

Generation Cognizant (GenC)

Learner Handbook

(Quality Engineer with Selenium Automation -v1)

Learning Journey Guide

Java Track – Full Internship

**Why do we need this GenC learning Program?**

Gen C learning program engages young talents with a comprehensive learning pathway, giving the millennials an opportunity to interact with Subject Matter Experts (SME), understand the corporate environment, and groom themselves.

Cognizant emphasizes on Learner Autonomy where students take charge of their own learning, with the available tools and resources. More focus is on “learning” than “teaching”. Get ready to embark your own learning adventure!



**Program at a glance**

Learning consisting of 2 Stages:

* Stage 1 – QEA Basics (5 weeks)
* Stage 2 – Selenium with Digital Technologies (8 weeks – Inclusive of the Project)

Business Aligned Project

Interim Project Evaluation + Technical Evaluation

Final Project Evaluation + Final Technical Evaluation



**Program Highlights**

* The complete learning journey is formalized using adult learning principles, where problem solving and applying the skills gained are given more importance than conceptual learning.
* Learner Autonomy is encouraged via Flipped Classroom, where the learning platform offers world class learning resources, and students would not be constrained by tutelage of an instructor.
* Get mentored by SME, whose motivation and guidance will help you accelerate in the learning journey.
* This program is applicable to Interns as well as GEN Cs.

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Learning Journey with Flipped Classroom

This program encourages you to be more autonomous learners during guided self-learning hours, completing the learning objectives on your own pace and style, and get ready for the hands-on practice time.

The complete learning path is set in the [GEN C Learn Platform](https://cognizant.tekstac.com/login/index.php), which you can login with SSO.

Flipped Classroom

Recommended Program Sequence

The learning journey contains 2 stages, followed by a Business Aligned Project.

* Stage 1 – QEA Basics
* Stage 2 – Selenium with Digital Technologies
* Business Aligned Project will provide you an experience of real time problem solving in Agile methodology.

Stage 1 – QEA Basics

Stage 2 – Selenium with Digital Technologies

Key Learning Components of the Program

Cognizant has collaborated with Udemy to provide world class learning videos for the evolving future of work. These Udemy programs are woven into a learning path, empowering you to plan and learn at your style.

The program also connects you with Subject Matter Experts (SMEs) to get the professional guidance on your queries in the learning journey.

The program doesn’t ONLY concentrate on the Technical skilling, but also on the shaping up of the Behavioral skills. **Behavioral learning** would be done in ILT mode, with few Self-paced learning modules too.

**Evaluation Model**

The program continuously evaluates if you are able to apply those self-learnt skills to solve a real-time business problem. Depicted below are the four key learning components, which are distributed across the learning journey for the purpose of continuous evaluation.

* Interim Evaluation (Project + Technical) through Video Interview
* Final Evaluation (Project + Technical) through Video Interview

The above evaluation components will attribute to the Performance Health Status (PHS) of a GenC. Additional Learning Components like Hands-On, Code Challenges and ICTs will help you to enhance your expertise level.

The weightage of the Interim Evaluation will be 30%, while the Final Evaluation will account for 70%. However, the performance status of GenC will be indicated using the RAG (Red Amber Green) system. In this system, 'Green' signifies meeting the passing criteria, which is equal to or greater than 70%, the benchmark score for all evaluations.

Interim & Final Evaluation Approach

Below is the Evaluation Structure for GenC Learning Journey

The interim evaluation will be held halfway through the learning journey, while the final evaluation will take place at the end of the learning journey.

During the interim evaluation, the GenC will be interviewed by a Technical Subject Matter Expert (SME) from the Business Unit (BU) to assess your knowledge through a technical discussion. Additionally, the Mini project completed by the GenC will also be evaluated by the BU SME. Please note that the Mini project is an individual activity and not a group activity.

During the final evaluation, the GenC will again be interviewed by a Technical SME from the BU to assess their knowledge through a technical discussion. In the same evaluation call, the Hackathon project completed by each group will be evaluated by the BU SME. Please note that the Hackathon project is a group activity and not an individual activity.

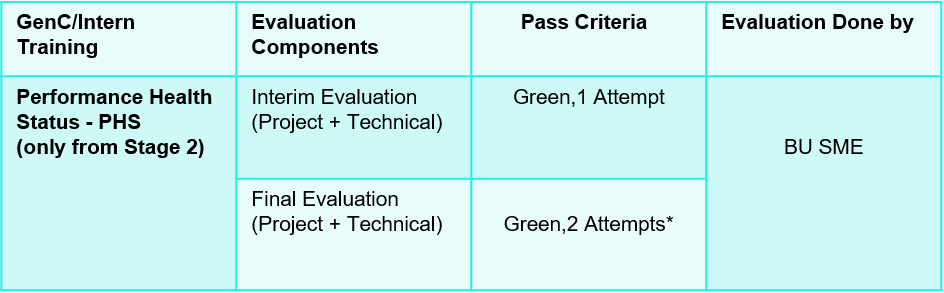
Program Completion Criteria

**Stage 1 (Pre-requisites)**

**Gating Criteria: Qualifier Assessment**

**Stage 2 & Beyond (Advanced Skills)**

**Gating Criteria: Performance Health Status is Green**



**Outcome of Interim / Final evaluation will be RED, AMBER or GREEN status**

Note: 100% Completion of Hands On in Stage 1 is mandatory for qualifier assessment and 100% Completion of Hands On in Stage 2 is mandatory for interim / final evaluation eligibility.

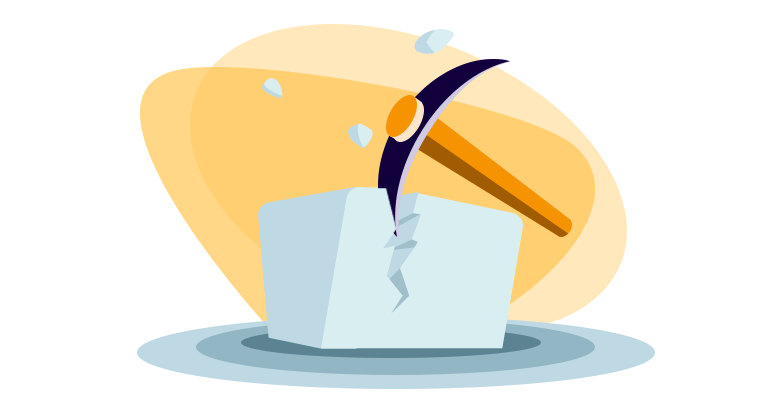
Key Check Point Intervals in the Learning Journey

Progressing to Stage 2 depends on clearing the qualifier assessment after stage1. Candidates who do not clear the Stage 1 Qualifier will be terminated from the Internship. However, based on the demand and later needs, they will be considered for the CSD mode of training.

Subsequent stages learning journey, your progress will be measured. On the below check point intervals, your overall Performance Health Score will be calculated as on date, and the RAG status will be arrived.

