiPath uses to identify a UI element.

Difference between Full Selector and Partial Selector?

ANSWER

A full selector contains the complete hierarchy needed to identify the target. A partial selector relies on a container such as an application or browser scope and describes the target inside it.

What are Dynamic Selectors?

ANSWER

Dynamic selectors use variables, wildcards, or changing values so the selector can identify elements whose attributes vary at runtime.

How do you handle changing IDs in selectors?

ANSWER

Remove or replace unstable IDs with stable attributes, variables, anchors, or wildcards. Prefer attributes that remain consistent across runs.

What are Wildcards in Selectors?

ANSWER

The * wildcard represents zero or more characters and ? represents a single character. They are useful when an attribute contains predictable but changing text.

Difference between Anchor Base and Find Element?

ANSWER

Anchor-based targeting identifies an element relative to a stable nearby element. Find Element locates a target element and returns or uses its UI element reference for later actions.

What is Computer Vision and when do you use it?

ANSWER

Computer Vision uses visual understanding to identify screen elements when traditional UI selectors are unavailable or unreliable. It is useful for remote, virtualized, or difficult applications.

What is a Fuzzy Selector?

ANSWER

A fuzzy selector allows UiPath to find a target even when some target attributes are not an exact match, making it more tolerant of UI changes.

What is a Semantic Selector?

ANSWER

A semantic selector identifies a target using its meaning or human-understandable properties rather than depending only on low-level technical attributes.

Difference between Strict Selector and Fuzzy Selector?

ANSWER

A strict selector expects a close structural or attribute match. A fuzzy selector allows controlled variation and is useful when UI attributes are not stable.

What is Unified Target?

ANSWER

Unified Target is UiPath's modern targeting approach that brings together different targeting technologies so an activity can identify the intended UI element more reliably.

What is Target Anchoring?

ANSWER

Target anchoring means locating an element using another stable element as a reference point.

What is the Application/Browser activity?

ANSWER

It provides the application or browser context used by UI automation activities and helps UiPath identify and interact with elements inside that application.

How do you automate Citrix applications?

ANSWER

When normal selectors are unavailable, use Citrix or remote-app techniques such as image-based automation, Computer Vision, OCR, keyboard shortcuts, and stable screen anchors.

Why do selectors fail even though the UI element is visible?

ANSWER

The element may not be ready, may be inside a different application context or frame, may have changed attributes, or may be visually present but not exposed through the same UI technology.

What happens if a selector matches multiple elements?

ANSWER

UiPath may not know which element is intended. Refine the selector with more reliable attributes, an anchor, or a narrower container.

Chapter 6 — Computer Vision

Q85–Q89

What is Computer Vision?

ANSWER

Computer Vision enables software to understand and interact with visual elements on a screen using image or visual recognition techniques.

How does Computer Vision differ from OCR?

ANSWER

Computer Vision focuses on understanding and locating visual UI elements. OCR focuses mainly on converting visible text in an image into machine-readable text.

What are the limitations of Computer Vision?

ANSWER

Accuracy can be affected by screen resolution, scaling, visual similarity, latency, overlays, remote-session quality, and major UI changes.

When would you choose CV over traditional selectors?

ANSWER

Choose CV when the application does not expose reliable selectors, such as some Citrix, remote desktop, virtualized, or image-heavy applications.

How do you improve CV accuracy?

ANSWER

Use stable screen conditions, consistent scaling, clear targets, appropriate anchors, controlled timing, and validation after important actions.

Chapter 7 — DataTables, LINQ & VB.NET

Q90–Q105

Difference between Clone() and Copy()?

ANSWER

Clone copies the DataTable structure and schema without the rows. Copy creates a new DataTable containing both the structure and the data.

How do you remove duplicate rows from a DataTable?

ANSWER

Use LINQ with Distinct when the row comparison is suitable, or group rows by the required business columns and select the first row from each group.

How do you merge two DataTables?

ANSWER

Use Merge when the schemas are compatible, or create a new table and import rows after aligning the required columns.

How do you filter a DataTable using LINQ?

ANSWER

Convert it with AsEnumerable(), apply Where with the required condition, and convert the result back to a DataTable when needed.

