

Occupation: Games Quality Assurance Technician**Level: 4**

Profile: A Quality Assurance (QA) Technician is an essential role within computer game software development, responsible for ensuring that games are thoroughly and strategically tested for software defects (known as bugs), playability and usability issues in order to improve products before they are released. QA Technicians test games by playing through software systematically, creating and following test plans, identifying and reproducing bugs and other issues, investigating and reporting on these, documenting results clearly and verifying fixes before games go live. They also work within a larger multi-disciplined working environment as they liaise with other internal or external games development staff, such as Artists, Programmers and Designers, in order to resolve bugs and so must be able to communicate findings and reports effectively to both technical and non-technical colleagues.

QA Technicians are expected to have a thorough knowledge of game genres, a good understanding of the software development process and a passion for games. The games industry now consists of many different sized companies, working on a variety of different hardware such as consoles, PC and mobile devices which all have specialised testing requirements, methods, terminology and software tools. Experienced QA Technicians are therefore growing in demand and may choose to further specialise in specific testing types, move across to other games development departments, and/or progress to Lead QA and other senior management levels within the QA department.

QA technicians not only have to identify issues but replicate them and report them clearly. They have to have a thorough knowledge and understanding of the production process and communicate clearly and coherently across many departments including development, production and marketing. The work they do is highly confidential and they must have a responsible and mature attitude

Requirements: Knowledge, Skills & Behaviours

All of the Knowledge, Skills and Behaviours below need to be grounded in a strong awareness of the game development cycle and different departments involved, including the role of QA within the games development process, the structure of QA teams and the different roles and responsibilities within QA, as well as key points of game development (such as design document, proof of concept, prototype, milestone submissions, content complete, Alpha, Beta, launch, patches, updates and downloadable content).

	Knowledge – the QA Technician will understand:	Skills – the QA technician will be able to:
BUG REPORTS	<ul style="list-style-type: none"> How to identify and report software errors, known as bugs. The life-cycle of a bug. Different types of bugs. 	<ul style="list-style-type: none"> Find and report bugs using appropriate systems and templates. Write bug reports including summary, description, steps to reproduce, reproduction rate, expected results, actual results. Attach appropriate screen shots, video footage and/or crash dump files to bug reports. Update bug entries with appropriate additional information. Classify, filter and prioritise different bug reports within a database. Assign bugs to appropriate team or individual developer to be fixed.
ANALYSIS	<ul style="list-style-type: none"> How to identify and report playability, usability, difficulty and quality issues. 	<ul style="list-style-type: none"> Critically analyse products for playability and usability. Report findings clearly and concisely with relevant, actionable recommendations to improve product quality. Present constructive and balanced feedback highlighting both pros and cons of relevant improvement options. Give supporting examples as evidence.
TEST PLANS	<ul style="list-style-type: none"> How to follow, design and create test plans. 	<ul style="list-style-type: none"> Follow an existing test plan, executing and recording all test cases within it. Add relevant, clear and concise comments to test plans. Design and create a simple spreadsheet test plan documenting functionality and including a summary cover page.
STANDARDS	<ul style="list-style-type: none"> Testing terminology, procedures and techniques, including black-box and white-box testing theory, and priorities. 	<ul style="list-style-type: none"> Use industry recognised terminology accurately, including with regards to bug reports, databases, testing processes, software and platforms. Use industry recognised testing procedures and techniques Work under pressure, manage priorities and bring multiple tasks to completion within deadlines.

TEST TYPES	<ul style="list-style-type: none"> • Testing types including scripted, exploratory, regression, smoke, embedded, compliance standards, acceptance, platform compatibility, stress, performance, localisation, network, usability, game-play and automated. 	<ul style="list-style-type: none"> • Conduct practical testing in the following 3 functionality-related testing types, with appropriate use of procedures and techniques for each: <ul style="list-style-type: none"> ○ Scripted – systematically test for errors, recording and analysing actual and expected results ○ Exploratory – find bugs and design flaws by performing unscripted testing in novel and unexpected ways outside of the expected patterns of playing. ○ Regression – investigate database bugs marked as fixed and close or reopen them as appropriate.
COMMUNICATION	<ul style="list-style-type: none"> • Effective communication and handling of issues identified by others. • How to actively share knowledge, collaborate and support colleagues. • The importance of maintaining clear, accurate, up-to-date documentation. 	<ul style="list-style-type: none"> • Use excellent verbal and written communication with colleagues of different technical abilities. • Respond appropriately to issues identified both within and outside of the QA team. • Gather and document information from others, in order to effectively identify and replicate bugs. • Use appropriate communication methods, for example verbal, email, written documents and/or other internal procedures. • Manage response times and priorities, promoting efficient scheduling within test cycles. • Communicate effectively with appropriate team or individual developer as needed to resolve bugs or issues. • Foster good professional working relationships whilst still escalating issues as appropriate. • Take direction, be willing to address feedback, working as part of a team.
TOOLS	<ul style="list-style-type: none"> • Software and hardware including specialised bug tracking tools. • Different project management methodologies and expectations that may differ across companies. 	<ul style="list-style-type: none"> • Use spreadsheets or similar planning tools, for example in test planning. • Use industry recognised bug tracking, testing and project management software, including appropriate commenting and updates. • Use tools and hardware relevant to the games being tested, in the form of retail, test or development kits as appropriate.
POLICIES	<ul style="list-style-type: none"> • Company procedures and service level agreements. • The importance of confidentiality regarding risk to the company and including use of social media, photography and mobile phones. 	<ul style="list-style-type: none"> • Operate within company policies, preferred procedures and appropriate service level agreements, including security and confidentiality. • Complete relevant paperwork. • Comply with relevant industry legislation and standards.

Behaviours

Games Quality Assurance Technicians will be expected to demonstrate the following behaviours:

- Adaptability, initiative and a keen ability to problem-solve
- Observance, attention to detail and a high level of accuracy
- Enthusiasm to learn and develop professionally
- Respect for industry confidentiality expectations

Entry Requirements

Suitable only for 18+ year olds. Individual employers will identify other entry requirements in terms of previous qualifications, training or other criteria, typically this might include GCSE grades A-C and demonstrating at interview a passion for playing games and the industry. Most candidates will have Level 2 Maths and English (equivalent to GCSE grade C or above), ideally as part of 5 GCSE A-C grades or other comparable qualifications. Apprentices without English or Maths at Level 2 must achieve this prior to taking the end-point assessment.

Duration: Typically 18-24 months.

Review Date: This standard will be reviewed in 3 years.