**Table -** Check Point Intervals

| **Check points** | **Interpreting Status** |
| --- | --- |
| **Interim Evaluation** | - Green - On Track for Graduation - Red /Amber - There will not be any re-attempts given |
| **Final Evaluation** | - Green - On Track for Graduation - Red /Amber – Only 1 attempt are given (Re-attempt is not applicable if the student is Red in Interim and Final Evaluation)  **Note:** If student fails after the applicable re-attempts, they will be considered as “Not-Graduated”. |



Icebreaker

Icebreaker session will be conducted for a duration of initial **5 days.** During the session, various topics related to Corporate Induction, Talent Management, Cognizant Agenda on Core Values, Leader Talks, Alumni, BU Mentor connects will be covered. Followed by icebreaker, technical training will kick start.

Following sessions will be covered during the **5 days** of icebreaker

* Corporate Induction
* Talent Manager Connect
* Cognizant Agenda Sessions on Core Values
* Leader Talks (Academy) and many more…

A recommended day-wise schedule is provided below for the learning, with the learning content for the day, the practice hands-on and extended hands-on to be done for the day or any other activities are listed. Few days might be interleaved to accommodate the extension due to Behavioral Training.

Schedule – Stage 1: Day 1 to 5

Week 1 will be focusing on Functional Testing Fundamentals.

Udemy learnings are recommended in the Platform to understand the fundamental concepts. Apply the concepts learned and solve the Hands-on and Practice Case studies as recommended below.

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| Day 1 |

**Functional Testing (Day1 -Day5)**

**Continuous Learning: Technical Enablement**

Learn the basics of Agile Fundamentals and Software Testing Life Cycle

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Manual Software Testing + Agile with Jira Tool](https://cognizant.udemy.com/course/learn-manual-software-testing-with-live-project-jira-tool/#overview)  Refer section 1 and 2 in this Udemy course and complete the corresponding learnings.  **Section 1: Software Testing Introduction**  What is Software?  Types of Software’s?  What is Software Testing?  What is Software Quality?  Project Vs Product  Why do we need Testing?  Error, Bug & Failure Why the software has bugs?  **Section 2: Software Testing Concepts**  SDLC  Waterfall Model  Spiral Model  V-Model  Static Testing & Dynamic Testing  Verification & Validation  White Box & Black Box Testing Methods |

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| Day 2 |

**Functional Testing (Day1 -Day5)**

**Continuous Learning: Technical Enablement**

Learn the basics of Software Testing Life Cycle

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Manual Software Testing + Agile with Jira Tool](https://cognizant.udemy.com/course/learn-manual-software-testing-with-live-project-jira-tool/#overview)  Refer section 2 in this Udemy course and complete the corresponding learnings.  **Section 2: Software Testing Concepts**  Static Testing & Dynamic Testing  Review, Walkthrough & Inspection  QA & QC & QE  Levels of Software Testing  Unit Testing  Integration Testing  System Testing  UAT Testing  System Testing Types  GUI Testing  Usability Testing  Functional Testing  Non-Functional Testing  Regression testing  Re-Testing  Smoke & Sanity Testing  Exploratory Testing  Adhoc Testing  Monkey Testing  Positive & Negative Testing  End-To-End Testing  Localization & Globalization/Internationalization(I18N) testing |

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| Day 3 |

**Functional Testing (Day1 -Day5)**

**Continuous Learning: Technical Enablement**

Learn the basics of Software Testing Life Cycle

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Manual Software Testing + Agile with Jira Tool](https://cognizant.udemy.com/course/learn-manual-software-testing-with-live-project-jira-tool/#overview)  Refer section 2 and 3 in this Udemy course and complete the corresponding learnings.  **Section 2: Software Testing Concepts**  Test Case Design Techniques  Equivalence Class Partitioning (ECP)  Boundary Value Analysis (BVA)  Decision Table  State Transition  Error Guessing  **Section 3: Software Testing Life Cycle (STLC)**  STLC  Test Planning  Test Design/Development  Test Execution  Defect Reporting & Tracking  Test Closure  Test Plan  Use Case Vs Test Scenario Vs Test Case  Test Case Template  RTM (Requirement Traceability Matrix)  Test Environment Setup & Test Execution  Defects/Bugs  Contents is Defect Report  Defect Classification (Severity & Priority)  Defect/Bug Life Cycle  Test Closure/When To Stop Testing?  Software Testing Metrics  QA/Testing Activities  Principles of Software Testing |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| * Hotel Booking   **Deliverables Expected:**  Deliverable 1: Identify four test scenarios for the mentioned requirement  Deliverable 2: Write all the test cases using the appropriate testing techniques wherever applicable |

Deliverable 3: Log the below mentioned defects effectively with all the details, relating the requirement mentioned such that the developers would understand.

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| Day 4 |

**Functional Testing (Day1 -Day5)**

**Continuous Learning: Technical Enablement**

Learn the basics of Software Testing Life Cycle

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Manual Software Testing + Agile with Jira Tool](https://cognizant.udemy.com/course/learn-manual-software-testing-with-live-project-jira-tool/#overview)  Refer section 4 and 5 in this Udemy course and complete the corresponding learnings.  **Section 4: Software Testing Live Project (E-Commerce Domain)**  Introduction to AUT, FRS, Creating Test Plan & Test Scenarios  Test Cases & RTM (Requirement Traceability Matrix)  Test Cases, Environment Setup(Test Bed) & Deploy Application  Test Execution & Defect Reporting  **Section 5: Agile Testing Process and Working with Jira Tool**  Agile Testing Process & Terminology  Working with Jira Tool |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| * Students Enquiry Form   **Deliverables Expected:**  Deliverable 1: Identify four test scenarios for the mentioned requirement.  Deliverable 2: Write all the test cases using the appropriate testing techniques wherever applicable.  Deliverable 3: Log the below mentioned defects effectively with all the details relating the requirement mentioned such that the developers would understand. |

**Additional Learning:**

**Technical Quizzes:**

Functional Testing

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| Day 5 |

**Functional Testing (Day1 -Day5)**

**Integrated Capability Test (ICT)**

Functional Testing

Stage 1: Day 6 to 15

Day 6 to 15 will be focusing on Java Programming

Udemy learnings are recommended in the Platform to understand the fundamental concepts. Apply the concepts learned and solve the Hands-on and Practice Case studies as recommended below

**Note**: You'll find the hands-on and practice case study in the current learning path's module as per the names specified below.

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| Day 6 |

**Java Programming Fundamentals (Day 6 -Day15)**

**Continuous Learning: Technical Enablement**

Overview, First Java Program, Variables, Datatypes, Literals, Operators, Expressions and Conditional Statements.

**Learn and Practice**

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| C:\Users\690417\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FCA95A2.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview).  Refer section 2 in this Udemy course and complete the corresponding learnings.  **Section 2: Java Programming**  Variables & Data Types in Java  Java Operators |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| --- |
| * Highest Placement * Display Characters * Fuel Consumption Calculator |

**Additional Hands-on**

* Bill Generation
* Movie Ticket Calculation

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| Day 7 |

**Java Programming Fundamentals (Day 6 -Day15)**

**Continuous Learning: Technical Enablement**

Overview, String, Arrays, Looping Statements, Methods, Class, Object, static.

