Section 1 - Details

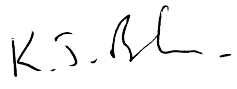
Apprentice Details

Name	Arron Dunne
Unique Learner Number	1645025755

Training Provider Details

Contact Name	Gareth Johnson
Company Name	Corndel Ltd.
Company Address	Corndel Unit 315, Highgate Studios Kentish Town London NW5 1TL

Employer Details

Company Name	Capgemini UK
Company Address	22 St Lawrence Street Southgate BATH BA1 1AN
Print Name	Keith Banks
Job Title	Director, Software Engineering Unit
Signature	
Date	14th April 2022

Section 2 – Technical Competencies

Technical Competence Evaluation - Logic

The apprentice is competent to write good quality code (logic) with sound syntax in at least one language	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
			X

Supporting text:

Arron has carried out analysis and development on HICLASS project which led to the development of new tools for use within the Capgemini organisation. These tools were developed effectively by Arron in both Python and Java following the Capgemini corporate standards. Arron also developed a Machine Learning algorithm to select identify Test Input Generation values which are more likely to identify the faults, by analysing the fitness score from the algorithm to select an optimum solution.

Technical Competence Evaluation - Data

The apprentice is competent to effectively link code to a database/ data sets	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
		X	

Supporting text:

Arron developed a Java interface that moved the storage of a large amount of application data held within program variables into a SQL database. Arron developed an interface wrapper that meant that the majority of the application code was unaware of the storage model for this information. This solution preserved Capgemini's intellectual investment in the rest of the toolset, whilst de-risking the potential that large amounts of test data would impact the performance of the corporate tooling.

Technical Competence Evaluation – User Interface

The apprentice is competent to develop effective user interfaces for at least one channel	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
			X

Supporting text:

One of the important outputs in a test framework, is the ability to "Visualise" the effectiveness of the testing and to identify problems in the system under test through the execution of the test-set. Arron whilst working on the HICLASS test set was responsible for developing some HTML graphical visualisations of the test executions. He proposed a number of renderings of the data, and with some minor adjustments (following review) these were accepted as valuable additions to the corporate test toolset.

Technical Competence Evaluation - Test

The apprentice is competent to test code and analyse results to correct errors found using either V-model manual testing and/or using unit testing	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
		X	

Supporting text:

Working on the HICLASS project Arron developed and tested a number of Java and Python modules and tools and used the relevant test suites (e.g. JUnit) to exercise the developed applications to ensure that they operated correctly. Arron also effectively used the application debugger to locate and fix errors in the code (e.g. due to data format mismatches).

Technical Competence Evaluation – Problem Solving

The apprentice is competent to apply structured techniques to problem solving, can debug code and understand the structure of programmes in order to identify and resolve issues.	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
		X	

Supporting text:

Within HICLASS Arron was given problems to solve, e.g. Automatic generation of test cases and visualisation of test result data, and proficiently investigated the problem space and developed effective and cost-effective solutions, seeking to reuse other applications and libraries wherever possible. His analysis approach showed maturity, in that he did not jump straight into developing a new tool immediately, rather he examined the solution space for the cheapest solution, before considering tool development from scratch.

Technical Competence Evaluation - Design

The apprentice is competent to create simple data models and software designs to effectively communicate understanding of the program, following best practices and standards	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
		X	

Supporting text:

Whilst developing the database storage mechanism for the HICLASS testing framework, Arron developed a full data-model of all the information that needed storage in and retrieval from the MYSQL database. This analysis ensured that the data would be stored in an effective manner in the database, and would meet the needs of the project.

Technical Competence Evaluation - Analysis

The apprentice is competent to understand and create basic analysis artefacts, such as use cases and/or user stories	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
			X

Supporting text:

Arron has shown that he has the skills to gather relevant problem domain information and analyse the information he has gleaned to synthesize a solution to a problem, or to clearly express requirements in a way which allows other engineers to develop a final solution. He doing this work he has worked on the development of Use Cases as well as the development of Requirements which capture the required behaviour of the system.

Technical Competence Evaluation - Deployment

The apprentice is competent to understand and utilise skills to build, manage and deploy code into enterprise environments	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
		X	

Supporting text:

Whilst Arron worked within the HICLASS project he used a number of tools including: JIRA, BitBucket and Git to manage and save his work. He operated within an Agile process and followed all the relevant Capgemini Processes and Procedures. This demonstrated his ability to operate with the rest of the team to deliver a solution in a controlled, well managed way.

Technical Competence Evaluation – Development Lifecycle

The apprentice is competent to operate at all stages of the software development lifecycle, with increasing breadth and depth over time (with initial focus on build and test)	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
		X	

Supporting text:

Arron has worked effectively through the whole of the development lifecycle: software specification, design, implementation and test lifecycle on the HICLASS project whilst developing new solutions. Arron operated in a methodical manner when developing all these solutions.

