## Detailed description of SYNE USER MANAGEMENT trainings

## Session 1: SYNE USER MANAGEMENT Overview:

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| **Course Title** | SYNE USER MANAGEMENT Automation Framework Overview |
| **Course Duration** | 5 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* **Introduction:**
  + Introduction to SYNE USER MANAGEMENT Framework
  + How SYNE USER MANAGEMENT invented and why we need SYNE USER MANAGEMENT Framework?
  + Idea about framework components and coding standard
* Input Unit
* Processing unit
* Execution Unit
* Output Unit
  + SYNE USER MANAGEMENT Automation Framework Architecture(High-level)
  + Challenges Faced by Voice Claim Sequence Automation Framework
  + SYNE USER MANAGEMENT Striking Features

### Session 2: a) SYNE USER MANAGEMENT Framework Architecture:

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| **Course Title** | SYNE USER MANAGEMENT Automation Framework Architecture |
| **Course Duration** | 15 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* **Introduction:**
  + SYNE USER MANAGEMENT Architecture Walkthrough
  + All components Detail Design Development and Functionality Understanding

a) Input Unit

b) UML Input

c) Configurator

d) Input Test Script File/Builder

e) Processing Unit

f) Tokenization

g) Syntax Analyzer

h) Parser

i) Transpiler

j) Library

* + Test Management Interface
  + Software Interface adapter Module
  + Business Validation Flow

### b) SYNE USER MANAGEMENT - Input Module Design

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| **Course Title** | SYNE USER MANAGEMENT - Input Module Design |
| **Course Duration** | 10 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* Introduction
* Input Module Overview
* INPUT MODULE
* Sequence UML Diagram Pattern
* Detail Discussion on Configurator
* Platform
* Automation .XML
* ENV Configurator
* Enviromental.XML
* Test Config
* Test Script.XML
* XML server

### c) SYNE USER MANAGEMENT - Processing Unit Module Design

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| **Course Title** | SYNE USER MANAGEMENT Processing Unit Module Design |
| **Course Duration** | 10 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* Introduction
* Processing Unit Module Overview
* Processing Unit Module
* PROCESSING Sequence
* Tokenizer
* Syntax Analyzer
* Parser
* Transpiler
* Technical Library
* Rule Refinement Utility
* Feature Eligibility Services
* Business Library
* Rule Engine and Central DB

### d) SYNE USER MANAGEMENT – Rule Engine and Central DB Design

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| --- | --- |
| **Course Title** | SYNE USER MANAGEMENT – Rule Engine and Central DB Design |
| **Course Duration** | 15 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* Introduction
* Rule Engine and central DB Overview
* Processing Unit Module
* Middle Tier Webservices
* SYNE USER MANAGEMENT Wrapper Services
* Get caller Profile
* Feature Eligiblity Services
* EJB Webservices
* Rule Engine Wrapper Services
* Role Engine EXECUTION
* Business Rules
* Intelliset
* Test Script
* HS Enroll
* AxaPTA
* BBlogin
* Enterprise and Address
* Subscriber Cancellation
* Digital Product Eligiblity

### e) SYNE USER MANAGEMENT – Execution Unit and Output Module Design

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| **Course Title** | SYNE USER MANAGEMENT – Execution Unit and Output Module Design |
| **Course Duration** | 10 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* **Introduction**
* Rule Engine and central DB Overview
* **Execution Unit and Output Module**
* Input Data
* EXPECTED DATA
* Voice Business
* Profile data
* Test Script
* Compare Actual expected data
* XML Jason Format
* HTML Chart
* Other Format.

### f) SYNE USER MANAGEMENT – Test Management Tool Interface Module

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| **Course Title** | Test Management Tool Interface Module |
| **Course Duration** | 10 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* **Introduction**
* Test Management Tool Overview
* **Detail walkthrough of each module**:
* Requirement Module.
* Test Plan Module
* Test Lab Module
* Defect Module
* Test Management Tool Interface Structure
* How to manage database that keeps historical data to analysis.
* Scheduling test cases to be executed.
* Managing different testing statistics such as time spent in test design, execution time, and number of defects logged against each BR.
* Interfaces to other tools, such as customized dashboard to trace different release progress, Traceability of tests, test results and defects to requirements or other sources.
* Provide different progress reports/graph based on metrics (quantitative analysis).

