Version 1
GAME DEVELOPMENT TEAM
Game Developer - Level 1

Game Developer - Level 1
Member of: Game Development Team
Division: CTO (Nursing Product OR Infrastructure, Engineering, & Systems Division)
Technology & Product
Category: Salaried, Exempt
Required: N/A

Job Summary
The purpose of this role and how it impacts Shadow Health’s vision and mission

The Game Developer creates simulations in the Unity game engine - the foundation of Shadow Health’s Digital Clinical Experience (DCE).

The Game Developer works with a cross-disciplinary team of game designers, instructional designers, software developers, content developers, artists and nursing experts to create educational simulation software that trains nurses and healthcare students.

The Game Developer contributes to Shadow Health’s success by creating and improving the interactive online environment that allows students to grow and learn.

Job Tasks
The core responsibilities of this role

DEVELOPS new features, products and IMPROVES existing features
- Programs in Unity to improve features and products for users
  - Fixes bugs
  - Improves user interfaces
- Implements and prototypes new features
- Reduces technical debt
  - Performs code maintenance (e.g. refactoring, sunsetting old code)
  - Supports automation of tasks
  - Optimizes code
  - Documents design, functionality, and code
  - Designs code architecture to improve optimization, performance, extensibility
  - Develops automated tests to ensure quality
  - Responsible for one’s code’s impact on tech debt
- Creates internal tools to increase efficiency (e.g. operationalize QA)
- Prepares and deploys builds to cloudfront and s3

COLLABORATES with a cross-functional team
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- Participates in design studios
- Identifies MVP solutions for new projects
- Participates in Scrum processes - (e.g. plan/review/retro, daily stand ups, maintaining project board, identifying risks and blockers)
- Supports testing of software (e.g. putting builds on dev or staging for internal and alpha testing)

ITERATES based on internal testing and user feedback
- Observes and documents user testing (e.g. student using our system)
- Participates in code review
-Debugs other team member’s code
- Troubleshoots issues, investigates problem reports, and develops approaches to identifying bugs
- Develops tests to promote quality

Education and Experience
The education, certification(s) and/or past experience required for this role

REQUIRED
- B.S. or B.A. degree in computing or design (e.g. Computer Science, Computer Engineering, Interactive Media Design) OR one (1) year of related work experience and an A.S. degree in related computing or design discipline
- Demonstrable projects in Unity3D or similar game engine

PREFERRED
- Academic or self-motivated specialization in computer graphics: knowledge of 3D transforms, graphics pipeline, and shaders
- Completed academic or professional projects using Object-Oriented Development (e.g. in C++, C#, or Java)
- Completed academic or professional projects using an Agile Methodology and SCRUM Framework.
- Completed academic or professional projects using version control (e.g. SVN, Git)
- Completed academic or professional projects using test-driven development, unit testing, and integration tests in a framework (e.g. NUnit)
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Job Competency KSAs
The Knowledge, Skills and Abilities needed to perform this role with excellence

**KNOWLEDGE** ("theoretical or practical understanding of a subject")

**DESIGN AND UX**
- Reproduce graphic design best practices (e.g. layout, typography, font).
- Reproduce interactive software design best practices (e.g. navigation, feedback, reward systems, history, trends).
- Reproduce artistic design best practices (e.g. composition, balance, color theory, form, shape).
- Visualize communication through digital means.
- Demonstrate knowledge of UX testing research methods.

**HEALTH SCIENCE SUBJECT MATTER**
- Comprehend health science subject matter at a basic level.

**PROGRAMMING LANGUAGES**
- Know C#.
- Know Unity.
- Understand component-based models (efficient and “safer” use of data structures and access).
- Identify Unity editor features and how to access them to use parts of the engine.
- Reproduce software development best practices to improve performance, increase efficiency, improve safety in code structure, reduce impact of your code on other pieces of code.

**SOFTWARE DEVELOPMENT**
- Describe object-oriented programming.
- Understand variable types.
- Recognize best practices in release management.
- Interpret basic principles of Software engineering in order to propose and implement feasible and efficient solutions.
- Understand the basic principles of game development (e.g. texture coordinates, antialiasing, normal maps, UX).

**SKILLS** ("proficiencies developed through training or experience")

**ADAPTABILITY AND ABILITY TO LEARN QUICKLY**
- Draft work quickly.
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- Prototype in relationship to the actual product.
- Learn new software quickly.

COMMUNICATION AND COLLABORATION
- Use oral communication skills to collaborate with diverse teammates.
- Grow and iterate from critique by accepting that there is truth behind it.
- Collaborate with stakeholders within the company.
- Communicate shared vision for design/project to cross-functional team during project.
- Inform stakeholders and cross-functional team members about the impact of development decisions on the final product from the perspective of your team's functional domain expertise. (e.g. How will the proposed solution impact code, learning outcomes, testing, scaling, content etc.?)
- Consult on solutions for teams with problems requiring domain knowledge.

