Cognizant

Digital Nurture

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Introduction

We welcome you to the Digital Nurture Base 2 program by Cognizant!

This program is exclusively designed to equip you with a set of knowledge & skills that form the base for a career in Information Technology. The Program has been carefully crafted by Subject Matter Experts (SMEs), who combine Technology expertise with practical experience. This approach perfect blend of theory and practice, to launch you on your journey to the highest levels of proficiency in Hi-Tech work environments.

We encourage you to go through this guidebook completely to understand the program throughly, including the FAQs at the end.

Enjoy your Learning!

Learning Guide - Technical Skills

The purpose of this handbook is to provide important facet of the Digital Nurture Program-Base 2. It includes a list of links and steps illustrating how to access learning sources.

Why do we need this enablement Program?

As Digital Technologies proliferate, there is a dual need in workplaces:

(i) Solid foundations in computing and
(ii) Capabilities in advanced areas.

It is important to keep in mind that Advanced Technologies, by their nature, are the forefront of innovation. This means they keep changing and professionals in the IT industry need to (apart from the work they do) journey on a path of continuous learning. Mastery of Advanced Technologies and continuously expanding one's skillsets is possible only if professionals have a mastery of the fundamental concepts of a range of subjects in IT.

This Program aims to do just this. It enables you to acquire a comprehensive grasp of the fundamental concepts in a range of subjects that form the base of modern Information Technology. With this foundational skill-kit, you will be able to navigate and succeed in your learning journey – a journey that will see you continuously learn and thrive.

Digital Base 2 at a glance

Students should have chosen any one of the streams from the below 3 available options. This learning journey of 5 weeks consists of modules covering:

- Digital Nurture Base 2 – JAVA (Stream 1)
- Digital Nurture Base 2 – DOTNET (Stream 2)
- Digital Nurture Base 2 – DATA WAREHOUSE (Stream 3)

Stream 1 - JAVA

- Foundation
- Web
- RDBMS
- Dev Support Technologies
- Advanced Java
- Business Communication

Stream 2 - DOTNET

- Foundation
- RDBMS
- Web
- Dev Support Technologies
- Advanced C#
- Business Communication

Stream 3 - DATA WAREHOUSE

- Foundation
- Web
- RDBMS
- Data Warehouse
- Core Programming
- Business Communication

Program Highlights

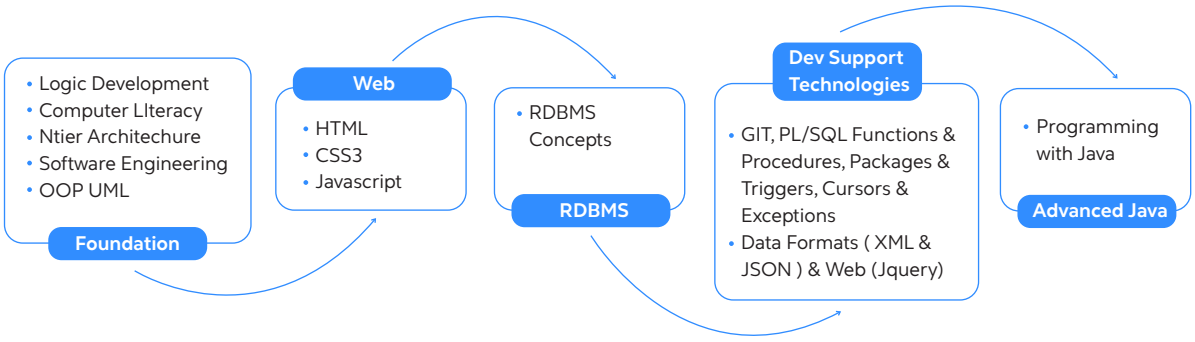
- Completely online: delivered 24x7 through a best-in-class digital skilling platform.
- A pedagogy that places the learner at the center: each component of the program is crafted keeping in mind the fact that you are an adult, that you are keen on acquiring skills and value autonomy in directing your learning.
- A learning approach based on the idea that skills are acquired through practice and feedback: you will find that each course has an ample number of exercises, quizzes and hands-on labs that are designed to help you become confident in practical application of concepts.
- Support from SMEs as you progress.

Key Components of the Program

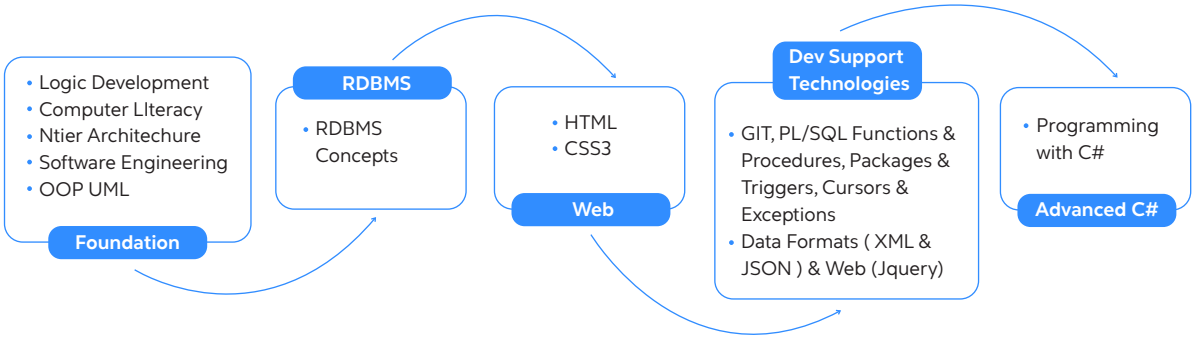
- The Program is structured as a set of 5 Modules with each Module culminating in a Coding Challenge.
- Each Module is a learning unit that consists of explanatory videos, presentations, demos of practical applications, hands-on Lab exercises (where applicable) and knowledge-check quizzes.
- The Coding Challenges are equivalent to Micro certifications in Digital Base1.The Coding Challenge for a Module is awarded on successful completion of an Assessment.

