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OPERATOR CLASSES ----

Software Developer Level 4

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Welcome to the Level 4 Software Developer Programme

This apprenticeship will cover:

- Developing User Interface (UI)
- © Coding
- Problem-Solving
- Debugging Code

Contents

4	Software Developer Level 4 Training
6	Learner Journey
8	Your Apprenticeship Programme
10	Expectations During Your Apprenticeship
11	Paths to Mastery
11	Career Progression
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Software Developer Level 4 Training

Unit 1 - Software Methodologies (Part 1)

Delivery days - 3

Learners will explore the fundamentals of the business, its organisational structure and how that fits into the software development life cycle. They will learn about different methodologies with an emphasis on Agile. They will learn what it is like to work effectively in teams and how to communicate with key stakeholders and a wide range of departments.

Unit 1 - Software Methodologies (Part 2) and UI Design

Delivery days - 3

Learners will explore ethical constraints and continue to explore the legislation and a wide range of legislative acts that they will need to be aware of. They will progress onto systems architecture, roles responsible and the associated development practices. Software designs and specifications, both functional and technical, will be at the heart of this module.

Unit 4 - Programming using Java (Part 1)

Delivery days - 3

Learners will explore the fundamentals of using the Java programming language. This module has been designed to enable apprentices to understand Java Fundamentals, to work with data types, variables and expressions. Apprentices will learn how to create logical and maintainable code and to link code to data sets.

Unit 4 - Programming using Java (Part 2)

Delivery days - 3

Learners will explore the next stages of programming using Java, implement flow control and perform object-orientated programming. Apprentices will carry out various scenario-based activities to put their coding knowledge into practice.



Unit 2 - Database Design

Delivery days - 2

Learners will develop their knowledge of databases, their uses and the best ways in which they can be used. Apprentices will focus on understanding relational and non-relational databases, when they are used in the workplace and how they are designed. Database design will naturally interlink with the software design stage and will focus on creating a solution to a set specification.

Unit 3 - SQL

Delivery days - 3

Learners will continue to develop their knowledge of databases, their uses and the best ways in which they can be used. Apprentices get to grips with SQL server basics, creating queries and displaying data in a range of scenarios. They will learn how to create Entity Relationship Diagrams (ERDs), insert data into databases, create and manage tables, and configure user access.

Unit 4 - Programming using Java (Part 3)

Delivery days - 3

Learners will explore the next stages of programming using Java to compile and debug code and troubleshoot errors, logic errors and runtime errors. Apprentices will complete a number of scenario-based activities during this module.



EPA Readiness - Portfolio

Delivery days - n/a

Learners will have to prepare for Gateway and have 20 days to write up a work based project. They will consolidate the portfolio that they have built up during the course.

- Projects
- Paths to Mastery (to be disussed)
- Portfolio Building



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- Programming using Java (Part 2)
- Progress Review

Learner Journey

Month 3

• Database Design

Progress Review

- Month 1 Software Methodologies
- Coaching Session

10 UI **>>**

Month 2

- Software Methodologies (Part 2) and UI Design
- Coaching Session

Month 5 Programming using Java (Part 1) 7 Coaching Session Month 4 • SQL Coaching Session

77

Month 9

Progress Review



Month 7

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Programming using

Coaching Session

Month 8

Java (Part 3)