Difference between AsEnumerable() and Rows?

ANSWER

Rows gives the DataRowCollection. AsEnumerable() exposes the rows as an IEnumerable(Of DataRow), which makes LINQ operations convenient.

How do you convert a DataTable to a Dictionary?

ANSWER

Select a unique key column and a value column, then use ToDictionary. The key must be unique or duplicates must be handled first.

Explain Dictionary usage in UiPath.

ANSWER

A Dictionary stores key-value pairs for fast lookup. It is useful for configuration, mappings, IDs, status values, and other data accessed by a known key.

Difference between Dictionary and DataTable?

ANSWER

A DataTable is better for tabular data with rows and columns. A Dictionary is better for direct lookup using a key.

What is a Lambda Expression?

ANSWER

A lambda is a short function expression written inline, often used with LINQ. Example: row => row("Status").ToString = "Success"

How do you use LINQ in UiPath?

ANSWER

Use LINQ expressions in Assign activities or Invoke Code where appropriate, commonly with DataTable.AsEnumerable() and methods such as Where, Select, GroupBy, OrderBy, and ToDictionary.

What is String.Join?

ANSWER

String.Join combines multiple strings into one string using a separator. Example: String.Join(",", listOfNames)

What is String.Format?

ANSWER

String.Format inserts values into placeholders in a formatted string. Example: String.Format("Invoice {0} is {1}", invoiceNo, status)

How do you convert JSON to a DataTable?

ANSWER

Deserialize the JSON into an appropriate object or JArray structure, then map the required properties into DataRows, or use a supported conversion approach when the JSON is tabular.

How do you convert a DataTable to JSON?

ANSWER

Convert the rows and columns into serializable objects and serialize them to JSON using a JSON serialization library or activity.

How do you parse nested JSON?

ANSWER

Deserialize the JSON, navigate through JObject and JArray properties, and extract nested values by property name or array index.

Difference between JObject, JArray, and JSON String?

ANSWER

A JSON String is the raw serialized text. JObject represents a JSON object with named properties. JArray represents a JSON array containing ordered elements.

Chapter 8 — Excel Automation

Q106–Q111

Difference between Workbook activities and Excel activities?

ANSWER

Workbook activities can work with Excel files without requiring the Excel desktop application. Excel activities interact with Excel and provide richer Excel-specific capabilities.

When do you use Excel Process Scope?

ANSWER

Use it when you want to control the Excel application lifecycle and group Excel activities under a managed Excel process context.

How do you handle large Excel files?

ANSWER

Read only required columns or ranges, avoid unnecessary UI operations, use Workbook activities where suitable, process data in chunks, and prefer DataTable or LINQ operations over cell-by-cell automation.

How do you refresh Pivot Tables using UiPath?

ANSWER

Open the workbook in an Excel context and use the appropriate Excel refresh capability, or invoke a macro when the workbook requires a VBA-specific refresh.

How do you execute VBA macros from UiPath?

ANSWER

Use the Excel macro execution activity available in the project or package version, provide the workbook and macro name, and ensure macro or security settings allow execution.

How do you update formulas dynamically?

ANSWER

Write the formula text into the required cells using Excel or Workbook activities, preferably by building the formula from variables rather than hard-coding changing values.

Chapter 9 — Document Understanding

Q112–Q129

Explain the complete Document Understanding workflow.

ANSWER

1. Classify documents.
2. Digitize or OCR them.
3. Extract fields.
4. Validate low-confidence data.
5. Export or process the structured result.

What is Taxonomy Manager?

ANSWER

Taxonomy Manager defines the document types, fields, and groups that the extraction process is expected to identify.

What is Validation Station?

ANSWER

Validation Station provides a human validation step for extracted data that requires review or correction.

Difference between Form Extractor and ML Extractor?

ANSWER

Form Extractor is suitable for structured, template-based documents. ML Extractor is designed for more variable documents and uses trained machine-learning models.

How do you improve extraction accuracy?

ANSWER

Improve document quality, choose the right classifier or extractor, configure fields correctly, validate low-confidence results, and retrain or customize models when the project supports it.