Learning Journey

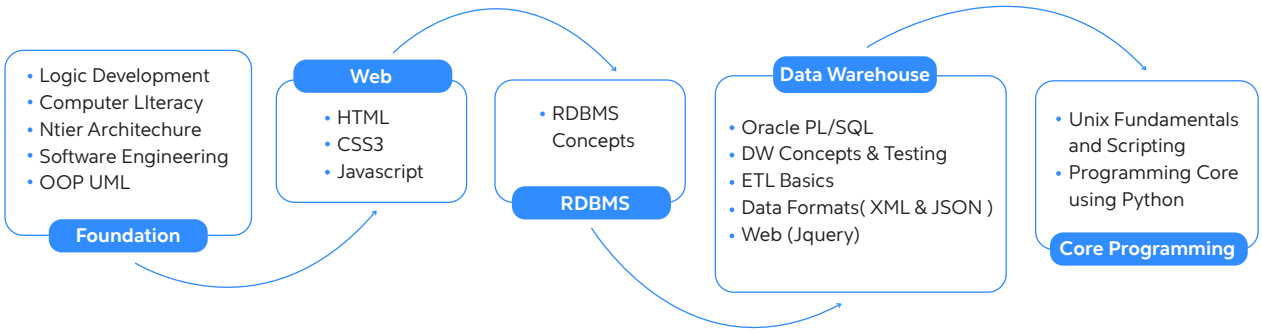
Stream 1 – JAVA



Stream 2 - DOTNET



Stream 3 - DATA WAREHOUSE



Getting Started

To get started you need to login to Digital Nurture Learning platform at:

https://cognizantee.tekstac.com/login/?lang=en

In most mail programs, this should appear as a blue link which you can just click on. If that does not work, then copy and paste the address into the address line at the top of your web browser window. Once you log in you will find all the required details about the program.

Courses & Lessons

To access the courses, Login to the Digital Nurture Learning platform,

- On the home page, scroll down to "My Learning Path" section and click on "Digital Base 2" learning path and access all your course modules. Please find the below screenshot for your reference.
- Once you login and go through the course modules, please make note that there are mandatory course activities like Quiz and Hands-on, that will be present under each course unit. These quizzes are meant to gauge your understanding of the concepts in each course unit and the hands-on activities is to help you implement the concepts learnt.
- On completing the mandatory activities in each course unit, you will be awarded certain XP points. As you complete more activities, the XP points will keep increasing.