Month 10

• EPA Readiness

Month 13-15 Gateway Exit

Review

Coaching **EPA** Session

Month 11

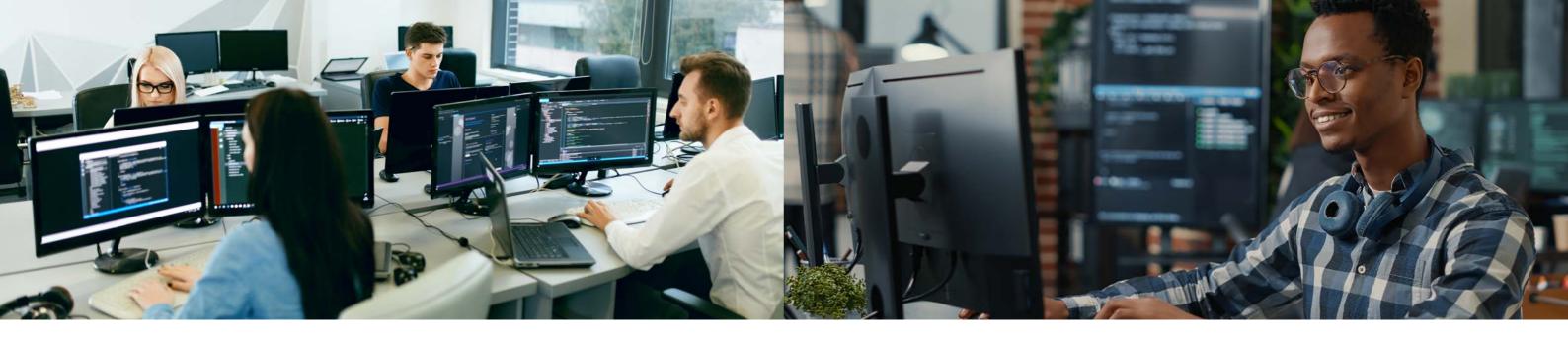
• EPA Readiness

Coaching Session



- **EPA Mock Interview**
- Coaching Session

Coaching Session



Your apprenticeship programme

Qualification

On completion of the programme, you will be awarded a Level 4 Software Developer Apprenticeship, which will allow you to join the British Computer Society (BCS) as an Associate member.

Off-the-job training

As an apprentice, you study while you work, a minimum of 6 hours per week of your time at work will be dedicated to your apprenticeship. You will learn through a mix of classroom days, personalised coaching sessions, e-learning and activities to practise what you are learning.

Employers collaborate with the training provider and you to ensure that you are on target with your off-the-job learning hours. Everything you do can be tracked on the Bud digital platform. Working with your Development Coach and line manager, you can balance your off-the-job training hours with your day-to-day responsibilities.

Is it off-the-job training?

Off-the-job training can take place very flexibly throughout the apprenticeship. This can be scheduled for every day, a day a week, in longer blocks (e.g. one week in every five) or in other creative ways. The stipulations are:

- The minimum off-the-job training hours have been met
- Has the individual begun their apprenticeship programme?
- Is the activity directly related to the apprenticeship standard or framework?
- Is the activity teaching new knowledge, skills and behaviours?
- Is the learning taking place within the apprentice's normal contracted working hours?

If all of these apply, it counts as off-the-job training.

Virtual Classrooms

Learners will attend classroom sessions online using Class, our virtual-classroom software.
To access the session, they will need:

- A desktop/laptop computer
- To download the Class meeting software application

Apprentify Class

Once you have installed the software, please use the Class Guides if you are having any issues.

Class Guides



Assessment

On Programme

Your progress will be continually assessed using our online apprenticeship management system, Bud. Throughout your apprenticeship you will upload evidence to show that you have completed the activities that contribute towards the achievement of your apprenticeship.

Apprenticeship Standard

End-point Assessment (EPA)

Once you have gone through the gateway, you will start the EPA. This assessment will showcase the entirety of the knowledge, skills and behaviours you have developed during the programme.

EPA Explainer Video

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Expectations during your apprenticeship

The modern apprenticeship revolves around the tripartite relationship between apprentice, employer and Apprentify. All parties are responsible for ensuring that the apprenticeship programme is a success.

The expectations listed are necessary for all parties to ensure that the apprentice completes their apprenticeship.



Apprentice

- Preparation and planning for coaching/ classroom sessions
- Attending all virtual classrooms and coaching sessions
- Completion of tasks in the agreed timeframe
- Planning your 20% off-the-job training and completing your Bud activities
- Taking responsibility for your own development
- Communicate support needs to your line manager and Development Coach
- Update your Self-Study Log with the extra training you complete

Line Manager

- Facilitate time for the apprentice for their learning in working hours
- Monthly one-to-one reviews with learners to discuss progress, provide feedback and guide development
- Provide opportunities for learners to participate in relevant workplace tasks related to their apprenticeship standard
- Keep in regular contact with the apprentice and Development Coach
- Provide learning opportunities
- Support with 20% off-the-job training

Development Coach

- Providing teaching and coaching sessions
- Monitoring progress using Bud and gaining feedback from line managers
- Coaching apprentices with both apprenticeship- and workplace-related skills
- Feedback to drive enhanced performance and improved knowledge
- Online support through regular meetings
- · Marking and assessment of Bud work
- · Preparation for EPA

Paths to Mastery

The Path to Mastery gives you the chance to gain additional skills in specialist areas. The optional learning is designed to enhance expertise in specialist areas and let you thrive in your role. As an apprentice, you will only be enrolled on the Path to Mastery if both your employer and Apprentify agree that you are in a position to take on extra learning. You can choose one of the following:



HTML 5

You will explore HTML5 Web Components to provide the power to define standards-based reusable web components through four new technologies.