What confidence threshold do you use in projects?

ANSWER

The threshold should be based on business risk and validation results. A high-risk field should use a stricter threshold and human validation rather than one universal number.

What are the types of Classifiers in UiPath Document Understanding?

ANSWER

Classifiers are the components used to determine document type before extraction. The exact available classifier list depends on the UiPath package or platform version.

What are the types of Classifier Trainers in UiPath Document Understanding?

ANSWER

Classifier Trainers are used to train classification models from labeled document examples. The exact trainer options depend on the UiPath version and installed Document Understanding packages.

What are the Extractors in UiPath Document Understanding?

ANSWER

Extractors are components that read classified documents and return structured field data. Examples include rule or template-based and machine-learning-based extraction approaches.

What is the Machine Learning Extractor Trainer activity?

ANSWER

It is used to train or improve an ML-based extractor using labeled document data so the model can learn how to identify required fields.

What is GenAI Document Understanding in UiPath?

ANSWER

GenAI Document Understanding uses generative AI capabilities to understand and extract information from documents, especially where traditional fixed extraction rules may be difficult.

Which activities enable GenAI Document Understanding?

ANSWER

The exact activity names depend on the UiPath package or version used. GenAI DU is best described conceptually rather than tied to one fixed activity list.

Do you need Taxonomy or AI Center for GenAI Document Understanding?

ANSWER

There is no single universal requirement. The exact dependencies depend on the GenAI DU capability and UiPath version being used.

How do you boost accuracy when some fields are missed?

ANSWER

Check OCR quality, field definitions, document classification, extraction configuration, and confidence thresholds. Add human validation or model training for recurring difficult cases.

Can GenAI be used in existing Document Understanding projects?

ANSWER

Yes, where the selected UiPath capabilities and project version support it. It can be introduced for difficult fields or document types while retaining existing DU components.

What is IXP (Intelligent Xtraction and Processing)?

ANSWER

IXP is an intelligent document-processing approach focused on extracting useful information from documents and driving downstream processing. Exact capabilities depend on the UiPath platform version.

How does IXP work?

ANSWER

1. Receive the document.
2. Understand and classify it.
3. Extract information.
4. Validate the result.
5. Use the structured result in the business process.

What are the advantages of IXP?

ANSWER

It can reduce manual document handling, improve extraction-driven automation, and connect document understanding with downstream business processing.

Chapter 10 — AI Center

Q130–Q150

What is UiPath AI Center?

ANSWER

UiPath AI Center is the platform area used to manage, train, evaluate, deploy, and consume machine-learning models for automation use cases.

What are the key features of AI Center?

ANSWER

Key capabilities include datasets, ML packages, training and evaluation pipelines, ML Skills, model deployment, and integration with automation workflows.

What are the types of ML models in AI Center?

ANSWER

AI Center supports different machine-learning solutions depending on the package or model. Models may be trainable or non-trainable and can support tasks such as classification, extraction, prediction, or scoring.

What are common use cases of AI Center?

ANSWER

Examples include document classification and extraction, prediction, text processing, image analysis, and custom business-specific ML models.

What are the prebuilt models in UiPath AI Center?

ANSWER

Prebuilt models are UiPath-provided or ready-to-use ML capabilities that can be consumed without building the model from scratch. Availability depends on the platform version.

What are the main components of AI Center?

ANSWER

The main building blocks are ML Packages, Datasets, Pipelines, ML Skills, models, evaluation, and project or access management. Exact UI labels can vary by version.

Explain the difference between ML Package and ML Skill.

ANSWER

An ML Package contains the model code and its metadata. An ML Skill is a deployed, callable instance of a model that an automation can use for prediction.

What is the purpose of Datasets?

ANSWER

Datasets store the data used to train, evaluate, and support machine-learning models.

What does "Make Dataset Public" do?

ANSWER

It makes the dataset available beyond its normal private scope according to the configured access model. This should be used carefully because it changes who can access the data.

What pipelines exist in AI Center and when are they used?

ANSWER

Training pipelines train models. Evaluation pipelines measure model performance against evaluation data. Other pipeline capabilities depend on the model, package, and platform version.

How do access roles work in AI Center?