DIGITAL NURTURE BASE 2 – JAVA

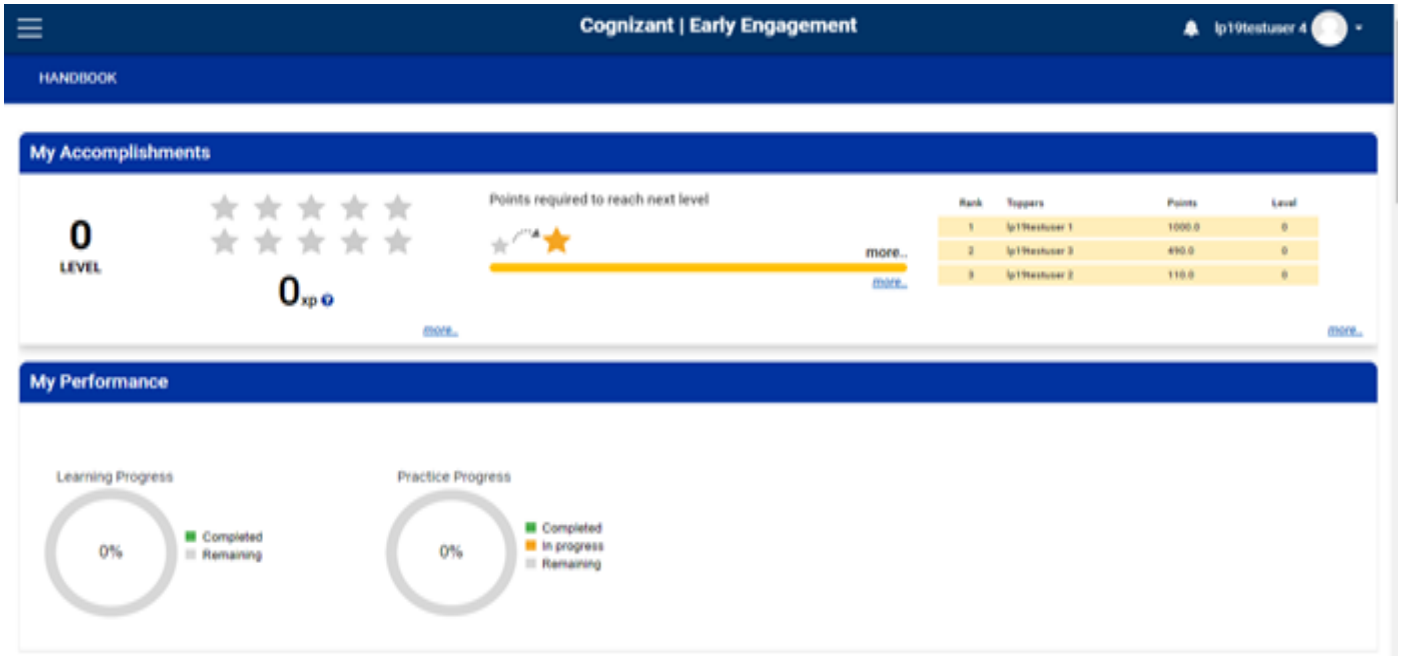
DIGITAL NURTURE BASE 2 – DOTNET

DIGITAL NURTURE BASE 2 – DATA WAREHOUSE

Learning Progress Report

To know your learning progress, Login to the Digital Nurture Learning platform and on the home page you will see:

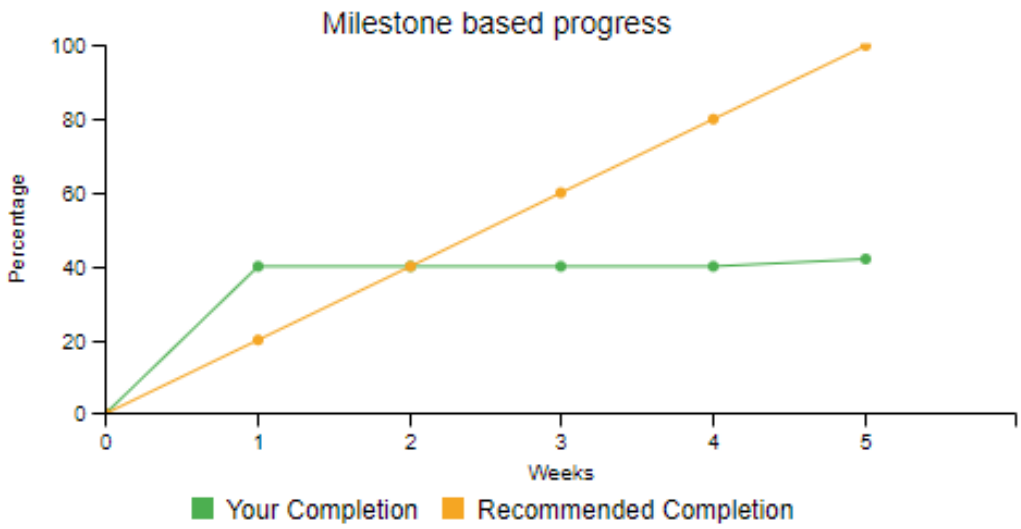
- “My Accomplishments” which details the XP points level reached by you. It also includes your overall rank. Please find the below screenshot for your reference:



The doughnut charts shown above under “My Performance” captures you learning progress and practice progress respectively.