### Session 3: SYNE USER MANAGEMENT Input Test Script/File Builder UI:

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| **Course Title** | SYNE USER MANAGEMENT Input Test Script/File Builder UI |
| **Course Duration** | 5 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* **Introduction:**
  + Introduction to SYNE USER MANAGEMENT Test Script UI
  + SYNE USER MANAGEMENT Test Script UI Menu Bar
  + SYNE USER MANAGEMENT Client Configuration Management UI
  + Configuration Management Page Purpose
  + View Client Configuration set in Production Env
  + How Stuff works?

### Session 4: SYNE USER MANAGEMENT Tester/Execution Use Cases:

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| **Course Title** | SYNE USER MANAGEMENT Tester/Execution Use Cases |
| **Course Duration** | 3 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* **Introduction:**
  + Introduction to Use Cases and its purpose
  + SYNE USER MANAGEMENT Tester Use Cases
  + SYNE USER MANAGEMENT Voice Scenarios
  + SYNE USER MANAGEMENT Test Execution Use Case

### Session 5: SYNE USER MANAGEMENT Media Server Configuration:

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| **Course Title** | SYNE USER MANAGEMENT Automation Overview of Media Server Configuration |
| **Course Duration** | 7 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* **Introduction:**
  + Introduction to SYNE USER MANAGEMENT Media Server Configurations
  + Media sever location is configured in SYNE USER MANAGEMENT Server and SYNE USER MANAGEMENT Rule Engine in configuration file
  + SYNE USER MANAGEMENT Automation Overview of Environment Config
  + Correlation between SYNE USER MANAGEMENT, Media server and Audios
  + Call Type logging / Reporting
  + Reporting Server

### Session 6: SYNE USER MANAGEMENT Modules, Feature Customization, & Live Demo:

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| **Course Title** | SYNE USER MANAGEMENT Framework Modules, Feature Customization, & Live Demo |
| **Course Duration** | 20 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* **Introduction:**
  + Remarkable features of SYNE USER MANAGEMENT Module along with example
  + SYNE USER MANAGEMENT Framework Module Customization
  + SYNE USER MANAGEMENT E2E demo
  + Audio Issues in QA
  + Common issues
  + Corrupted Audio files / bad fetch
  + Permissions Issue while reading audio files.
  + Typical Test Errors
  + Typical Test Errors Messages
  + Manual Testers Contribution for Automation Efforts
  + Voice Script Generation Tool
  + Role Definitions and Benefits
  + Benefits and Future plan

### Session 7: SYNE USER MANAGEMENT Automation Framework Scripting Information:

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| **Course Title** | SYNE USER MANAGEMENT Automation Framework Scripting Information |
| **Course Duration** | 20 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* **Introduction:**
  + **SYNE USER MANAGEMENT Modules- Java classes**