ANSWER

Roles and permissions control who can view, create, manage, train, deploy, and consume AI Center resources.

How do you view or debug model performance?

ANSWER

Use evaluation results, logs, pipeline outputs, model metrics, and representative test data to identify weak fields, classes, or predictions.

How does RPA connect with AI Center trained models?

ANSWER

Deploy the trained model as an ML Skill and call it from UiPath using the appropriate ML Skill activity or API connection.

How do trainable models differ from non-trainable models?

ANSWER

Trainable models can be improved using project-specific training data. Non-trainable models are consumed as provided and are not trained through the same project-specific training flow.

What is the purpose of Evaluation Pipelines?

ANSWER

They measure how well a model performs against known evaluation data before or after deployment.

How does JSON output help in RPA integration?

ANSWER

JSON provides a structured format that UiPath workflows can parse into fields, tables, or objects for downstream decisions.

Why would you make an ML Skill public in UiPath AI Center?

ANSWER

Public access can allow external systems or users to consume the skill when the architecture requires it. It should only be done when security and access requirements allow it.

What credentials are required to connect to a public AI Center model?

ANSWER

The exact credentials depend on the AI Center deployment and connection method. Controlled access matters more than any single universal credential type.

What are the two connection modes in the ML Skill activity?

ANSWER

The exact connection modes depend on the UiPath package or version. The activity can support connecting through managed AI Center access or an external, API-oriented connection in supported configurations.

How can you revoke external access to a public ML Skill?

ANSWER

Remove or disable the public or external access configuration and rotate or revoke any associated credentials or access tokens as required.

What format is returned by ML Skill APIs?

ANSWER

ML Skill APIs commonly return structured JSON containing the model's prediction or result and related metadata.

Chapter 11 — APIs & Integration

Q151–Q165

What does REST API mean?

ANSWER

REST API means Representational State Transfer Application Programming Interface. It lets applications communicate through HTTP requests and responses.

How do you consume REST APIs in UiPath?

ANSWER

1. Configure the endpoint, method, headers, and authentication.
2. Send the request using HTTP or API activities.
3. Deserialize the response.
4. Process the result.

Difference between Deserialize JSON and Deserialize JSON Array?

ANSWER

Deserialize JSON is used when the root JSON structure is an object. Deserialize JSON Array is used when the root is an array or list.

How do you handle API authentication?

ANSWER

Use the authentication method required by the API, such as API key, Basic authentication, OAuth2, or Bearer token, and store secrets securely.

What is OAuth2?

ANSWER

OAuth 2.0 is an authorization framework that allows an application to obtain limited access to a resource without directly handling the user's password.

What is the OAuth 2.0 Authorization Code Flow?

ANSWER

The user authenticates with the authorization server, the application receives an authorization code, and the backend exchanges that code for an access token.

Difference between Bearer Token and API Key?

ANSWER

A Bearer token is typically presented in an Authorization header and often represents delegated authorization. An API key is a static identifier or secret used by an API to identify or authorize a client.

What is a JWT Token?

ANSWER

JWT is a compact token format containing claims that can be digitally signed so the receiving system can validate the token and its contents.

How do you refresh expired tokens?

ANSWER

Use the API's refresh-token flow when supported, obtain a new access token, update the stored token, and retry the request when appropriate.

What is pagination in APIs?

ANSWER

Pagination splits a large result set into smaller pages so the client retrieves data in multiple requests.

How do you process API rate limits?

ANSWER

Read the API's rate-limit response, wait according to Retry-After or the documented policy, use controlled retries with backoff, and avoid sending unnecessary requests.

What is a Webhook?

ANSWER

A webhook is an HTTP callback sent automatically from one system to another when a configured event occurs.

Difference between SOAP and REST?

ANSWER

SOAP is a protocol with a formal XML-based messaging model. REST is an architectural style commonly using HTTP methods and formats such as JSON.

How do you upload files through APIs?

ANSWER

Use the API's required multipart form-data or binary upload format, set the required headers, provide the file content, and handle the response.

How do you handle API failures?

ANSWER

Check status codes, log the response, retry only transient failures, handle authentication expiry, apply backoff for rate limits, and raise a clear business or system exception when recovery is not possible.