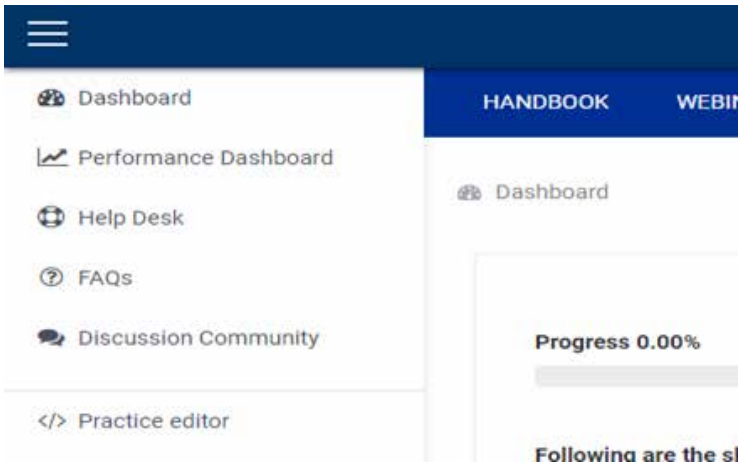
Milestone based progress

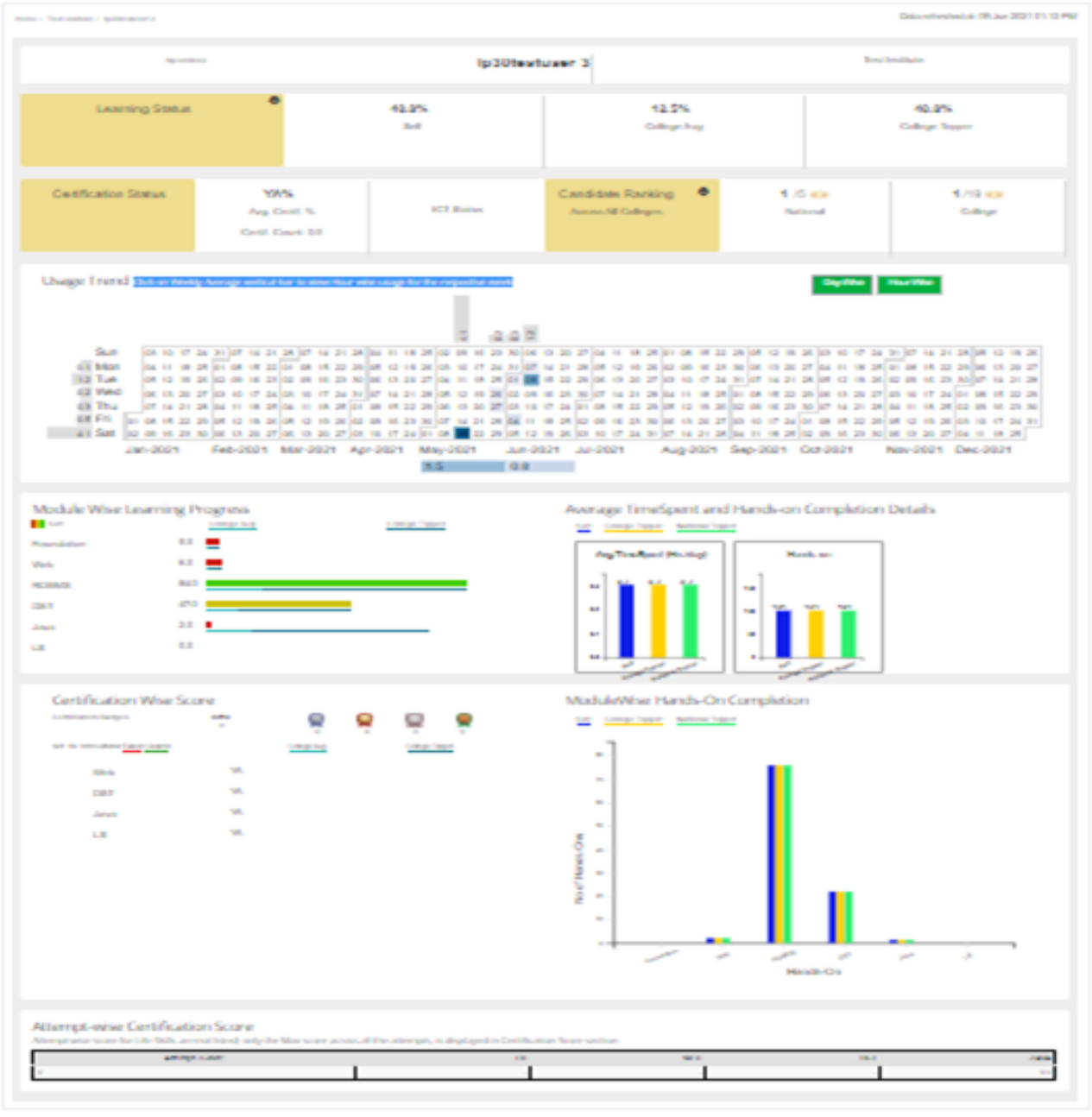
The “Milestone Based Progress “graph shown below indicates your course completion Vs the recommended course completion to be achieved within 12 weeks.



Performance Dashboard

Holistic view of your performance (course & module wise) can be accessed through the 'Performance Dashboard' available in the homepage.