**Learn and Practice**

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| C:\Users\690417\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FCA95A2.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview).  **Section 2: Java Programming**  Java Conditional Statements |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| * Least offer * String Concatenation * Ticket Price Calculation – Static * Student Details - Constructor   **Additional Hands-on**   * Increment Calculation * Find Average Age |

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| Day 8 |

**Java Programming Fundamentals (Day 6 -Day15)**

**Continuous Learning: Technical Enablement**

Access Modifiers, Packages, Inheritance, Abstraction.

**Learn and Practice**

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| C:\Users\690417\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FCA95A2.tmp | Go through below mentioned section and implement the examples along with the author.  [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview).  Refer section 2 in this Udemy course and complete the corresponding learnings.  **Section 2: Java Programming**  Java Loops  Java Arrays  Working with Strings in Java |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| --- |
| * Contact Details of Hosteller * Account Manipulation - Abstract class |

**Additional Hands-on**

* Shape - Area Volume Calculator
* Divide two numbers - Use finally

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| Day 9 |

**Java Programming Fundamentals (Day 6 -Day15)**

**Continuous Learning: Technical Enablement**

**Learn and Practice**

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| C:\Users\690417\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FCA95A2.tmp | Go through below mentioned sections and implement the examples along with the author.  [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview).  Refer section 2 in this Udemy course and complete the corresponding learnings.  **Section 2: Java Programming**  Java OOPS Concepts, Class, Object, Methods  Java Methods, Constructors, Polymorphism & Overloading |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| * BankAccountDetails * Employee Loan Eligibility – Polymorphism * Vehicle-Loan-Insurance - Use Interface |

**Additional Learning:**

**Technical Quizzes:**

* Quiz 1 - Java Operator, Control flow statement

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| Day 10 |

**Java Programming Fundamentals (Day 6 -Day15)**

**Continuous Learning: Technical Enablement**

Collection Framework, ArrayList, Map, Set.

**Learn and Practice**

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| --- | --- |
| C:\Users\690417\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FCA95A2.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview).  Refer section 4 and 5 in this Udemy course and complete the corresponding learnings.  **Section 2: Java Programming**  Encapsulation, Setters & getters, static keyword  Java Inheritance, Overriding, super keyword |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| * Register a Candidate - User defined Exception(with throw and throws) * Array Manipulation - Use try with multi catch * Insurance Bazaar |

**Additional Hands-on**

* Count of Each Words

**Code Challenge:**

Code Challenge - Group 1

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| Day 11 |

**Java Programming Fundamentals (Day 6 -Day15)**

**Continuous Learning: Technical Enablement**

Collection Framework, ArrayList, Map, Set.

**Learn and Practice**

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| C:\Users\690417\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FCA95A2.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview).  Refer section 2 in this Udemy course and complete the corresponding learnings.  **Section 2: Java Programming**  Interface in Java, final keyword  Java packages, Access Modifier’s & Wrapper classes |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| * Number of New Words * Phone Book Manipulation |

**Additional Hands-on**

* Book Manipulation

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| Day 12 |

**Java Programming Fundamentals (Day 6 -Day15)**

**Continuous Learning: Technical Enablement**

File Handling, Annotation, Threads and Garbage Collections, Exception Handling, Enums.

**Learn and Practice**

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| C:\Users\690417\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FCA95A2.tmp | Go through below mentioned sections and implement the examples along with the author.  [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview).  Refer section 4 and 5 in this Udemy course and complete the corresponding learnings.  **Section 2: Java Programming**  Exception Handling in Java  Java Collections |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| * Employee Promotion * Retrieving Data from file |

**Additional Hands-on**

* Visitors Details

**Additional Learning:**

**Serial and Parallel Sorts in Java**

• https://www.geeksforgeeks.org/serial-sort-vs-parallel-sort-java/

**Streams and Optionals**

• https://www.java2novice.com/java-8/streams/

• https://www.geeksforgeeks.org/java-8-optional-class/

**Technical Quizzes:**

* Quiz 2 - Applying Object Oriented Concepts in java

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| Day 13 |

**Java Programming Fundamentals (Day 6 -Day15)**

**Continuous Learning: Technical Enablement**

**Learn and Practice**

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| C:\Users\690417\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FCA95A2.tmp | [Java In-Depth: Become a Complete Java Engineer!](https://cognizant.udemy.com/course/java-in-depth-become-a-complete-java-engineer/).  Go through only below mentioned sections 16 & 17 and implement the examples along with the author   * Section 16: Collections Framework (aka Data Structures) * Section 17: Generics |

Java 8 Features - Streams and Optionals. Asynchronous and Parallel Programming in Java 8. Go through web pages for learning below specific topics

[Asynchronous and Parallel Programming](https://www.baeldung.com/java-asynchronous-programming)

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

* Employee Loan Eligibility
* Placement Enrollment Count
* Auditing

**JDBC**

**Continuous Learning: Technical Enablement**

I[ntroduction, Connection, Statement, Prepared Statement, Callable Statement, Transactions and Meta Data.](javascript:void(0);)

**Learn and Practice**

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| C:\Users\690417\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FCA95A2.tmp | [Java Database Connection: JDBC and MySQL](https://cognizant.udemy.com/course/how-to-connect-java-jdbc-to-mysql/).   * Go through entire course. * Implement the examples along with the author. |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| --- |
| * Add Flight using JDBC |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| --- |
| * Mall Parking System * Validate Name * Travel Agency * Fruit Basket Estimation   **Additional Hands-on**   * Participant List Manipulation * College Account |
| **Additional Learning:**  **Technical Quizzes:**   * Quiz 3 - Collections Framework * Quiz 4 - Advanced Java Concepts |

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| Day 14 |

**Java Programming Fundamentals (Day 6 -Day15)**

**Continuous Learning: Technical Enablement**

I[ntroduction, Connection, Statement, Prepared Statement, Callable Statement, Transactions and Meta Data.](javascript:void(0);)

**Learn and Practice**

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| --- | --- |
| C:\Users\690417\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FCA95A2.tmp | [Java Database Connection: JDBC and MySQL](https://cognizant.udemy.com/course/how-to-connect-java-jdbc-to-mysql/).   * Go through entire course. * Implement the examples along with the author. |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

* Search for Trains – JDBC
* Player Selection System\_JDBC

**Additional Hands-on**

* Retrieve customer count based on loan type\_JDBC
* Retrieve ID and Price of mobiles with in the range\_JDBC

**Code Challenge: Code Challenge - Group 2**

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| Day 15 |

**Java Programming Fundamentals (Day 6 -Day15)**

**Continuous Learning: Technical Enablement**

* Rehearse the sections based on need

**Integrated Capability Test**

**Integrated Capability Test (ICT) - QAQE - JAVA ASSESSMENT**

Schedule – Stage 1: Day 16 to 25

Week 4 will be focusing on WebUI: JavaScript and HTML/CSS

Udemy learnings are recommended in the Platform to understand the fundamental concepts. Apply the concepts learned and solve the Hands-on and Practice Case studies as recommended below.

