Ui Path **The Foundation of Innovation™**

Business Analyst Training
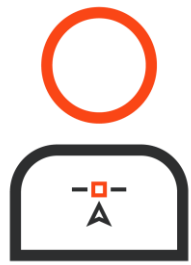
Solution Design, Development,
and Testing

Learning Objectives

- Manage and monitor the changes in the business process.

- Define the governance plan for the project.

Solution Design

Solution Architect

Project Manager

Automation Developer

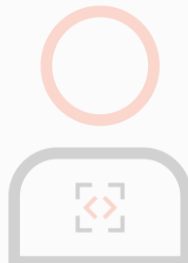- The key people involved in this phase are the Solution Architect, the Project Manager, and the Automation Developer.

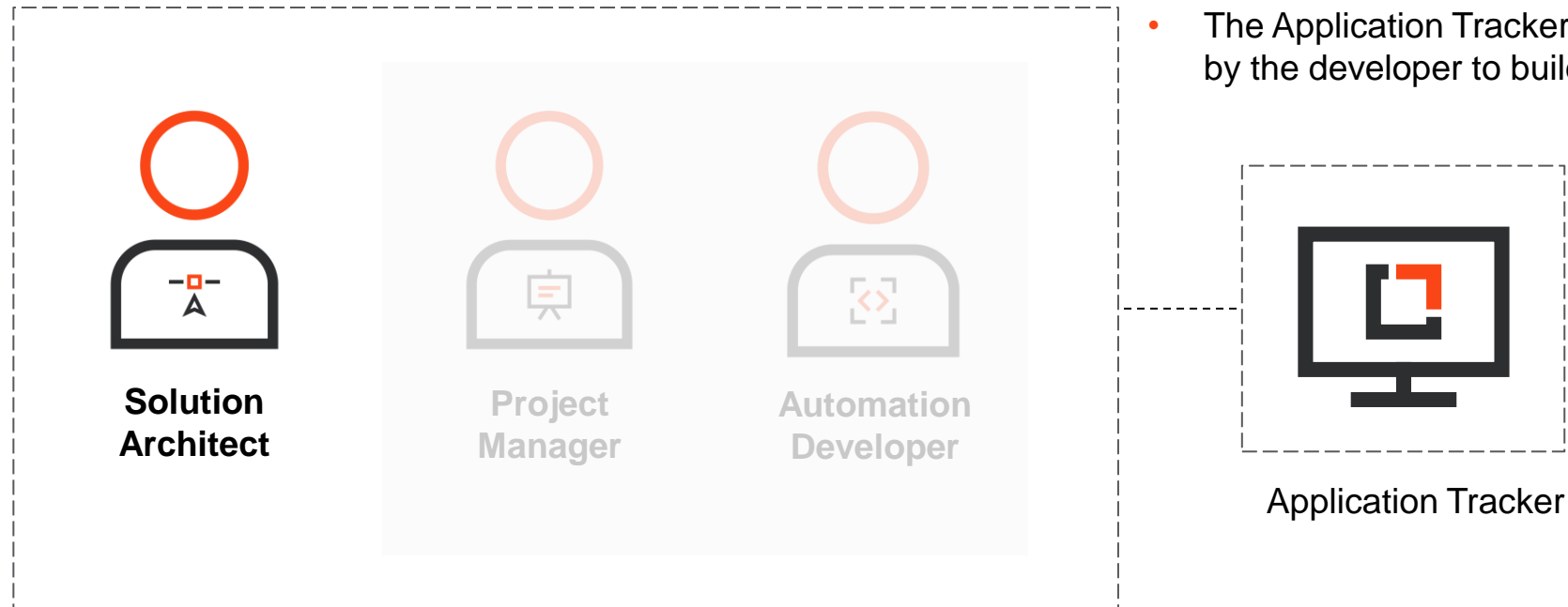# Solution Design

Solution Architect

Project Manager

Automation Developer

- The Solution Architect designs a future state flow and maps out the various modules to be developed to complete the automation.
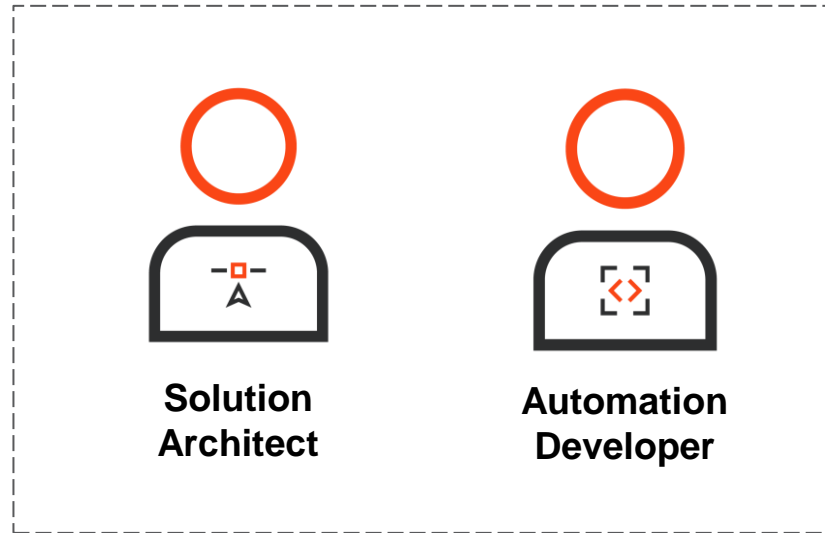
Solution Design

Solution Architect

Project Manager

Automation Developer

- The Application Tracker is used to record accesses required by the developer to build the automation.

Application Tracker

Solution Design

Solution Architect

Automation Developer

Technical Testing Plan

The Solution Architect and the Automation Developers work together to prepare the Technical Testing plan, which includes:

- UAT scenarios

- Functional testing

- System integration testing

Solution Design

Solution Design Document

Application Tracker

Technical Testing Plan

Output:

- Approved Solution Design Document (SDD)

- Completed Application Tracker

- Completed Technical Testing Plan

Development and Testing

Solution Architect

Project Manager

Automation Developer

- In this stage, the Solution Architect, the Project Manager, and the Automation Developers collaborate with each other.

Development and Testing

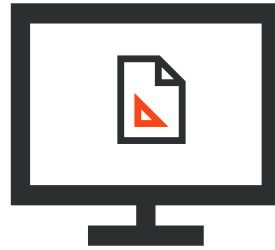**Automation Developer** → PDD → SDD → **Unit Testing**

The Automation Developer:

- Creates the modules outlined in the design whiteboard by referencing the Process Definition Document (PDD) and Solution Design Document (SDD).

- Tests the created modules individually to ensure they run successfully in controlled test settings.

- Executes the Technical Testing plan once the development and the Unit Testing are completed.

Development and Testing

Functional Testing

System Integration Testing

UAT Test Scenarios

The Automation Developer performs:

- Functional testing, where automated tests should be created to confirm large functions work independently.

- System integration testing, where an end-to-end test should be completed in an environment that mirrors how the automation runs in UAT and eventually production.

- UAT test scenarios in that environment to confirm business expectations will be met by the automation.

Managing Changes

Business Analyst

The Business Analyst:

- Manages the changes that might be required in the process.
- Needs to assess the changes and evaluate their implications.
- Updates the content of the Process Definition Document (PDD) after each change.
- Logs the approved changes using the Traceability Matrix.

- **Definition of change**: Any modification in the initial process requirements, as documented and agreed in the signed-off PDD and that is not a bug or defect.

- **When can changes occur**: Bugs and defects are identified and handled during the testing phase exclusively, while changes can occur throughout the entire implementation process.

- **What can trigger change**: New input types, gaps in the PDD identified after sign-off, internal or external factors, or an increase in the percentage of automation, etc.

- **When dealing with changes**, consider possible outcomes, impact on existing requirements and solutions, the duration of the change implementation, and the risks involved.

Responsibilities of the Business Analyst

These are the responsibilities of the Business Analyst during the Solution Design, and the Development and Testing phases:

- Analyze the proposed changes with stakeholders and apply the KRAC (keep / remove / add / change) approach.

- Identify how the proposed changes impact the value delivered to the business or stakeholder groups, the time to deliver or the resources required to deliver the value.

- Understand how the proposed changes affect the overall initiative's risks, opportunities, or constraints.

- Use the Traceability Matrix for logging the approved changes.

- Update the PDD to include the requested changes and the detailed step by step description for each change implementation.

- Ensure that the changes are communicated to the stakeholders and gain a consensus on the same.

Quick Recap

- How Business Analyst manages and monitors the changes to the business process.