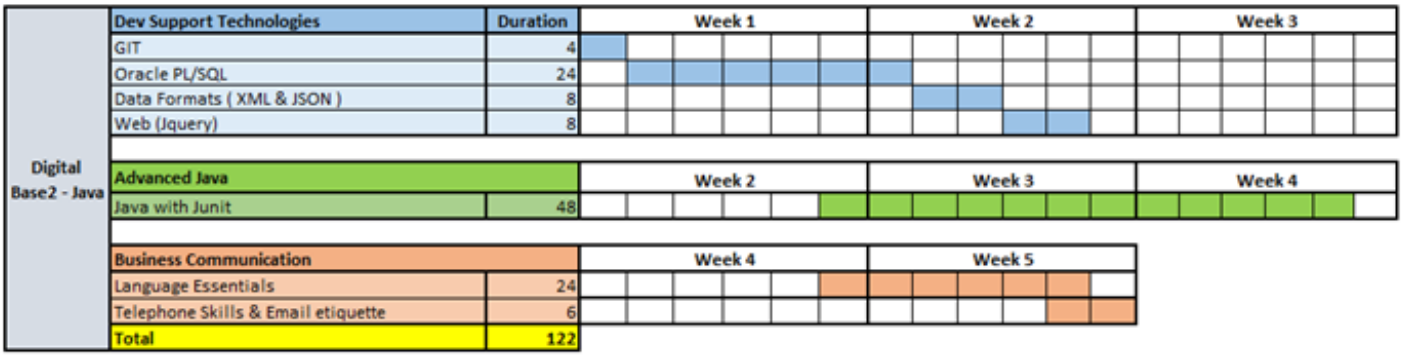


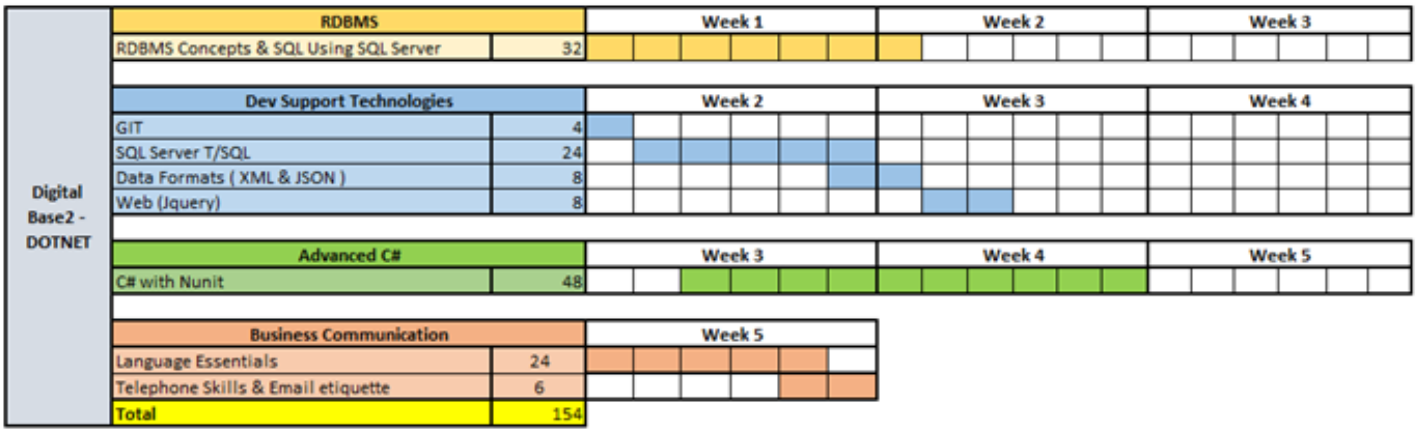


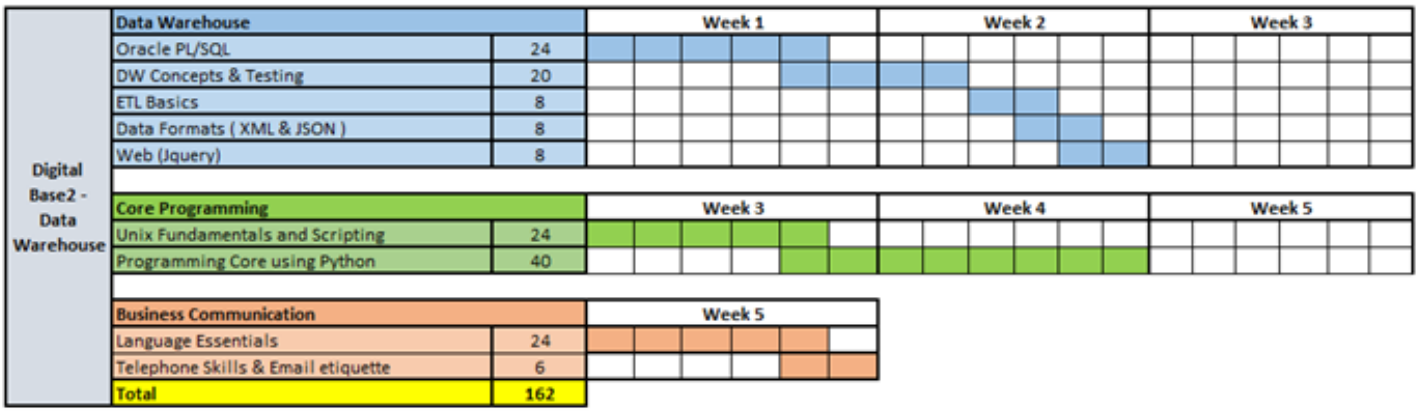
Recommended Completion

Please find below the Recommended Schedule for your reference. This chart will give you an idea on how you need to progress with your learning on a weekly basis.

Cognizant Digital Nurture Base 2 - Recommended Schedule







Practice Editor

Each candidate would be having an option to practice coding in the practice editor tab. Follow the instructions as given in the above image. The Practice editor helps in honing your coding skills and gain a deeper understanding and hands on experience.

Submission:

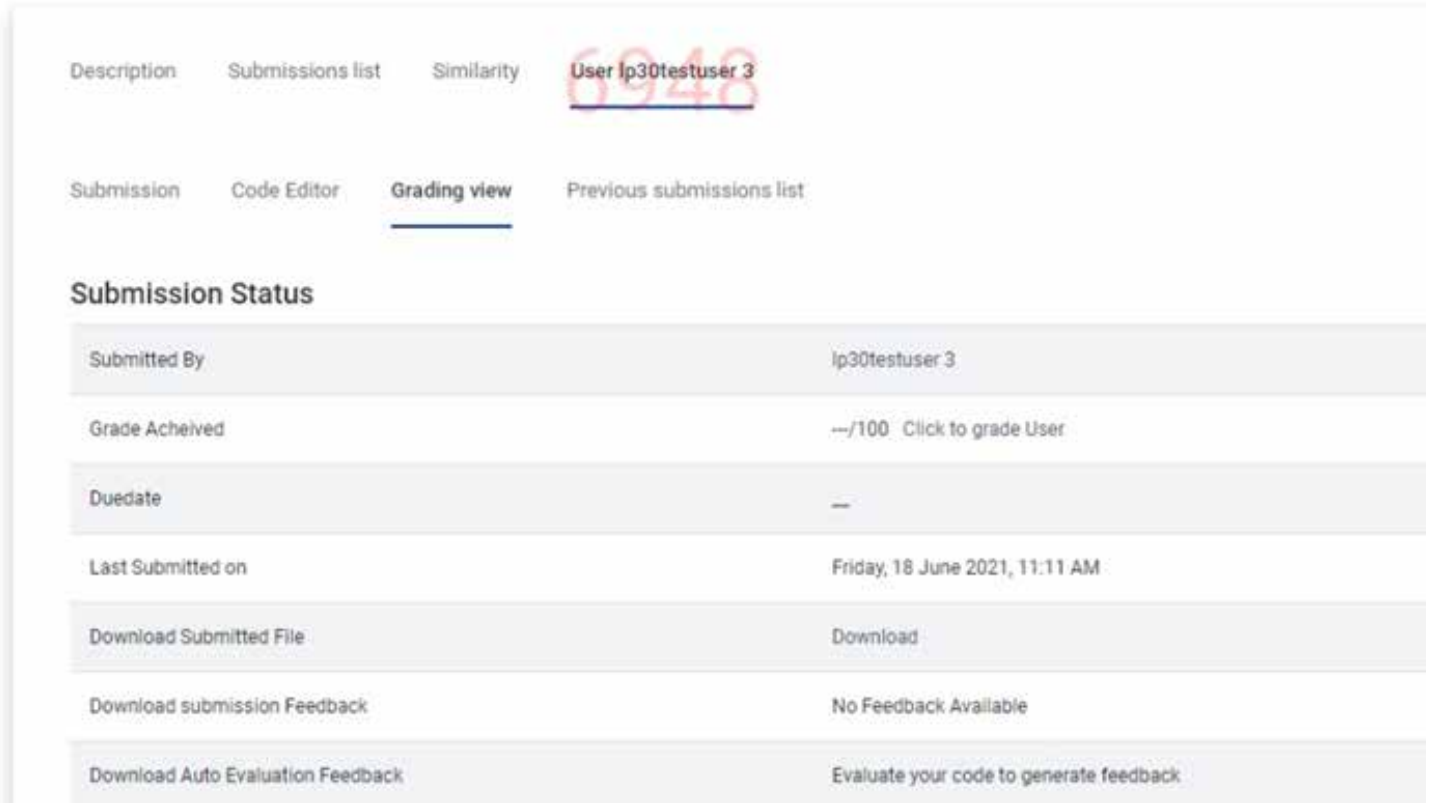
Step 1: Click on the submission button to submit the work.

Step 2: Describe the result in the result description space given.

Step 3: The solution should be a zip file, containing all the necessary files. Ensure that the filenames. should be as that of the description and the files mentioned in the Code Editor.

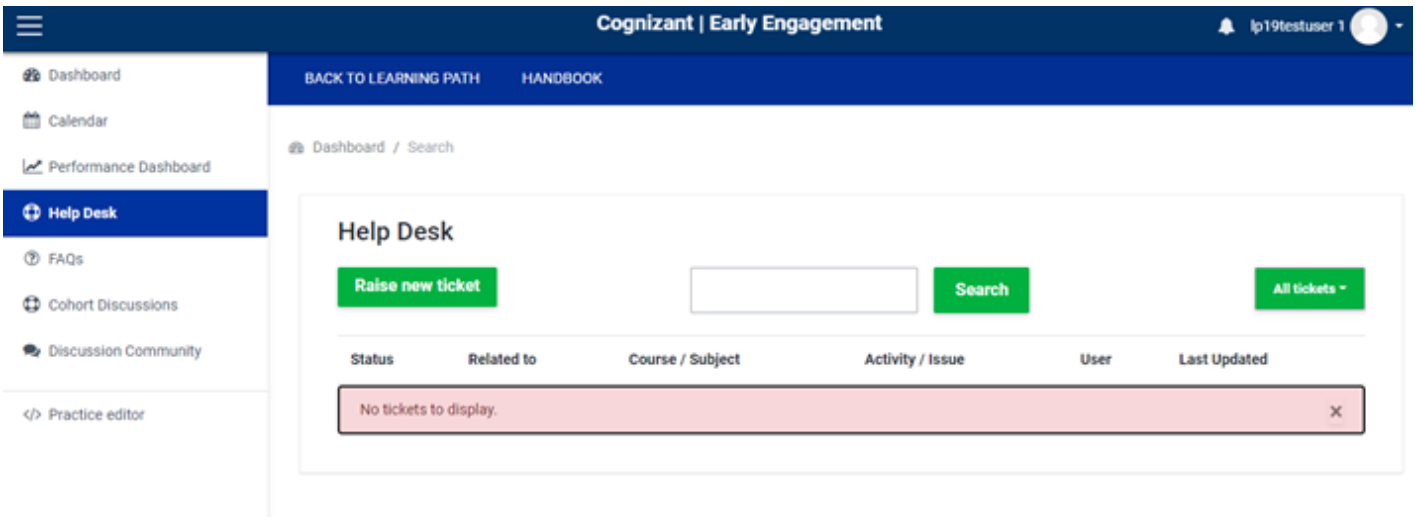
Step 4: You can Drag and Drop or choose the file to submit your work.

Step 5: Click on submit your work.