1. FE\_FN\_IS\_Deductible
2. FE\_FN\_IS\_Holds\_Adj
3. FE\_FN\_IS\_Holds\_Tier1
4. FE\_FN\_IS\_HubSupport
5. FE\_FN\_IS\_HubSupportESN
6. FE\_FN\_IS\_HubSupportOptout
7. FE\_FN\_IS\_HubSupportQR
8. FE\_FN\_IS\_ReadyFuture
9. FE\_FN\_IS\_SCDeductible
10. FE\_FN\_IS\_StartClaim
11. FE\_FN\_MainMenu
12. FE\_FN\_NotEnrolled
13. FE\_FN\_NotEnrolledTEP
14. FE\_FN\_NotEnrolledWarranty
15. FE\_FN\_RequestApprovedLT1
16. FE\_FN\_RequestLT1\_CBDate
    * **Java classes -Dynamic Menu**
17. DDMConfigWSClient:
18. EloyaltyElements:
19. Speakit Element:
20. SYNE USER MANAGEMENT Util Custom Element:
21. Secure Digits Custom Element:
22. TTA Custom Element:
23. SetElementToSessionValues Custom Element:
    * **Common Classes Across all Modules**
24. checkReportingType.java
25. ResetReportValues.java
26. SetLanguage.java
27. SetReportingKeyInfo.java
28. ValidateMDN.java
29. SetSpeakITOptions.java
30. SetSessionVars.java
    * **Application specific classes**
31. FE\_InitialApp
32. FE\_InitialApp\_RA
33. FE\_DDM\_DTMF\_Menu:
34. FE\_FN\_AutoPay and FE\_FN\_IS\_CCPay:
35. FE\_FN\_CSRTransfer:
36. FE\_FN\_BMI\_StartClaim :
37. FE\_FN\_BMI\_StartClaim\_CheckIn:
38. FE\_FN\_Shipping:
39. FE\_FN\_IS\_StartClaim\_CheckIn:
40. InitialApp: Java proj
41. ISCheckIn: Java proj
42. ATACTriage : Java proj

### Session 8: SYNE USER MANAGEMENT - Database Coding Standards:

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| **Course Title** | SYNE USER MANAGEMENT - Database Coding Standards |
| **Course Duration** | 10 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* **Introduction:**
  + SYNE USER MANAGEMENT Database – Naming Standards
  + SYNE USER MANAGEMENT Tables - Standards
  + SYNE USER MANAGEMENT Stored Procedures – Standards
  + SYNE USER MANAGEMENT Central DB – Detail
  + SYNE USER MANAGEMENT Stored Procedures Sample
  + SYNE USER MANAGEMENT Database Deployment Flow

### Session 9: SYNE USER MANAGEMENT XML Parser Depth Understanding Training

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| **Course Title** | SYNE USER MANAGEMENT XML Parser Depth Understanding Training |
| **Course Duration** | 30 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content

* SYNE USER MANAGEMENT XML Parser
* Agenda
* SYNE USER MANAGEMENT XML Parsing
* Customization of parser
* Generic Tree parser
* What is JAXP?
* Another alternative
* JAXB
* DOM
* About DOM
* SYNE USER MANAGEMENT DOM abstraction layer in Java -- architecture
* SYNE USER MANAGEMENT Sample Code
* Validation
* Important: Schema validation
* Associating document with schema
* A few notes
* Document object
* Types of Nodes
* SYNE USER MANAGEMENT Transforming XML
* The JAXP Transformation Packages
* SYNE USER MANAGEMENT Transformer Architecture
* Writing DOM to XML
* Creating a DOM from scratch
* SYNE USER MANAGEMENT Manipulating Nodes
* SAX
* About SAX
* SAX vs. …
* How a SAX parser works
* Obtaining a SAX parser
* DefaultHandler
* SYNE USER MANAGEMENT Overriding Handler methods
* startElement
* Characters
* Entity references
* Choosing a Parser
* Validating SAX Parsers
* Transforming arbitrary data structures using SAX and Transformer
* Goal
* Transformers
* Strategy
* What?
* Main snippet
* XMLReader implementation

### Session 10: SYNE USER MANAGEMENT-Transpiler Depth Understanding Training

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| **Course Title** | SYNE USER MANAGEMENT-TranspilerDepth Understanding Training |
| **Course Duration** | 25 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content

* SYNE USER MANAGEMENT-Transpiler
* Agenda
* Introduction
* Chronology of PHP
* Compiler vs Interpreter
* Advantages of Compilation
* PHP Compilers of note
* Phalanger
* Zend Engine
* PHPstatic (ex. Roadsend PHP)
* PHC
* SYNE USER MANAGEMENT Transpiler
* Multi-threaded vs Multi-process Web Servers
* SYNE USER MANAGEMENT Transpiler Problem with Multi-process Web Servers
* Conclusions
* Compiler Compatibility