Oracle Java

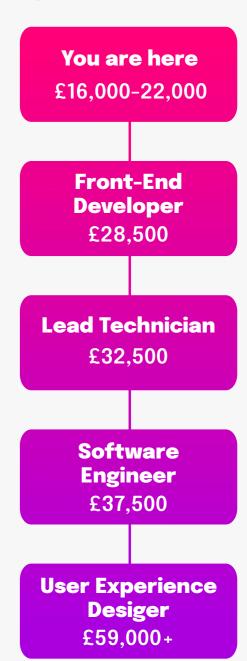
You will explore how to migrate existing web applications to run in the cloud, how to create Java SE and Node.js applications and run them in Oracle Application Container Cloud Service.



Oracle PL/SQL

You will participate in a oneday virtual-classroom session where you will explore the essentials and fundamentals of Oracle PL/SQL.

Career Progression



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British Values

All schools, colleges and training providers have a duty to actively promote the fundamental British values of a functioning modern democracy. What are British values, and what are examples of the understanding and knowledge apprentices are expected to learn in the workplace?

Rule of Law

Rules promote a happy, safe and secure living and working environment. Examples are:

- Legislation
- Agreed procedures, policies and ways of working
- Codes of conduct
- How the law protects you and others

Individual Liberty

Protection of your rights and the rights of others you work with. Examples are:

- Values and principles
- Individuality, consent, choice and rights
- Dignity and respect
- Equality and human rights
- Personal and professional development

Democracy

Everyone should be aware of their rights and responsibilities that help to build a culture of freedom and equality. Examples are:

- Team meetings
- Joint decision-making
- Receiving and giving feedback
- The right to protest and petition
- Leadership and accountability

Respect and Tolerance

Respecting the ideas, beliefs and values of others while not imposing our own on others, including:

- Tackling discrimination
- Tackling bullying
- Embracing diversity
- The importance of religion, traditions, preferences and cultural heritage
- Recognise stereotyping, prejudice and labelling

Safeguarding and Additional Learning Needs (ALN)

Safeguarding and Prevent

Apprentify has a statutory requirement to ensure that all our apprentices are safe from harm and can learn in a secure environment. This is a responsibility of everyone involved in the apprenticeship programme, including employers and apprentices.

Safeguarding does not simply refer to physical harm. It can also be far less obvious and harder to recognise – abuse, neglect and wellbeing concerns are all examples of safeguarding concerns that you should be aware of and know how to respond to, both on behalf of yourself and on behalf of others.

The Prevent duty is part of the UK Government's Counter-Terrorism Strategy (CONTEST) and is designed to stop people from becoming terrorists or supporting terrorism. It is a requirement of numerous public-facing bodies, including apprenticeship training providers, to develop knowledge of the signs of radicalisation and to ensure that learners understand how to report their concerns.

What does this look like in my apprenticeship?

Your Development Coach will support you and your employer in building awareness and applying safeguarding and Prevent in the workplace and in modern Britain. This will involve:

- · Discussions during progress reviews
- · Activities in virtual classrooms
- E-learning courses
- · Real-life scenarios in coaching sessions
- External courses for Action Counters Terrorism (ACT) Awareness

Our Safeguarding Officers

To find out who our designated Safeguarding Officers are, click on the link below.

Safeguarding

What do I do if I have any concerns?

If you have any concerns, you can confidentially contact the Apprentify safeguarding team.

Cognassist

During the application process for apprenticeships, learners will complete a Neurodiversity Assessment, which will identify any neurodiversity needs. If the software identifies such a need, the learner will work with a dedicated Cognassist Tutor throughout the apprenticeship.

At the start of each month, learners will be provided with four strategies to support their learning and develop their understanding.

Learners must aim to complete all four strategies every month. Once learners have completed the strategies, apprentices hold a monthly session with their Cognassist Tutor.

These are completed remotely with a Tutor, who will discuss each strategy and document feedback around the skills and actions, as well as the impact of, each module on Cognassist. While this is not mandatory, and you can opt out if you wish, this will support you with any identified learning needs throughout your apprenticeship.

Cognassist is a tool that assesses the neurodiversity of learners and provides strategies and activities for them to enhance their learning. Cognassist assesses capacity in the following domains:

- Verbal Memory
- Non-Verbal Memory
- Literacy
- Numeracy
- Visual Information
- Processing Speed
- · Executive Function
- · Verbal Reasoning
- · Non-Verbal Reasoning

Notes



Get connected

- **** 0333 996 0165