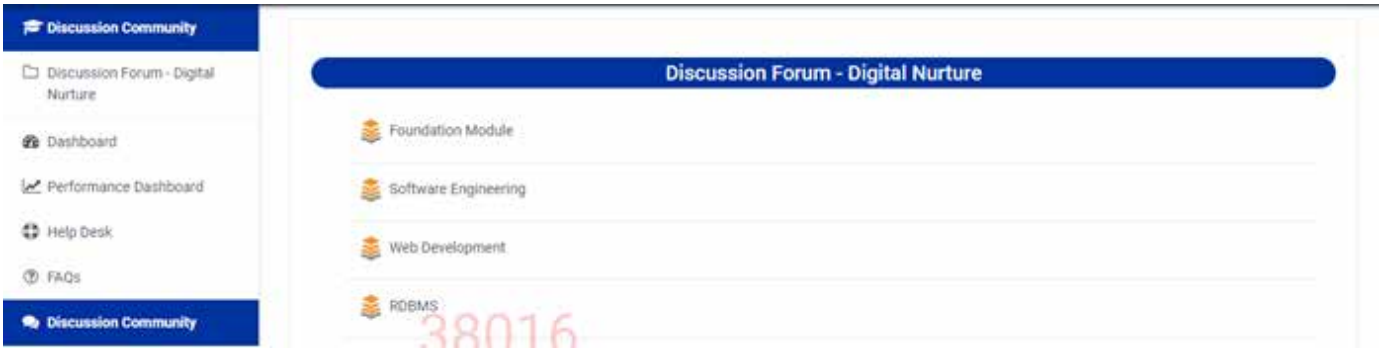
Help Desk

For any issues / queries related to the platform or the learning activities, students may raise a ticket using the Help Desk option available on the platform. Replies/response to the tickets will be sent by emails/notifications (on the platform), within 24 hours on working days. Please find the below screenshot for your reference. Once you click on “Raise new ticket”, you will be guided to mention the category and type of your query. All tickets raised by you will be displayed here including the status of your ticket.



Discussion Forum

Cohort Discussions help a learner to participate in the discussions that happen within the college. This helps in progress and improve the discussions that are happening within the groups that you would be a part of enhancing the learning experience throughout the Digital Nurture program.



Course Modules

There will be a Coding Challenge at the end of each course module. The Coding Challenge will cover the topics mentioned under each course module. Based on the three streams, the learning content of each course module will have numerous learning activities, that will cover the mentioned topics.

DIGITAL BASE 2 - JAVA

Module 1

Foundation

Objective(s): Learn fundamentals of logic, the algorithmic way to approach problems, how modern computing works, how software applications are built and the principles of Object-Oriented Programming.

Topics include: Logic development, n-tier Architecture, Software Engineering and Object-Oriented Programming

Module 2

Web Technologies

Objective(s): Learn the essentials of developing the front-end, the interfaces for users of web applications.

Topics include: HTML 5, CSS3 with Bootstrap and JavaScript

Module 3

RDBMS & SQL using ORACLE

Objective(s): Learn how data is created, organized, stored, and retrieved in software applications. Also, learn how to work with the Oracle database, and perform various computations and functions with data.

Topics include: RDBMS concepts, Tables, Data manipulation, SQL statements, Scalar & Aggregate functions, Joins, Subqueries, Views, Index and Data Control Language.

Module 4

Dev Support Technologies

Objective(s): Learn the core concepts of Dev Support Technologies.

Topics include: GIT, Introduction to PLSQL, PL/SQL Functions & Procedures, Packages & Triggers, Cursors & Exceptions, Data Formats (XML & JSON) and Web (jQuery).

Module 5

Advanced Java

Objective(s): Learn how to write programs using the basic elements of Java.

Topics include: The Java environment, the building blocks of Java, classes, strings and arrays.

Module 6

Business Communication

Objective(s): Learn how to improve communication and interpersonal skills.

Topics include: Grammar, Vocabulary, Write Right, Telephone Skills and Email Etiquette.

DIGITAL BASE 2 - DOTNET

Module 1

Foundation

Objective(s): Learn fundamentals of logic, the algorithmic way to approach problems, how modern computing works, how software applications are built and the principles of Object-Oriented Programming.

Topics include: Logic development, n-tier Architecture, Software Engineering and Object-Oriented Programming.

Module 2

RDBMS & SQL using ORACLE

Objective(s): Learn how data is created, organized, stored, and retrieved in software applications. Also, learn how to work with the Oracle database, and perform various computations and functions with data.

Topics include: RDBMS concepts, Tables, Data manipulation, SQL statements, Scalar & Aggregate functions, Joins, Subqueries, Views, Index and Data Control Language.

Module 3

Web Technologies

Objective(s): Learn the essentials of developing the front-end, the interfaces for users of web applications.

Topics include: HTML 5, CSS3 with Bootstrap and JavaScript.

Module 4

Dev Support Technologies

Objective(s): Learn the core concepts of Dev Support Technologies.

Topics include: GIT, Introduction to PLSQL, PL/SQL Functions & Procedures, Packages & Triggers, Cursors & Exceptions, Data Formats (XML & JSON) and Web (jQuery).

Module 5

Advanced C#

Objective(s): Learn how to write programs using the basic elements of C#.

Topics include: The .NET framework, the building blocks of C#, nullables, classes, strings and arrays.

Module 6

Business Communication

Objective(s): Learn how to improve communication and interpersonal skills.

Topics include: Grammar, Vocabulary, Write Right, Telephone Skills and Email Etiquette.