Chapter 12 — Agentic Automation, GenAI & MCP

Q166–Q183

What is Agentic Automation?

ANSWER

Agentic Automation combines AI reasoning and decision-making with automation execution. An agent can understand a request, retrieve knowledge, choose tools, and trigger actions.

How do you access Agentic Automation?

ANSWER

It is part of the UiPath agentic and AI capabilities available through the UiPath platform. Access depends on the licensed platform features and tenant configuration.

How do you create an Agent in UiPath?

ANSWER

1. Define the business goal and agent role.
2. Provide instructions.
3. Connect knowledge sources and tools.
4. Configure guardrails and evaluation.
5. Test and deploy the agent.

What are the core components of an Agent?

ANSWER

Typical components are an LLM, instructions or system prompt, knowledge or RAG, memory and context, tool calling, guardrails, evaluation, and monitoring.

How do Agents use Context and Indexes?

ANSWER

Context provides the information needed for the current task. Indexes help agents retrieve relevant information from connected knowledge sources.

How is Escalation handled in Agentic Automation?

ANSWER

Define conditions where the agent should stop acting and hand the case to a human or another workflow. For example, unresolved IT issues can be escalated to a service ticket.

What is Retrieval-Augmented Generation (RAG)?

ANSWER

RAG retrieves relevant external information before the LLM generates an answer. It helps ground responses in a known knowledge source.

What is DeepRAG in UiPath?

ANSWER

DeepRAG refers to a deeper retrieval-and-reasoning approach for finding and using relevant knowledge. The exact implementation depends on the UiPath version and capability set.

Difference between Agent and Robot?

ANSWER

An Agent reasons, interprets information, and decides what to do. A Robot executes deterministic automation steps in applications. They can work together.

What is Agent Memory?

ANSWER

Agent memory stores context or knowledge so the agent can use information beyond the immediate prompt. This includes short-term conversation context and longer-term stored knowledge.

What are Evaluation Sets?

ANSWER

Evaluation Sets are test cases containing inputs and expected outcomes used to measure an agent's quality and reliability.

What are Evaluators?

ANSWER

Evaluators score agent responses against defined criteria such as accuracy, relevance, completeness, or hallucination risk.

How do Agents use MCP Servers?

ANSWER

An agent can use MCP servers to discover and call standardized tools or resources exposed by those servers.

What is MCP (Model Context Protocol)?

ANSWER

MCP is a protocol for connecting AI models and agents to external tools and context through a standardized interface.

What are the types of MCP Servers?

ANSWER

MCP servers can expose different capabilities such as tools, resources, or prompts. The exact server types available depend on the implementation.

How do you prevent AI hallucinations?

ANSWER

Use RAG, strict system instructions, guardrails, evaluation testing, controlled temperature, and explicit rules such as "answer only from the approved knowledge base."

What is Human-in-the-Loop?

ANSWER

Human-in-the-Loop means a person reviews, approves, corrects, or decides on an automation step when AI confidence or business risk requires human judgment.

When would you choose Agentic Automation over traditional RPA?

ANSWER

Choose agents when the process requires interpretation, dynamic decisions, unstructured information, or tool selection. Use traditional RPA when the rules and steps are stable and deterministic.

Chapter 13 — Communication Mining

Q184–Q186

What is Communication Mining in UiPath?

ANSWER

Communication Mining is used to understand and classify business communications such as emails and messages so automation can act on the extracted intent and information.

How does Communication Mining work?

ANSWER

Communications are collected, analyzed and classified, and converted into structured insights that can trigger or support downstream automation.

What are common use cases of Communication Mining?

ANSWER

Examples include email triage, customer-request classification, support-ticket routing, intent detection, and extracting business information from communications.

Chapter 14 — Integration Service

Q187–Q191

What is UiPath Integration Service?

ANSWER

Integration Service provides managed connectors and integrations that let UiPath workflows communicate with external applications through APIs rather than relying only on UI automation.

What are Connectors?

ANSWER

Connectors are integration definitions that expose an application's API capabilities to UiPath.

What are Connections?

