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# Generalist Programmer

**Reports To**

Lead Programmer

**Responsibilities**

* Develop generic systems that will support the work of the specialist programmers (AI, 3D, physics, sound, animation, etc.) and meet the design and technical needs of the project;
* Work as a key part of an agile development team, organising and planning the implementation of features with direction from their lead, and assist less experienced programmers;
* Use practical solutions to implement feature requests, taking into account performance, maintainability and resource usage;
* Ensure coding standards are followed in their own and others code;
* Collect, interpret and analyse the technical feasibility of system/feature specifications;
* Write clear and well-structured code using the appropriate data structure and algorithms while bearing in mind performance, maintenance and architectural requirements;
* Include comments in the code and document implemented features;
* Demonstrate an understanding of the basics of load testing and game feature testing and write test code;
* Stay up-to-date with technology advances within the field;
* Perform code reviews for peers;
* Extract and interpret relevant runtime system resource information (disk IO, network, CPU, memory, etc).

**Skills and Knowledge**

* Knowledge of most areas of game development (physics, AI, gameplay, rendering, online, tools, UI, audio);
* Very good C/C++ programming skills, with very good knowledge of object oriented development including design patterns and UML;
* Experience working with a large game codebase, and it's modules, middleware and associated pipeline;
* Understanding of speed and memory considerations, and able to implement basic optimisations;
* Knowledge of common algorithms, data structures and patterns, and their application;
* Ability to analyse unfamiliar code of a reasonable complexity to understand, extend and refactor an existing module;
* Ability to debug defects of a reasonable complexity, including memory related issues, and multi-threading;
* Knowledge of different software development methods such as Test Driven Development, Unit Testing, Agile etc.;
* Understanding the constraints and technical requirements for console platform development within their area is a plus;
* Ability to adapt to change;
* Good interpersonal and communication skills.

**Relevant Experience**

* Bachelor’s degree in computer science or computer engineering or equivalent experience;
* 3 years commercial software development experience with significant involvement in 1 published game in a relevant programming capacity is a plus;
* Experience working with at least one modern console platform is an advantage;
* Experience with profiling tools is desirable;
* Experience working in a multi-site collaboration environment is a plus.