DIGITAL BASE 2 – DATA WAREHOUSE

Module 1

Foundation

Objective(s): Learn fundamentals of logic, the algorithmic way to approach problems, how modern computing works, how software applications are built, and the principles of Object-Oriented Programming.

Topics include: Logic development, n-tier Architecture, Software Engineering and Object-Oriented Programming.

Module 2

Web Technologies

Objective(s): Learn the essentials of developing the front-end, the interfaces for users of web applications.

Topics include: HTML 5, CSS3 with Bootstrap and JavaScript.

Module 3

RDBMS & SQL using ORACLE

Objective(s): Learn how data is created, organized, stored, and retrieved in software applications. Also, learn how to work with the Oracle database, and perform various computations and functions with data.

Topics include: RDBMS concepts, Tables, Data manipulation, SQL statements, Scalar & Aggregate functions, Joins, Subqueries, Views, Index and Data Control Language.

Module 4

Data Warehouse

Objective(s): Learn the core concepts of Data Warehouse.

Topics include: Introduction to PLSQL, PL/SQL Functions & Procedures, ETL Basics, General Concept of Data Warehouse, Dimensional Modeling, Online Analytical Processing (OLAP), Datawarehouse Lab, Data Mining, Business Intelligence, Data Formats (XML & JSON) and Web (jQuery).

Module 5

Core Programming

Objective(s): Learn the core concepts of Core Programming.

Topics include: Unix Fundamentals and Scripting, Introduction To Java and Programming Core using Python.

Module 6

Business Communication

Objective(s): Learn how to improve communication and interpersonal skills.

Topics include: Grammar, Vocabulary, Write Right, Telephone Skills and Email Etiquette.

Program Guidelines

- Learning must be taken in a sequence except for Business Communication and learning must be completed within 5 weeks.
- The platform has a Help Desk where students can raise tickets regarding platform issues and any issues about the learning activities. Queries will be responded between 24 & 48 hours on any working day.
- To be eligible to attempt a Coding Challenges, completion of all quizzes and hands-on exercises (wherever applicable) in the associated Module is mandatory.
- The completion of all quizzes and hands-on Lab (mandatory activities) in a particular course module, will provide access to you for the next module in the learning journey.

- XP points will be awarded for all mandatory activities. Additional XP points will be: -
    - 100 points for qualifying in a Coding Challenge.
    - 100 points for qualifying in the first attempt of taking up a Coding Challenge.
    - 100 points for qualifying in the first occurrence of a Coding Challenge.
- The schedules for the Coding Challenges will be displayed on the platform. Coding Challenges need not be taken up in a sequence. Students must complete the prerequisite learning by midnight at the end of the previous day of the CC schedule.
- Students can take up one re-test if they fail in any Coding Challenge. If passed in the 1st attempt, the next attempt will not be allowed. They will have to qualify in the CC within the 4 occurrences for each CC.
- Students have only one attempt at ICT. They can take up either of the two occurrences of ICT.
- After qualifying in the ICT, they will have a technical interview which they have to qualify to finally succeed in DB 2.
- Eclipse and Visual Studio plugins are included at the end of the Java and Dot Net streams.

Please click here to access the Eclipse IDE - Demo Video

- The Business Communication component is an important one and students are expected to go through the complete course. It will not be enabled in sequence, and students can complete the learning anytime.
- Once students complete the Business Communication learning module the respective CC will be enabled.
- Students can take up the Business Communication CC at any time, 1 attempt and 2 reattempts will be allowed, and the passing score is 60%.

Frequently Asked Questions

1) **Is there any pre-learning I should do?**

This program is Foundational. In other words, it starts from the basics and covers a wide range of concepts and applications comprehensively. No specific pre-learning is required.

2) **Can I choose the stream of Base2?**

Students can choose any one stream from the 3 available options: JAVA, DOT NET, DATA WAREHOUSE. Based on business requirement and their scores in Base 1, they will be assigned a track.

3) **How much time do I have to complete Digital Base2?**

You are expected to complete the Digital Base2 in 5 weeks after your enrollment. Students will have to clear 4 Coding challenges to complete Digital Base2 module. Coding Challenges are equivalent to Micro certifications in Digital Base1.

4) **What if I do not complete Digital Base2 by end of July'21?**

Depending on your scores and progress % in Digital Base2 module, you will be enabled for appropriate Hiring Challenge.i.e., HIRING CHALLENGE Level 1 (based on Digital Base1 Module) or HIRING CHALLENGE Level 2 (Based on Digital Base 1 and Digital Base2 Modules).

5) **What is a Coding Challenge?**

Coding Challenges are equivalent to Micro certifications in Digital Base1.A Coding Challenges is a credential, which attests that you have achieved a desired level of proficiency in the knowledge-areas covered in a Module. (Completion of Quiz with 60% & 100 % for Hands-on is a mandate to take up the coding challenge)

6) **Can I take up the Coding Challenge without completing the Hands-on for that module?**

No. To be eligible for a Coding Challenge Assessment, completion of all quizzes, and hands-on in the associated Module is mandatory.

7) **Who can I contact in case I have any clarification / queries?**

For any issues / queries related to the platform or the learning activities, students may raise a ticket using the Help Desk option available on the platform. Replies/response to the tickets will be sent by emails/notifications (on the platform), between 24 & 48 hours on working days.