ANSWER

Connections are authenticated configurations that allow a connector to access a specific application or account.

What are Triggers?

ANSWER

Triggers start automation when a defined event occurs, such as a new record, email, or application event.

What are the advantages of Integration Service over UI Automation?

ANSWER

API-based integrations are generally more stable and faster than screen automation because they do not depend on changing UI elements.

Chapter 15 — OCR & PDF

Q192–Q204

Which OCR engines have you used?

ANSWER

Common OCR technologies include Tesseract, Microsoft OCR, and OmniPage. In a project, the engine should be selected based on document quality, language, layout, and accuracy requirements.

Difference between OmniPage, Tesseract, and Microsoft OCR?

ANSWER

They are different OCR engines with different recognition quality, language support, layout handling, and deployment characteristics. The best choice depends on the document and environment.

How do you improve OCR accuracy?

ANSWER

Use high-quality scans, correct orientation, improve resolution, choose the correct language, remove noise where possible, and use an OCR engine suited to the document.

What is OCR scaling?

ANSWER

OCR scaling refers to resizing or normalizing the image before recognition so text is at a suitable size for accurate recognition.

How do you extract data from handwritten documents?

ANSWER

Use handwriting-capable AI, OCR, or document-understanding technology where supported, then validate uncertain fields with human review.

How do you process multilingual documents?

ANSWER

Configure supported languages in the OCR or document-understanding components and ensure the selected model or engine supports the required languages.

What challenges did you face in Document Understanding?

ANSWER

This is a project-specific question. Typical challenges include poor scans, different layouts, low-confidence fields, tables, handwriting, classification errors, and documents that vary from the training examples.

How do you validate extracted fields?

ANSWER

Use confidence thresholds, business-rule validation, data-type checks, cross-field checks, and human validation for uncertain or high-risk fields.

How do you train a custom ML Extractor?

ANSWER

1. Prepare representative labeled documents.
2. Define the required fields.
3. Train the model with the labeled data.
4. Evaluate it and improve weak fields.
5. Deploy the model once performance is acceptable.

Difference between Read PDF Text and Read PDF With OCR?

ANSWER

Read PDF Text extracts text already present in a text-based PDF. Read PDF With OCR is used when the PDF contains scanned or image text that needs recognition.

Which OCR engine would you choose and why?

ANSWER

Choose the engine that gives the best accuracy for the target documents and languages while meeting licensing, performance, and deployment requirements. Test it on representative samples before deciding.

How do you extract tables from scanned PDFs?

ANSWER

OCR the scanned pages, use document or table extraction capabilities to identify rows and columns, then validate the resulting table against business rules.

How do you handle password-protected PDFs?

ANSWER

Obtain the password through a secure source, unlock or read the document using a supported PDF capability, and never hard-code or expose the password in logs.

Chapter 16 — Email Automation

Q205–Q208

Difference between Outlook, Exchange, and IMAP activities?

ANSWER

They connect to email systems through different interfaces and authentication models. Outlook activities suit Outlook or desktop scenarios, while Exchange and IMAP approaches can interact with mail servers without relying on the desktop UI.

How do you process 10,000 emails efficiently?

ANSWER

Filter at the mailbox or query level, process only required messages, avoid loading all messages into memory, batch work where possible, and use queues or parallel workers for independent emails.

How do you filter emails without looping through all messages?

ANSWER

Use the mail provider's query or filter capabilities so the server returns only matching messages.

How do you handle large attachments?

ANSWER

Filter by attachment type or size, save attachments to controlled storage, process them one at a time or in batches, and clean up temporary files after processing.

Chapter 17 — Database

Q209–Q212

How do you connect UiPath to SQL Server?

ANSWER

Use the database activities or package, configure a connection string securely, open the connection, execute the required query or command, and close or dispose the connection.

Difference between Execute Query and Execute Non Query?

ANSWER

Execute Query is used when you expect result rows, such as SELECT. Execute Non Query is used for commands such as INSERT, UPDATE, or DELETE where the main result is the affected-row count.

How do you handle database transactions?

ANSWER

Use database transaction support where required, commit successful work, roll back on failure, and keep transaction boundaries aligned with the business operation.