### Session 11: SYNE USER MANAGEMENT-Tokenization & POS-Tagging Depth Understanding Training

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| **Course Title** | SYNE USER MANAGEMENT- Tokenization & POS-Tagging Depth Understanding Training |
| **Course Duration** | 25 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content

* SYNE USER MANAGEMENT- Tokenization & POS-Tagging
* Agenda
* Why SYNE USER MANAGEMENT Tokenization?
* Problems of tokenization
* Some Best Solutions
* SYNE USER MANAGEMENT POS Tagging
* Simplest Stochastic Tagger
* Markov Models (MM)
* Example of Markov Models (MM)
* Hidden Markov Model
* HMM Tagger
* Finding the most probable sequence
* HMM tagging – an example
* Calculating the most likely sequence
* Dealing with unknown words
* TnT (Trigrams’n’Tags)
* Transition and emission probabilities
* Smoothing Technique
* Other techniques

### Session 12: SYNE USER MANAGEMENT- Syntax Analyzer Depth Understanding Training

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| **Course Title** | SYNE USER MANAGEMENT- Syntax Analyzer Depth Understanding Training |
| **Course Duration** | 30 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content

* SYNE USER MANAGEMENT Syntax Analyzer Training
* Agenda
* SYNE USER MANAGEMENT Syntax Analysis
* Syntax analysis limitation
* Limitations of regular languages
* SYNE USER MANAGEMENT Syntax definition
* Examples
* Derivation
* Syntax analyzers
* SYNE USER MANAGEMENT Parse Tree
* Example
* Ambiguity
* Associativity
* Precedence
* SYNE USER MANAGEMENT Parsing
* Example: Top down Parsing
* Recursive descent parsing
* Define a procedure for each non terminal
* procedure simple
* Resolving problem
* Left recursion
* Example
* Removal of left recursion
* Left recursion hidden due to many productions
* Removal of left recursion due to many productions
* Left factoring
* Dangling else problem again
* Predictive parsers
* Parsing algorithm
* Parse table for the grammar
* Constructing parse table
* Compute first sets
* Construction of parse table
* Practice Assignment
* Error handling
* Panic mode
* Phrase level recovery
* Error productions
* SYNE USER MANAGEMENT Global corrections
* Error Recovery in LL(1) parser
* Assignment
* Bottom up parsing
* Shift reduce parsing
* Issues in bottom up parsing
* Handle
* Conflicts
* Shift reduce conflict
* Reduce conflict
* LR parsing
* Actions in an LR (shift reduce) parser
* Configurations in LR parser
* SYNE USER MANAGEMENT LR parsing Algorithm
* Parser states
* Constructing parse table
* Viable prefixes
* LR items
* Start state
* Closure operation
* Applying symbols in a state
* SYNE USER MANAGEMENT Sets of items
* Construct SLR parse table
* Notes
* Assignment
* SLR parse table for the grammar
* Problems in SLR parsing
* Canonical LR Parsing
* Closure
* Construction of Canonical LR parse table
* SYNE USER MANAGEMENT Parse table
* Construct LALR parse table
* SYNE USER MANAGEMENT LALR parse table
* Notes on SYNE USER MANAGEMENT LALR parse table
* Error Recovery

### Session 13: SPEED

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| **Course Title** | SPEED (**Structured Project Execution and Engineering Discipline)** |
| **Course Duration** | 15 days |
| **Location** | Synechron Technologies Pvt. Ltd., Pune |

#### Course Content:

* SDLC Process Segments
* Estimation
* Project Management
* Engineering
* Quality Control
* Release Management
* Quality Management
* Engineering Guidelines
* Formalized Design
* Design Review
* Established Coding Standards
* Impact Analysis
* Established Development Frameworks
* Code Reviews
* Static Code Analysis Tools (FxCOP, PMD)
* Continuous Integration
* Gated Check-in's
* Dev and QA separate Environments
* Unit Testing