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| Day 16 |

**Web UI, DataSource (Day 16 - Day25)**

Learn the basics of WebUI : HTML Basics

**Continuous Learning: Technical Enablement**

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Build Websites from Scratch with HTML & CSS](https://cognizant.udemy.com/course/build-website-scratch/)  Refer only sections 1, 2, 3, 4, 5, 6 & 7 to learn HTML fundamentals with CSS. |

Learn the basics of WebUI : XPath Basics

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Master XPath and CSS Selectors for Selenium WebDriver](https://cognizant.tekstac.com/mod/udemy/view.php?id=2643)  Refer section 1, 2, 3, 4 and 5 in this Udemy course and complete the corresponding learnings.  Section 1: Locating Elements  Section 2: XPath Basics  Section 3: XPath Axis  Section 4: CSS Selectors Basics  Section 5: CSS Selectors Advance |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

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| --- |
| * HTML-Xpath-condition: StudentRegistration * HTML-Xpath: CommodityDetails2 * HTML-Xpath: CommodityDetails1 |

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| Day 17 |

**Web UI, DataSource (Day 16 - Day25)**

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

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| * HTML-Xpath-function: StudentRegistration * HTML-Xpath: AddressBook * HTML-Xpath: Cargo\_Shipping\_Cost * HTML-Xpath: CSS selector * HTML-Xpath: Label\_PartialXpath |
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| Day 18 |

**Web UI, DataSource (Day 16 - Day25)**

**Continuous Learning: Technical Enablement**

Learn the basics of WebUI: JavaScript Basics

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| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Accelerated JavaScript Training](https://cognizant.udemy.com/course/javascript-bootcamp-2016/)  Refer section 1, 2, 3 and 4 in this Udemy course and complete the corresponding learnings.  Section 1: Getting Started  Section 2: Language Basics  Section 3: Types & Scopes  Section 4: Arrays |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

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| * Print Fibonacci Series * Ugly Number |

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| Day 19 |

**Web UI, DataSource (Day 16 - Day25)**

**Continuous Learning: Technical Enablement**

Learn the basics of WebUI: JavaScript Basics

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Accelerated JavaScript Training](https://cognizant.udemy.com/course/javascript-bootcamp-2016/)  Refer section 5, 6 7, 8 & 9 in this Udemy course and complete the corresponding learnings.  Section 5: Objects  Section 6: Errors & Debugging  Section 7: Functions  Section 8: Built-in Objects & Functions  Section 9: Working with the Window and Document Object Model (DOM) |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

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| * Asset Summary * Customer Details * Payment Information * Total Expense |

**Additional Learning:**

**Technical Quizzes:**

Quiz 1 - Java script

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| Day 20 |

**Web UI, DataSource (Day 16 - Day25)**

**Code Challenge**

Code Challenge 1 - Java script

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| Day 21 |

**Web UI, DataSource (Day 16 - Day25)**

Day 21 to 25 will be focusing on DataSource – SQL, XML and JSON.

Udemy learnings are recommended in the Platform to understand the fundamental concepts. Apply the concepts learned and solve the Hands-on and Practice Case studies as recommended below.

**Continuous Learning: Technical Enablement**

Learn the basics of SQL

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Relational Database Design](https://cognizant.udemy.com/course/relational-database-design/learn/#overview)    Refer all the sections of the Udemy course |

Go through web pages for learning below specific topic- **No SQL overview**

[Introduction to NoSQL](https://www.geeksforgeeks.org/introduction-to-nosql/)

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [SQL for Beginners: Learn SQL using MySQL and Database Design](https://cognizant.tekstac.com/mod/udemy/view.php?id=2660)  Refer sections 1 to 12, and 14 in this Udemy course and complete the corresponding learnings.  Section 1: Course Introduction  Section 2: Installation and Setup  Section 3: Data Definition Language  Section 4: More on Alter Table  Section 5: Data Manipulation  Section 6: Selecting from a Table  Section 7: Selecting from Multiple Tables |

Go through web pages for learning below specific topics

[RANK Function](https://www.mysqltutorial.org/mysql-window-functions/mysql-rank-function/)

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

|  |
| --- |
| * Insert Records - Department * Department name based on block number * Student and their Department Based on City |

|  |
| --- |
| Day 22 |

**Web UI, DataSource (Day 16 -Day25)**

**Continuous Learning: Technical Enablement**

Learn the basics of SQL

|  |  |
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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Relational Database Design](https://cognizant.udemy.com/course/relational-database-design/learn/#overview)    Refer all the sections of the Udemy course |

Go through web pages for learning below specific topic- **No SQL overview**

[Introduction to NoSQL](https://www.geeksforgeeks.org/introduction-to-nosql/)

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [SQL for Beginners: Learn SQL using MySQL and Database Design](https://cognizant.tekstac.com/mod/udemy/view.php?id=2660)  Refer sections 8, 9, 10, 11 and 12 in this Udemy course and complete the corresponding learnings.  Section 8: Database Design  Section 9: Creating a Cinema Booking System Database  Section 10: Aggregate Functions  Section 11: Subqueries  Section 12: MySQL Functions - String Functions and Date Functions |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

|  |
| --- |
| * Hunger eats - update table * Delivery Partner details based on rating * car rental system - Insert values * Customers having gmail id * Car details based on type and name * Car & owner details based on car type |

**Additional Hands-on**

|  |
| --- |
| * Car rental system - Create Table * Car rental system - add new column * Hunger eats - change datatype * Hunger eats - Change the field name |

**Additional Learning:**

**Technical Quizzes:**

Quiz 2 - Database concepts

|  |
| --- |
| Day 23 |

**Web UI, DataSource (Day 16 - Day25)**

**Continuous Learning: Technical Enablement**

Learn the basics of SQL

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Relational Database Design](https://cognizant.udemy.com/course/relational-database-design/learn/#overview)    Refer all the sections of the Udemy course |

Go through web pages for learning below specific topic- **No SQL overview**

[Introduction to NoSQL](https://www.geeksforgeeks.org/introduction-to-nosql/)

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [SQL for Beginners: Learn SQL using MySQL and Database Design](https://cognizant.tekstac.com/mod/udemy/view.php?id=2660)  Refer sections 13 and 14 in this Udemy course and complete the corresponding learnings.  Section 13: Challenges  Section 14: Extra Information -Source code, and other stuff |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

|  |
| --- |
| * Concatenating Details * Hotels that took order based on month * Hotel\_info * Rental details based on date * Password Generation * Customer using HDFC bank |

**Additional Hands-on**

|  |
| --- |
| * Total sale daywise * Hotels that took order more than five times * Credential details * Maruthi car owner details * Cars not taken for rent * No of time rented by each car * Customer mail details * Order details * Hotels not taken orders in a specific month * Number of Tickets Booked * Buses based on Source and Destination |

