Project Brief 3

Project Title: Managing and Improving Software Quality

Project Description: The goal of this project is to create a written document that demonstrates how the apprentices studying the Application Support Lead apprenticeship are managing and improving software quality within their role. This document will cover the following objectives:

- K15: Principles of testing methodologies (manual and automated) including the importance of clear supporting documentation

- S9: Use manual or automated test tools

- S10: Adapt and apply testing activities according to industry standard development methodologies (sequential and iterative) including maintenance of clear supporting documentation

- B3: Ethical and security mindset - Follow the guidelines on secure working and the ethical codes of conduct for the sector/organisation

- B7: Committed to continued professional development of self and others

Deliverables: A written document that demonstrates how the apprentices are managing and improving software quality within their role. This document should include:

- An overview of the software development lifecycle and the methodologies used to manage software development projects.

- A description of the principles of software quality management, including defining quality requirements, planning quality assurance activities, and measuring quality metrics.

- An explanation of the various types of software testing and their roles in ensuring software quality.

- A discussion of the various methods used to test software, including manual testing, automated testing, and the use of test cases and documentation.

- A description of how software issues are identified and prioritized based on severity and impact on users, and how the appropriate course of action is determined to resolve them.

- An explanation of how metrics and data are used to monitor and evaluate software quality, identify trends and areas for improvement, and make recommendations for improving software quality.

- A discussion of how ethical and secure working practices are followed in all software quality management activities, in accordance with the guidelines and codes of conduct of the sector and organization.

- A description of how the apprentices are actively seeking out opportunities for personal and professional growth, and supporting the growth and development of others in the organization.