Technical Competence Evaluation – Good Practice

The apprentice is competent to apply good practice approaches according to the relevant paradigm (e.g. OOP, event driven programming, procedural)	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
		X	

Supporting text:

Whilst developing software for the HICLASS project Arron was required to operate under the auspices of the Capgemini ISO-9001 Software and Systems Management System (SSMS). The SSMS defines processes and procedures which ensure that the ISO-9001 mantra of "Say what you will do, Do what you say and then prove it" is satisfied. When starting a new task Arron sought out the relevant documentation to ensure that he delivered problem solutions in an appropriate manner.

Technical Competence Evaluation – Interpret and Follow

The apprentice is competent to interpret and follow software designs/specifications, company coding standards, industry best practice, testing frameworks, and company approaches to CI and source control.	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
		X	

Supporting text:

Whilst developing software for the HICLASS project Arron was required to operate under the auspices of the Capgemini ISO-9001 Software and Systems Management System (SSMS). The SSMS defines processes and procedures which ensure that the ISO-9001 mantra of "Say what you will do, Do what you say and then prove it" is satisfied. When starting a new task Arron sought out the relevant documentation to ensure that he delivered problem solutions in an appropriate manner.

Technical Competence Evaluation – Responding to Business Issues

The apprentice is competent to respond to the business environment and business issues related to software development	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
			X

Supporting text:

The RBLS project was a high-intensity project, which experienced a lot of challenges. These challenges were exacerbated by the fact that the project was being run as an Integrated Project Team(IPT), including the client, suppliers and Capgemini. This meant there was no place to hide, additionally the project was operating on tight timescales. At times the project was operating behind the plan and appeared to be incapable of meeting the final delivery. Arron worked hard and effectively with the rest of the team to restructure the way in which we developed the final solution. As a result Arron took on more responsibility and exposure to the client on a day-to-day basis. Arron definitely rose to the challenge on this project! Arron is also astute enough to recognise the impact of missed deadlines, both in terms of cost and time upon the business, and manages his delivery of work accordingly.

Technical Competence Evaluation – Operating in Different Environments

The apprentice is competent to operate effectively in their own business, their customers' and the industry's environments.	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
			X

Supporting text:

Arron has demonstrated his ability to operate in multiple different environments within Capgemini, either within a fully encapsulated Capgemini team, or working as part of an Integrated Project Team (IPT) including the client and suppliers. Within these project organisations he has demonstrated his ability to work effectively and appropriately. When working directly with the Client and Suppliers, his competency and professionalism shone through.

Technical Competence Evaluation - Maths

The apprentice is competent to apply the maths required to be a software developer (e.g. algorithms, logic, data structures)	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
		X	

Supporting text:

Arron developed a Java test data analysis module which provided an average solution time metric for the test tooling.

Section 3 – Behaviours, Business Skills and Level of Responsibility

Proficiency – Business Skills

In your view, is the apprentice proficient at:	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
Demonstrating an analytical and systematic approach to issue resolution		X	
Working independently and taking responsibility			X
Demonstrating effective communication skills and contributing fully to the work of teams		X	
Exploring all known options to resolve problems		X	
Appreciating the wider business context, and how their role relates to other roles and to the business of the employer of client			X

Supporting text:

In his work on the HICLASS and RBLS projects, Arron demonstrated his abilities to operate effectively within the business, he:

- Is able to analyse the problem domain and systematically synthesise a solution to the problem.
- Is able to take away a task, complete it and deliver a solution. Arron would also flag problems early and work hard in proposing\developing a solution to a problem.
- Communicates issues clearly and effectively with those on the project. He also has the confidence and skills to communicate directly with the Client and Suppliers.
- Arron is able to analyse a problem and effectively communicate a solution.
- Arron is aware of the importance of the work he contributes to the Business, and how this can impact the Business and always seeks to make a positive impact.

Proficiency - Complexity

In your view, is the apprentice proficient at:	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
Performing a range of work, sometimes complex and non-routine, in a variety of environments			X
Applying methodical approaches to issue definition and resolution		X	

Supporting text:

Arron has worked effectively through the whole of the development lifecycle: software specification, design, implementation and test lifecycle on the HICLASS project whilst developing new solutions. Arron operated in a methodical manner when developing all these solutions.

Proficiency - Autonomy

In your view, is the apprentice proficient at:	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
Working under general direction		X	
Actively working with others and leading by example			X
Determining when issues should be escalated to a higher level			X

Supporting text:

On the RBLS project Arron demonstrated his excellent abilities to take responsibility for a piece of work, he did this whilst working effectively within an Integrated Project Team (IPT) including the client and potential suppliers. When he identifies problems he has confidence to escalate the issue to the relevant domain expert, team leader or project management.