**Additional Learning:**

**Technical Quizzes:**

Quiz 3 - ANSI SQL

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| Day 24 |

**Web UI, DataSource (Day 16 -Day25)**

**Continuous Learning: Technical Enablement**

Learn the basics of XML and JSON

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| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn API Technical Writing: JSON and XML for Writers](https://cognizant.tekstac.com/mod/udemy/view.php?id=2668)  Refer sections 1, 2, 3 and 4 in this Udemy course and complete the corresponding learnings.  Section 1: Introduction  Section 2: JSON  Section 3: XML  Section 4: Final Words |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
| --- |
| * Well Formed XML - Employee Detail * Well Formed XML - Department Details * Well Formed XML - Department Details -2 * Well Formed XML - Hotel Information * Well Formed XML - Multiple Department Details |

|  |
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| Day 25 |

**Web UI, DataSource (Day 16 - Day25)**

**Continuous Learning: Technical Enablement**

Learn the basics of XML and JSON

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn API Technical Writing: JSON and XML for Writers](https://cognizant.tekstac.com/mod/udemy/view.php?id=2668)  Revisit the sections in this Udemy course and complete the corresponding learnings. |

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**Code Challenge**

* Code Challenge 2 - DDL, DML & Select Statement
* Code Challenge 3 - JOINS and SUBQUERIES
* Code Challenge 4 - Scalar, Aggregate
* Code Challenge 5 – XML

|  |
| --- |
| Day 26 & Day 27 |

**Qualifier Assessment on Java, SQL and Web UI**

Schedule – Stage 2: Week 6 to 13

Day 28 to 32 will be focusing on Selenium configuration and WebDriver Basics

Udemy learnings are recommended in the Platform to understand the fundamental concepts.

Apply the concepts learned and solve the Hands-on and Practice Case studies as recommended below.

**Business Aligned Project (Mini Project/ CAS Project/ Hackathon)**

As the selenium learning starts, the project details (Mini project, CAS project and the Hackathon) will be given for the learners so that they can parallel keep doing the project activities along with the rest of the learnings.

The given Mini, CAS Project and the Hackathon are expected to be completed on or before the end week of the program.

Project Evaluation will be based on:

* Source Code
* Functionality Completion, Usage of Features, Code Quality
* Demo of Output

**Note:**

Mini Project is an individual team member activity. Project Requirement is available in the platform

CAS project is an individual activity – Individual requirements will be given by the CAS team and candidates must complete the requirement and submit the solution for evaluations by BU SME.

Hackathon is an individual activity. Project requirement is available in the platform.

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| Day 28 |

**Automation Concepts, configuration, WebDriver Basics (Day 28 -Day 32)**

**Continuous Learning: Technical Enablement**

Learn the basics of WebDriver Basics

|  |  |  |
| --- | --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 3 in this Udemy course and complete the corresponding Subtopics from 17 to 25  Section 3: Selenium WebDriver | |
| Day 29 | |

**Automation Concepts, configuration, WebDriver Basics (Day 28 -Day 32)**

**Continuous Learning: Technical Enablement**

Learn the basics of WebDriver Basics

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 3 in this Udemy course and complete the corresponding Subtopics from 17 to 25  Section 3: Selenium WebDriver |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
| --- |
| * Object Identification By name |

|  |
| --- |
| Day 30 |

**Automation Concepts, configuration, WebDriver Basics (Day 28 -Day 32)**

**Continuous Learning: Technical Enablement**

Learn the basics of WebDriver Basics

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 3 in this Udemy course and complete the corresponding Subtopics from 17 to 25  Section 3: Selenium WebDriver |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

* IdLocator
* All Web elements
* Page Navigation

**Project Deliverable (Mini Project):**

**Overall Duration:** Should start your mini project parallel with the Stage 2 Selenium Automation learnings

The outcomes of doing **Mini Project** are:

* Enables learners to know on the environment setup
* Any web application is taken, and learner try to automate given scenario using Selenium APIs

Exhibits learner skills on automation of real time applications for smaller requirement.

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| Day 31 |

**Automation Concepts, configuration, WebDriver Basics (Day 28 -Day 32)**

**Continuous Learning: Technical Enablement**

Learn the basics of WebDriver Basics

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 3 in this Udemy course and complete the corresponding Subtopics from 17 to 25  Section 3: Selenium WebDriver |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

|  |
| --- |
| * Form Registration Advanced * Form Registration Basic |

**Additional Hands-on**

* Login Servlet - Basic Web Elements
* User Registration PrintOptions - Basic Web Elements
* AgentRegistration Error Message - Basic Web Elements

**Additional Learning:**

**Technical Quizzes:**

Quiz 1 - Automation Concepts, Selenium configuration, WebDriver Basics

**Project Deliverables**

* Integrate the mini project

|  |
| --- |
| Day 32 |

**Automation Concepts, configuration, WebDriver Basics (Day 28 -Day 32)**

**Continuous Learning: Technical Enablement**

Learn the basics of WebDriver Basics

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 3 in this Udemy course and complete the corresponding Subtopics from 17 to 25.  Section 3: Selenium WebDriver |

**Code Challenge**

Code Challenge - Automation Concepts, Selenium configuration, WebDriver Basics

|  |
| --- |
| Day 33 |

**Selenium Automation Techniques, Dynamic XPath (Day 33 -Day 37)**

**Continuous Learning: Technical Enablement**

Learn the basics of Automation Techniques and Dynamic Xpath

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 3 in this Udemy course and complete the corresponding Subtopics from 26 to 32.  Section 3: Selenium WebDriver |

**Project Deliverables**

* Integrate the mini project

|  |
| --- |
| Day 34 |

**Selenium Automation Techniques, Dynamic XPath (Day 33 -Day 37)**

**Continuous Learning: Technical Enablement**

Learn the basics of Automation Techniques and Dynamic Xpath

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 3 in this Udemy course and complete the corresponding Subtopics from 26 to 32.  Section 3: Selenium WebDriver |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

|  |
| --- |
| * CSSLocator * AbsoluteXpathLocator |

**Project Deliverables**

* Integrate your mini project

|  |
| --- |
| Day 35 |

**Selenium Automation Techniques, Dynamic XPath (Day 33 -Day 37)**

**Continuous Learning: Technical Enablement**

Learn the basics of Automation Techniques and Dynamic Xpath

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 3 in this Udemy course and complete the corresponding Subtopics from 26 to 32.  Section 3: Selenium WebDriver |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

* Relative Xpath Locator
* Handling RegEx Selenium
* xPath Ancestor

**Additional Hands-on**

* StudentRegistration - Dynamic Xpath
* CommodityDetails - Dynamic Xpath
* CustomerRegistration - Dynamic Xpath
* Registration, Invalid - Dynamic Xpath

|  |
| --- |
| Day 36 |

**Selenium Automation Techniques, Dynamic XPath (Day 33 -Day 37)**

**Continuous Learning: Technical Enablement**

Learn the basics of Automation Techniques and Dynamic Xpath

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| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 3 in this Udemy course and complete the corresponding Subtopics from 26 to 32.  Section 3: Selenium WebDriver |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

|  |
| --- |
| * Work with Alerts * Work with Javascript Executor * Multiple Window * Drag and Drop with Slider |

**Additional Learning:**

**Technical Quizzes:**

Quiz 1 - Selenium Automation Techniques, Dynamic Xpath

**Project Deliverables**

* Integrate your mini project

|  |
| --- |
| Day 37 |

**Selenium Automation Techniques, Dynamic XPath (Day 33 -Day 37)**

**Code Challenge**

Code Challenge - Selenium Automation Techniques, Dynamic Xpath

**Project Deliverables**

* Integrate your mini project

|  |
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| Day 38 |

You will be focusing on Selenium WebDriver with POM and ApachePOI

Udemy learnings are recommended in the Platform to understand the fundamental concepts. Apply the concepts learned and solve the Hands-on and Practice Case studies as recommended below.