How do you bulk insert records?

ANSWER

Use a bulk insert capability or database-specific bulk loading approach instead of inserting one row at a time.

Chapter 18 — Version Control

Q213–Q216

How do you use Git in UiPath?

ANSWER

Connect the UiPath project to a Git repository, commit meaningful changes, pull updates before collaborative work, push completed changes, and use branches for controlled development.

Difference between Commit, Push, Pull, Merge, and Rebase?

ANSWER

Commit saves changes locally. Push sends commits to the remote repository. Pull retrieves and integrates remote changes. Merge combines branches with a merge commit. Rebase replays commits onto another base.

How do you resolve merge conflicts in UiPath projects?

ANSWER

Identify conflicting files, review both versions, keep the correct workflow or configuration changes, validate the project in Studio, then commit the resolved result.

What files should not be committed to Git?

ANSWER

Do not commit secrets, credentials, temporary files, machine-specific files, generated artifacts, or other files excluded by the project's .gitignore policy.

Chapter 19 — Frameworks, Libraries & Custom Activities

Q217–Q234

What is Workflow Analyzer?

ANSWER

Workflow Analyzer checks a UiPath project against configurable rules to identify design, maintainability, and best-practice issues.

What is Object Repository?

ANSWER

Object Repository stores reusable UI elements and their targeting information so multiple workflows can use consistent application objects.

What is a Storage Bucket?

ANSWER

A Storage Bucket is centralized storage in Orchestrator for files used by automations, such as documents or intermediate data.

What is a Library in UiPath?

ANSWER

A Library is a reusable package containing workflows or components that can be consumed by multiple UiPath projects.

How do you create and consume a custom library?

ANSWER

Create reusable workflows with defined inputs and outputs, publish the project as a library, add the library package as a dependency in another project, and invoke the exposed components.

What is dependency management in UiPath?

ANSWER

Dependency management controls the activity or package versions a project uses so the project remains stable and reproducible.

How do you handle package version conflicts?

ANSWER

Review dependency requirements, align compatible versions, update or pin packages deliberately, and test the project after changes.

What is the difference between Invoke Workflow and Invoke Process?

ANSWER

Invoke Workflow runs another workflow within the current process. Invoke Process starts another published automation process.

What is a reusable component?

ANSWER

A reusable component is a workflow, library, activity, or helper designed so multiple automations can use the same functionality.

How do you create reusable frameworks?

ANSWER

Separate common functionality from business-specific logic, define clear inputs and outputs, centralize configuration and error handling, and package shared components as libraries where appropriate.

How do you build custom activities?

ANSWER

Create a UiPath-compatible .NET activity project, implement the required activity behavior and properties, package it, test it, and publish it for consumption.

Have you developed any custom activity?

ANSWER

This is a project-specific interview question — answer with your actual experience, and do not claim custom activity development unless you have done it.

What is a NuGet package?

ANSWER

A NuGet package is a packaged unit of .NET software and dependencies. UiPath uses NuGet-based packages for activities, libraries, and project dependencies.

How do you publish libraries to Orchestrator?

ANSWER

Publish the library package from Studio to the configured package feed or Orchestrator, then add the published library as a dependency in consuming projects.

How do you maintain backward compatibility?

ANSWER

Avoid breaking changes to public inputs and outputs, version shared libraries carefully, preserve old interfaces where needed, and test existing consumers before upgrading.

How do you manage shared components across projects?

ANSWER

Centralize common components in libraries, use version control, define ownership, document interfaces, and control package versions.

What is semantic versioning?

ANSWER

Semantic versioning commonly uses MAJOR.MINOR.PATCH. Major indicates breaking changes, minor adds backward-compatible functionality, and patch contains backward-compatible fixes.

Difference between Library and Process?

ANSWER

A Library is a reusable component package. A Process is a deployable automation configured in Orchestrator for execution.

Chapter 20 — Power Automate vs UiPath

Q235–Q238

Difference between UiPath and Power Automate?

ANSWER

Both automate business processes. UiPath is strongly focused on enterprise RPA and complex desktop or process automation, while Power Automate is deeply integrated with the Microsoft ecosystem and cloud services.