Proficiency – Influence

In your view, is the apprentice proficient at:	The apprentice has NOT MET this requirement	The apprentice has MET this requirement	The apprentice has EXCEEDED this requirement
Having working level contact with customers, suppliers and partners			X
Externally working with customers, suppliers and partners in a variety of situations?			X

Supporting text:

Arron has worked effectively within an IPT effectively within an Integrated Project Team (IPT) including the client and potential suppliers. This involved day-to-day interactions and meetings with external organisations and engineers. Although a junior engineer, Arron performed professionally and provided insightful input to the meetings in which he was involved.

Section 4 – Professional Development

Professional Development Activities:

In your view, is the apprentice undertaking any of the following professional development activities:	Demonstrably undertaking this activity	NOT demonstrably undertaking this activity
Participating in group activities inside or outside the working environment that can assist with the development of interpersonal skills	X	
Undertaking pro bono (unpaid) activities that can help to develop professional skills or offer additional insight into, or understanding of, their working role	X	
Undertaking learning in subjects relevant to, but not directly related to, their role (e.g. foreign language courses, mentoring skills, cultural awareness and diversity training), perhaps through self-study or evening classes	X	
Gaining basic knowledge of the employing organisation, its business, structure, culture, products/services, operations and terminology	X	
Gaining knowledge of IT activities in the employing organisation external to their function	X	
Exploring a topic that is not part of their normal responsibilities, and presenting findings to colleagues and/or management	X	
Attending meetings, seminars and workshops organised by a professional body and reading published material such as journals and web content	X	
Undertaking learning and practice in the techniques of team and collaborative working. Gaining an understanding of the underlying concepts	X	
Undertaking learning and practice in oral and written communications, including report writing and presentations	X	

Professional Development

What is your overall evaluation of the apprentice's ability to undertake wider professional development?

• Arron participated in several virtual meet-and-greets over Teams, these were set up to allow new joiners, to meet others in the company and have a casual conversation. There were normally around 5 people on the call, from different projects and roles.
• Arron completed the Inspiring Digital Enterprise Award (iDEA) in his personal time, this is a course which teaches digital, enterprise and employability skills through challenges and talks.
• Arron completed diversity and unconscious bias training during his apprenticeship. These courses outlined the protected attributes of employees and taught him to identify and report any discrimination.
• Arron completed training courses and videos teaching me the values and culture in the company, where he learnt about the main values of the company and how to follow them in his work.
• Arron attended a workshop on one of the tools used at the company, Docker. He learnt about how to use docker and its basic functions, including why it is useful. He was also shown how Docker was used alongside some of the other tools use by Capgemini, such as the Atlassian code repositories and the continuous integration tools.
• Some of Arron's colleagues were running a workshop on the use of LEAN in the company and how people can learn about LEAN. Before the workshop he was asked to complete some LEAN training and look for resources that could be used as part of the workshop. He carried out this research and fed the knowledge gained back to the presenters of the course to improve the course content.
• Arron attended a careers fair organised by the University of Bath, during this he spoke to students about the work and role he had, and his experience of the Capgemini Apprenticeship scheme. This activity helped to recruit subsequent cohorts to the Capgemini apprenticeship scheme.
• Arron worked with a team of other apprentices to develop a small game using the React framework. This involved dividing the work into separate work packages, liaising with other team members to develop the solution and giving/receiving appropriate feedback.
• Arron did personal research on Machine Learning and then took the opportunity to present\share the knowledge he gained with other Capgemini engineers, by presenting at an internal company technical forum.

Section 5 – Overall Impressions and Constructive Feedback

Please share your general thoughts on the apprentice's performance, including anything not included by the above sections, or any areas in which you have not been able to give the apprentices the exposure that they would have liked. Please add any general constructive development advice that you would like to give.

Arron is working to a high standard and is impressing his direct Line Managers with proactivity, dedication and excellent technical work. I regularly receive positive feedback on Arron from his managers and peers. Some of the key comments are:

His RBLS Manager gave the following feedback:
"Arron has been exceptional in his role on the RBLS project on the Systems Engineering Team. He has demonstrated confidence and responsibility in taking ownership of tasks he is assigned on the project. He is very quick to learn absorb technical information and understand processes consistently which really helps to drive the engineering development. In my perspective this is above expectations."

His senior colleague on RBSL gave the following feedback:
"Arron quickly took on the necessary domain (railway signalling) and process knowledge and was key in helping us to deliver use-cases to the client in a pragmatic and effective manner. At one point the project was in a sticky place with the client, and his work put us in a good place at a critical time in the project, something for which he deserves definite praise and thanks."

His HICLASS Manager gave the following feedback:
"He met my expectations with his database task and exceeded my expectations with the dashboard work. He has a tremendous attitude, work rate, commitment and focus that is probably above average for his level."

Arron is pushing above what is expected of him as an apprentice. He's working at a higher level than his grade, pushing himself out of his comfort zone and his actions are being noticed and appreciated by those around him.