**Selenium Webdriver With POM and ApachePOI (Day 38 -Day 42)**

Learn the basics of WebDriver with POM and ApachePOI

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 4 in this Udemy course and complete the corresponding learnings.  Section 4: Apache POI - Data Driven Testing using MS Excel |

**Project Deliverable (CAS Project)**

**Overall Duration:** Should start CAS project parallel with the Stage 2 Selenium Automation learnings

The outcomes of doing **CAS Project** are:

* It is an individual team member activity
* Align to the BU real business problem
* Build automation test suite.
* Implement the Hybrid automation frameworks (Prototype) with all mandatory features.
* Automating good coverage of Regression Test Cases.

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| Day 39 |

**Selenium Webdriver With POM and ApachePOI (Day 38 -Day 42)**

Learn the basics of WebDriver with POM and ApachePOI

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| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 4 in this Udemy course and complete the corresponding learnings.  Section 4: Apache POI - Data Driven Testing using MS Excel |

**Continuous Learning: Technical Hands-on**

Additional Hands-on

* AgentRegistration – ApachePOI

Mandatory Hands-on

|  |
| --- |
| * Applying POI - 1 * Applying POI – 2 |

**Project Deliverables**

* Integrate your Mini project
* CAS Project connect and Integrate your CAS project

|  |
| --- |
| Day 40 |

**Selenium Webdriver with POM and ApachePOI (Day 38 -Day 42)**

**Continuous Learning: Technical Enablement**

Learn the basics of WebDriver with POM and ApachePOI

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| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 5 in this Udemy course and complete the corresponding learnings.  Section 5: TestNG Framework for Selenium |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
| --- |
| * Applying POI With POM – 1 |

Additional Hands-on

* FormRegistration, ReadExcelBySheetName – ApachePOI

**Project Deliverables**

* Integrate your Mini project
* Integrate your CAS project

|  |
| --- |
| Day 41 |

**Selenium Webdriver with POM and ApachePOI (Day 38 -Day 42)**

**Continuous Learning: Technical Enablement**

Learn the basics of WebDriver with POM and ApachePOI

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 5 in this Udemy course and complete the corresponding learnings.  Section 5: TestNG Framework for Selenium |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
| --- |
| * Applying POI with POM – 2 |

Additional Hands-on

* InvoiceUpdates - ApachePOI
* ShippingDetails – ApachePOI

**Additional Learning:**

**Technical Quizzes**:

Quiz 1 - Selenium Webdriver with POM and ApachePOI

**Project Deliverables**

* Integrate your Mini project
* CAS Project connect and Integrate your CAS project

|  |
| --- |
| Day 42 |

**Selenium Webdriver with POM and ApachePOI (Day 38 -Day 42)**

**Code Challenge**

Code Challenge - Selenium Webdriver with POM and ApachePOI

**Evaluation:**

**Interim Project Evaluation + Technical Evaluation**

|  |
| --- |
| Day 43 |

**Automation Testing - Selenium with TestNG (Day 43 - Day 52)**

You will be focusing on Selenium with TestNG

Udemy learnings are recommended in the Platform to understand the fundamental concepts. Apply the concepts learned and solve the Hands-on and Practice Case studies as recommended below.

**Continuous Learning: Technical Enablement**

Learn the basics of Selenium with TestNG

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 6 in this Udemy course and complete the corresponding learnings.  Section 6: Page Object Model |

**Project Deliverables**

* Integrate your CAS project

|  |
| --- |
| Day 44 |

**Automation Testing - Selenium with TestNG (Day 43 - Day 52)**

**Continuous Learning: Technical Enablement**

Learn the basics of Selenium with TestNG

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 6 in this Udemy course and complete the corresponding learnings.  Section 6: Page Object Model |

Mandatory Hands-on

* TestNG Annotations – 1
* TestNG Annotations – 2

**Project Deliverables**

* CAS Project connect and Integrate your CAS project

|  |
| --- |
| Day 45 |

**Automation Testing - Selenium with TestNG (Day 43 - Day 52)**

**Continuous Learning: Technical Enablement**

Learn the basics of Selenium with TestNG

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 7 in this Udemy course and complete the corresponding learnings.  Section 7: Hybrid Driven Framework Development with Project (eCommerce Application) |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
| --- |
| * Shipment Cost - TestNG with DataProvider |

Additional Hands-on

* AddressBook – TestNG

**Project Deliverables**

* CAS Project connect and Integrate your CAS project

|  |
| --- |
| Day 46 |

**Automation Testing - Selenium with TestNG (Day 43 -Day 52)**

**Continuous Learning: Technical Enablement**

Learn the basics of Selenium with TestNG

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| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer section 7 in this Udemy course and complete the corresponding learnings.  Section 7: Hybrid Driven Framework Development with Project (eCommerce Application) |

**Continuous Learning: Technical Hands-on**

Additional Hands-on

* ShipmentCharge - TestNG
* Shopify With Dataprovider - TestNG
* UserDetails - TestNG

**Additional Learning:**

**Technical Quizzes**:

Quiz 1 - Selenium with TestNG

**Project Deliverables**

* **Deliver your CAS project and get the evaluation comments from SME**

|  |
| --- |
| Day 47 |

**Automation Testing - Selenium with TestNG (Day 43 - Day 52)**

**Continuous Learning: Technical Enablement**

**Code Challenge**

Code Challenge - Selenium with TestNG

**Project Deliverables**

* Implement the review comments given for CAS Project

|  |
| --- |
| Day 48 |

**Automation Testing - Selenium with TestNG (Day 43 -Day 52)**

**Continuous Learning: Technical Enablement**

You will continue focusing Selenium with TestNG

Udemy learnings are recommended in the Platform to understand the fundamental concepts. Apply the concepts learned and solve the Hands-on and Practice Case studies as recommended below.

**Continuous Learning: Technical Enablement**

Learn the basics of Selenium with Datasource XML Parsing

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn API Technical Writing: JSON and XML for Writers](https://cognizant.tekstac.com/mod/udemy/view.php?id=4683)  Refer sections 1, 2, 3 and 4 in this Udemy course and complete the corresponding learnings.  Section 1: Introduction  Section 2: JSON  Section 3: XML  Section 4: Final Words |

Rehearse the below Lend a hand enablement given in platform

* + - XMLParser\_Enablement

Followed by refer “Lend-a-Hand” code template with solution

* + - XML Parsing
    - XMLParser\_Solution Explanation

**Project Deliverable (Hackathon Project)**

**Overall Duration:** Should start Hackathon project with the digital technology’s milestone

The outcomes of doing **Hackathon** are:

* Explore the Innovative Implementations.
* Implement Best practices such as creating **Smoke and Regression suite**.
* Implement **Maven** on the created automation test scripts
* Explore **Jenkins** to execute the test scripts periodically on Selenium Grid.
* Explore Selenium **Grid** to run test scripts on different platforms and against different browsers.
* Integrate Jenkins with version controller (**GIT**) and scheduled builds to run automatically.