When would you choose Power Automate instead of UiPath?

ANSWER

Choose it when the process is heavily based on Microsoft 365, Teams, SharePoint, Dynamics, or other Microsoft services and the required automation is well supported by connectors.

What are the advantages of UiPath over Power Automate?

ANSWER

UiPath provides strong enterprise RPA capabilities, rich desktop UI automation, mature orchestration, document and AI automation options, and extensive automation development features.

Have you integrated UiPath with Power Automate?

ANSWER

This is a project-specific question. A valid example would describe using APIs, webhooks, queues, or connectors to let Power Automate and UiPath exchange data or trigger each other.

Chapter 21 — Scenario-Based Questions

Q239–Q250

A selector suddenly stops working in Production. How will you troubleshoot?

ANSWER

1. Check the application and screen state.
2. Inspect the selector and compare it with the current UI.
3. Check timing, browser or app version, scaling, and permissions.
4. Fix unstable attributes and test in a production-like environment.
5. Add recovery only where appropriate.

A queue item is failing intermittently. How will you investigate?

ANSWER

Check logs and screenshots, identify whether failures are data-dependent or application-dependent, compare successful and failed attempts, inspect retries, and reproduce the failure with the same transaction data.

A process runs fine in Studio but fails in Orchestrator. What could be the reasons?

ANSWER

Check package or dependency versions, robot or runtime configuration, permissions, credentials or assets, file paths, environment variables, application access, unattended session conditions, and Orchestrator-specific configuration.

A website is taking too long to load. How will you handle it?

ANSWER

Use appropriate timeouts, wait for the required element rather than fixed long delays, verify network or application health, avoid unnecessary navigation, and add controlled retry or recovery for transient failures.

How will you design a bot that processes 1 million records?

ANSWER

Partition the data, use queues or batches, make transactions independent and idempotent, use multiple robots or runtimes, minimize UI operations, process data in bulk where possible, and monitor throughput and failures.

How would you automate a process where business rules change frequently?

ANSWER

Keep rules and configuration outside the core workflow, use configuration tables or rule data, isolate business-rule logic, and make changes data-driven instead of changing the entire workflow.

How would you build a reusable framework for multiple projects?

ANSWER

Separate common initialization, configuration, logging, exception handling, retry, application recovery, and reporting into reusable components, then expose business-specific processing through clear interfaces.

Explain your end-to-end project architecture.

ANSWER

A common architecture is: Orchestrator, published process, framework or workflow, application or API integrations, business validation, queue or database or file updates, then logging and reporting. Explain the actual components used in your project.

What challenges did you face in your project?

ANSWER

Use real examples from your project, such as unstable selectors, application crashes, changing business rules, large data volumes, authentication issues, or document-extraction accuracy.

How did you improve bot performance?

ANSWER

Reduce unnecessary UI actions and delays, use APIs or bulk operations where possible, process data in memory, filter data early, parallelize independent work, and monitor the real bottleneck before optimizing.

How many transactions does your bot process daily?

ANSWER

Give your real project number. If the volume changes, provide the typical range and explain what one transaction means in your process.

How do you calculate ROI for an automation?

ANSWER

A simple model is: annual benefit from saved manual effort and reduced errors or costs, minus annual automation cost. FTE savings can be estimated from manual hours removed compared with the automation's operating and maintenance cost.

Quick Reference

Fast lookups for common situations — task on the left, flow on the right.

Selector fails	Inspect UI → compare selector → replace unstable attributes → verify timing/context → test
Queue item fails	Check logs → identify exception → correct root cause → retry only if appropriate → monitor
REFramework flow	Init → Get Transaction Data → Process Transaction → Set Status → repeat → End Process
API integration	Authenticate → Request → Check status → Deserialize JSON → Validate → Process
Document processing	Classify → OCR/Digitize → Extract → Validate → Export
AI hallucination risk	RAG → strict prompt → guardrails → low temperature → evaluation
Large Excel file	Filter early → read required data → process in memory → avoid cell-by-cell UI automation
Production issue	Logs → environment → dependencies → credentials/assets → application state → reproduce

Thanks for reading

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