|  |
| --- |
| Day 49 |

**Automation Testing - Selenium with TestNG (Day 43 - Day 52)**

**Continuous Learning: Technical Enablement**

Learn the basics of Selenium with Datasource XML Parsing

|  |  |
| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn API Technical Writing: JSON and XML for Writers](https://cognizant.tekstac.com/mod/udemy/view.php?id=4683)  Refer sections 1, 2, 3 and 4 in this Udemy course and complete the corresponding learnings.  Section 1: Introduction  Section 2: JSON  Section 3: XML  Section 4: Final Words |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
| --- |
| * XMLParsing -1 * Work With XML and POM - 1 * Work With XML and POM - 2 (Commodity) * Work With XML and POM - 3(Discount Calculator) |

**Project Deliverables**

* Integrate your Hackathon project

|  |
| --- |
| Day 50 |

**Automation Testing - Selenium with TestNG (Day 43 - Day 52)**

**Continuous Learning: Technical Enablement**

Learn the basics of Selenium with Datasource XML Parsing

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| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn API Technical Writing: JSON and XML for Writers](https://cognizant.tekstac.com/mod/udemy/view.php?id=4683)  Refer sections 1, 2, 3 and 4 in this Udemy course and complete the corresponding learnings.  Section 1: Introduction  Section 2: JSON  Section 3: XML  Section 4: Final Words |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
| --- |
| * Work With XML and POM - 4(Shipment Detail) * Work With XML and POM - 5(Customer Registration |

**Project Deliverables**

* Integrate your Hackathon project

|  |
| --- |
| Day 51 |

**Automation Testing - Selenium with TestNG (Day 43 -Day 52)**

**Continuous Learning: Technical Enablement**

Learn the basics of Selenium with Datasource JSON Parsing

Rehearse the below Lend a hand enablement given in platform

* + - JSONParsing\_Enablement

Followed by refer “Lend-a-Hand” code template with solution

* + - JSON Parsing
    - Json Solution Explanation

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
| --- |
| * JSONParsing - 1 |

**Additional Learning:**

**Technical Quizzes**:

Quiz 2 - Selenium with different DataSource

**Project Deliverables**

* Integrate your Hackathon project

|  |
| --- |
| Day 52 |

**Automation Testing - Selenium with TestNG (Day 43 -Day 52)**

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

* Work With JSON and POM – 1

Mock ICT:

* Selenium Mock ICT

|  |
| --- |
| Day 53 |

**Digital Technologies (Day 53 -Day 62)**

You will be focusing on Selenium with BDD, Cucumber and WebServices

Udemy learnings are recommended in the Platform to understand the fundamental concepts. Apply the concepts learned and solve the Hands-on and Practice Case studies as recommended below.

**Continuous Learning: Technical Enablement**

Learn webservices testing with SOAPUI.

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [WebServices/Rest API Testing with SoapUI +Real time Projects](https://cognizant.udemy.com/course/webservices-testing-with-soap-ui/learn/lecture/1412346#overview)  Refer sections 1, 2, 3, 4,5, 6, 7 and 8 in this Udemy course and complete the corresponding learnings.  Section 1-8: SOAP UI tool basic features, REST API, JSON Assertions, End-to-End framework design |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

* Testing REST Hotel Service - SOAP UI
* Testing REST Train Service - SOAP UI

**Project Deliverables**

* Integrate your Hackathon project

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| Day 54 |

**Digital Technologies (Day 53 - Day 62)**

**Continuous Learning: Technical Enablement**

Learn webservices testing with SOAPUI.

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [POSTMAN API Testing - Step by Step for Beginners](https://cognizant.udemy.com/course/postman-api-testing-step-by-step-for-beginners/)  Refer sections 1 to 13 in this Udemy course and complete the corresponding learnings.  Section 1-13: Collections, Variables, Environments, Test script creation, Data Driven testing, Authorization, Command line and JENKINS, Workspaced, monitors, Documentation, Remote Execution, SOAP UPI testing, API chaining and Mock API. |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

* Simple SOAP UI web services project with WSDL
* Simple SOAP UI web services project with WADL

**Project Deliverables**

* Integrate your Hackathon project

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| Day 55 |

**Digital Technologies (Day 53 - Day 62)**

**Continuous Learning: Technical Enablement**

Learn SOAPUI Concepts.

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| .C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [WebServices/Rest API Testing with SoapUI +Real time Projects](https://cognizant.udemy.com/course/webservices-testing-with-soap-ui/learn/lecture/1412346#overview)  Refer sections 1, 2, 3, 4,5, 6, 7 and 8 in this Udemy course and complete the corresponding learnings.  Section 1-8: SOAP UI tool basic features, REST API, JSON Assertions, End-to-End framework design |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
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| * TeamPlayers * Creation of new PostMan request with collection |

**Project Deliverables**

* Integrate your Hackathon project

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| Day 56 |

**Digital Technologies (Day 53 - Day 62)**

**Continuous Learning: Technical Enablement**

Learn POSTMAN Concepts.

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [POSTMAN API Testing - Step by Step for Beginners](https://cognizant.udemy.com/course/postman-api-testing-step-by-step-for-beginners/)  Refer sections 1 to 13 in this Udemy course and complete the corresponding learnings.  Section 1-13: Collections, Variables, Environments, Test script creation, Data Driven testing, Authorization, Command line and JENKINS, Workspaced, monitors, Documentation, Remote Execution, SOAP UPI testing, API chaining and Mock API. |

**Code Challenge**

Code Challenge - [WebServices](https://cognizant.tekstac.com/course/view.php?id=489)

**Additional Learning:**

**Technical Quizzes**:

WebServices

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| Day 57 |

**Digital Technologies (Day 53 - Day 62)**

**Continuous Learning: Technical Enablement**

Learn BDD and Cucumber Concepts.

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Selenium WebDriver Masterclass with Java (Basic + Framework)](https://cognizant.udemy.com/course/selenium-webdriver-web-based-automation-testing/)  Refer sections 26 to 29 in this Udemy course and complete the corresponding learnings.  Section 26 - 29: Cucumber BDD framework, BDD framework using datadriven concept, Tags, Hooks, Page object model. |

**Integrated Capability Test (ICT) - SELENIUM**

**Selenium ICT**

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| Day 58 |

**Digital Technologies (Day 53 - Day 62)**

**Continuous Learning: Technical Enablement**

Learn Devops and Grid

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| .C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer sections 8 and 10 in this Udemy course and complete the corresponding learnings.  Section 8: CI - Maven, Git, Github & Jenkins  Section 10: Selenium Grid |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

* MavenTestApp
* MavenJavaApp
* Build Periodically

Additional Hands-on

* GIT installation & commands implementation
* Install Jenkins and Creation of new job

**Project Deliverables**

* Integrate the Hackathon project

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| Day 59 |

**Digital Technologies (Day 53 - Day 62)**

**Continuous Learning: Technical Enablement**

Learn Devops and Grid

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| .C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer sections 8 and 10 in this Udemy course and complete the corresponding learnings.  Section 8: CI - Maven, Git, Github & Jenkins  Section 10: Selenium Grid |

**Continuous Learning: Technical Hands-on**

**Mandatory Hands-on**

* Build Maven Project
* Clone Repo
* Git Branch

Additional Hands-on

* Mavenization using Eclipse M2E plugin Options and CLI commands

**Project Deliverables**

* Integrate the Hackathon project

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| Day 60 |

**Digital Technologies (Day 53 - Day 62)**

**Continuous Learning: Technical Enablement**

Learn Cucumber BDD Framework.

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| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer sections 9 in this Udemy course and complete the corresponding learnings.  Section 9: Cucumber BDD Framework |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
| --- |
| * Cucumber – UserPage * Cucumber - Shopify |

Additional Hands-on

* Simple cucumber project with phptravels
* Simple cucumber project using datatable

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| Day 61 |

**Digital Technologies (Day 53 - Day 62)**

you will be focusing on Selenium with BDD, Cucumber and DevOps

Udemy learnings are recommended in the Platform to understand the fundamental concepts. Apply the concepts learned and solve the Hands-on and Practice Case studies as recommended below.

**Continuous Learning: Technical Enablement**

Learn Cucumber BDD Framework.

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| --- | --- |
| C:\Users\125546\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7FDA4829.tmp | [Learn Selenium with Java, Cucumber + Live Project](https://cognizant.udemy.com/course/learn-selenium-with-java-live-project/learn/lecture/13175868#overview)  Refer sections 9 in this Udemy course and complete the corresponding learnings.  Section 9: Cucumber BDD Framework |

**Continuous Learning: Technical Hands-on**

Mandatory Hands-on

|  |
| --- |
| * Setup Grid and parallel execution |

Additional Hands-on

* Simple cucumber project using scenario outline

**Technical Quizzes**:

Cucumber and DevOps

**Project Deliverables**

* Integrate the Hackathon project

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| Day 62 |

**Digital Technologies (Day 53 - Day 62)**

**Continuous Learning: Technical Enablement**

Rehearse the section based on need

**Project Deliverables**

* Deliver the Hackathon project

The deliverables of the Hackathon will be evaluated by the BU SME.

Project Evaluation will be based on:

* Source Code
* Functionality Completion, Usage of Features, Code Quality
* Demo of Output

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| Day 63 - 65 |

**Evaluation:**

**Final Project Evaluation + Final Technical Evaluation**

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| **What is Final Evaluation?**  The Final Evaluation will be conducted to certify whether a GenC is eligible to enter into the BU or not. The skill of a GenC will be gauged on the application development and overall technical knowhow towards the end of GenC Training.  Tech SME from BU will be conducting the final tech evaluation. As a fallback, the project mentor can also steer this activity.  The final evaluation will be conducted as two phases. They are the following   1. **Final Technical Evaluation** 2. **Final Project Evaluation**   The mode of these evaluations will be any one of the following:   * F2F(face to face) * Video Based   **1. Final Technical Evaluation (FTE)**  The BU Mentor will interview the GenC on various skills achieved throughout the training program and put a score which will be considered for the final PHS of the GenC. | Evaluation Report Card Clipboard Assessment Grades Stock Photo by ©iqoncept  20332497 |
| **2. Final Project Evaluation (FPE)**  In this evaluation, the BU Mentor will be verifying the skills of a GenC on a project perspective. End of this evaluation, the BU Mentor will score the GenC’s work based on various evaluation criterions. |  |

How to learn each day?

Each day has a set of learning objectives. These learning objectives can be met by going through the Udemy courses and by completing the hands-on exercises mentioned in the daily plan.

The below strategies will help you decide the learning approach.

Learning Strategy & Approach

Find below few imaginary profiles. For each of these profiles we have defined a recommended learning approach. This is not an exhaustive list. The approaches below might help invent a new way of learning.

**Profile #1**

|  |  |
| --- | --- |
| man staring at white sky taken at daytime | Harry Reacher  **Engineering Discipline:** Electronics  **Skills:** Python, Ruby on Rails, nginx  **Project:** Mining Crime Data to get Route Cause Insights  **Learning Approach to Programming Languages:** I do not want to waste my time learning. I am more practice oriented. I want to work on the problem immediately |
| What will work for me?   * Directly complete hands on exercises * Refer Internet or Udemy Courses * If hands on are implemented early, clarify your friends questions and troubleshoot their issues |

**Profile #2**

|  |  |
| --- | --- |
| woman covering her face with white book | Olivia Richards  **Engineering Discipline:** Computer Science  **Skills:** Java, C, C++  **Project:** Library Management System  **Learning Approach to Programming Languages:** I have interest, but I don’t know where to start. |
| What will work for me?   * Go through the recommended Udemy Course * Try completing the hands on exercises * Get your clarifications solved with help from Tech SME * Get help from other learners in your batch whom had already completed |

**Profile #3**

|  |  |
| --- | --- |
| person holding pile of books near face | Greg Anderson  **Engineering Discipline:** Civil  **Skills:** C  **Project:** Fiber reinforced concrete  **Learning Approach to Programming Languages:** I am scared of programming languages. I haven’t got my hands dirty with coding |
| What will work for me?   * Go through the recommended Udemy Course * Implement the coding along with the author of the Udemy Course * Try completing the hands on exercises * Clarify queries with SME * Troubleshoot programming issues with help from SME or learner from your classroom whom had already completed |

FAQ

1. Who can participate in this program?

Students who have enrolled for Full Internship Program (or) the Cognizant on-boarded GEN Cs can participate in this program.

1. Is there any pre-learning I should do?

No. This program is open to all students from any academic discipline.

1. How will I know my RAG status?

It will be shown to you in the GEN C learn Platform, in your Home Page.

1. Whom do I reach out in case of any queries?

Coach is your point of contact.

1. What is the significance of Hands-on in the overall learning journey?

Hands-on focuses on specific topics in a Skill, which you can try and execute in the

Platform. Group of such Hands-on exercises will be packaged together as a Code

Challenge. This Code Challenge will allow you to benchmark your skills in the learning

journey. Hands On/ Code Challenges/ ICT are learning components which will help you in

understanding the skills better.

1. What is Code Challenge?

A problem statement will be provided to you and you need to solve it using a single skill.

1. What is Integrated Capability Test (ICT)?

A case study problem statement will be provided to you, that you may need solve using the combination of Skills learnt in the given stage.

1. How many attempts are provided for the Coding challenge and ICTs? Is it open all the time for practice?

The Coding challenges and ICTs are open and there are 3 attempts to take them up.

1. What is the entry criteria for qualifier?

 A minimum of 70% hands-on completion and attempt in the CC & ICT is the eligibility criteria for qualifier.

1. What skills are covered in the qualifier?

The skills of Stage 1 are covered in the qualifier. Only ONE attempt is provided to clear with a minimum score of 70%

1. What if I fail in the Interim evaluation?

Your coach will notify your performance in the Interim evaluation. However you can continue with the learning.

1. How many chances will I get in the Final evaluation?

You’ll get 2 chances in the Final evaluation which covers ALL the skills in the learning journey.

1. Whom do I reach out in case of any queries?

Coach is your point of contact.