PLANNING AND PROBLEM-SOLVING
- Demonstrate analytical problem-solving skills.
- Demonstrate design-thinking skills.
- Demonstrate creative problem solving skills.
- Apply estimation, planning, and scheduling skills.
- Synthesize information from diverse sources and apply the resulting data successfully in the product.
- Identify explicit, implied, and anticipated needs. (understand not just what is being asked for, but the reasons behind why the request is being made)
- Execute projects on a timeline including planning and organizing.

SOFTWARE DEVELOPMENT AND CODING
- Apply software development best-practices to resolve development coding problems.
- Write efficient, safe code.
- Apply design concepts to developing solutions throughout the lifecycle of the product (from design through implementation).

TECHNOLOGY
- Use document creation software. (e.g. Microsoft Office, Google Drive).

ABILITIES (“*innate* qualities of being able to do something”)

ABSTRACTION
- Display capacity for abstract thought.

ADAPTABLE
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- Adapt willingly to rapidly changing work environment.
- Perceive changing roles as opportunities to grow and contribute to the company mission.

ARTISTRY
- Think innately in an artistic manner (v. mechanical or informational approach).

BIAS FOR ACTION/ PROACTIVITY
- Acknowledge the need to search out development tasks proactively.
- Seek to improve the user’s (customer, shadow employee) experience with the product.
- Identify processes that need improvement and automation to increase efficiency.

CURIOSITY
- Ask questions without apprehension; Display curiosity.
- Display intrinsic motivation for learning.
- Identify gaps in one’s knowledge and identify steps to resolve gap.
- Explore problems with persistence and curiosity.
- Learn new software engineering principles, concepts, and technologies.

DESIGN-MINDED
- Synthesize technical and business requirements into an overall delightful experience for users.
- Design experiences that are intuitive to the user.

EMPATHY
- Empathize with other people's experiences.
- Imagine what a user feels as they experience the product.
- Acknowledge context and audience in order to internalize situations.

PUNCTUALITY AND PREPAREDNESS
- Serve others by being prepared and on time for meetings.

RESPONSIBILITY
- Value taking ownership of your work (e.g.code, solutions, ideas).
ABOUT SHADOW HEALTH

Shadow Health® is an educational software developer of rich, interactive learning environments including the Digital Clinical Experience™ for nursing and allied health education programs. Using the Shadow Health Digital Clinical Experience, educators increase their efficiency in their classrooms, giving them more time to focus on student achievement. In the Digital Clinical Experience, students can practice critical thinking, communication, and procedural skills in an immersive, safe, and always-available learning environment.

Our Vision
At Shadow Health, our vision is a healthy global population unleashed to do its greatest good through healthcare education technology.

Our Mission
At Shadow Health, our mission is to become the worldwide leader in healthcare simulation, providing educators and students leading-edge education technology centered on conversation-based learning across a cast of virtual patients.

We increase the effectiveness of healthcare practitioners by training them through measured improvement in practical application, patient interaction, and personal empathy, empowering them to increase the health of those they serve.

Our Character and Cultural Values
*Our SHADOW cultural values are built on the character traits that we ask of every role*

Servants First (we’re customer focused)
- SERVES clients, co-workers and the community every time there’s an opportunity.
- BUILDS and MAINTAINS customer satisfaction with our products and services.
- ENCOURAGES customer feedback and LISTENS fully to customers needs.
- DELIVERS products and services when and where the customer needs them.

Heart for Learning (we’re students for life)
- ASKS questions, CHALLENGES conventions, THINKS deeply.
- SEEKS personal growth through feedback as a path to greater understanding.
- FINDS answers and INCORPORATES new understanding to continuously improve.
- COMMITS to learning and leading - We learn, and we help others learn, too.

Agile. Always. All Ways. (we’re always improving)
- WELCOMES change as a path to competitive advantage.
- DELIVERS quality quickly.
- WORKS as a team, with a team.
IMPROVES regularly by encouraging development in people, processes and products.

**Disciplined Decisions (we're business-aligned)**
- ALIGNS direction, products, services, and performance of my team with the organization.
- INTEGRATES executive vision into every decision and consultation.
- SEEKS to understand services, deliverables, and measures for each of Shadow's teams.
- ADVOCATES for and POSITIVELY REPRESENTS our products when working with customers and stakeholders.

**Operating in Our Strengths (we’re leveraging our talents)**
- IDENTIFIES personal strengths and SEEKS to know the strengths of others.
- ACCEPTS the strengths of others to help balance where I’m weak.
- SHARES strengths with others to help balance where there’s need.
- DEVELOPS own strengths into excellence and expertise.

**We (You and I) Own It - Together (we're all owners)**
- ADOPTS the vision and mission of our organization.
- DEVELOPS an owner’s mindset for our people, process and product.
- EXPLORES options when unable to deliver a requested product or service.
- PURSUES solutions until the customer is satisfied.
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Disclaimer
This job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee. Other duties, responsibilities and activities may change or be assigned at any time with or without notice.

Work Conditions
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Open office environment with standard office equipment.
- Agile Management Environment.
- Fast paced work environment.
- Work is generally sedentary in nature, but may require standing and walking.
- Adequate lighting, temperature, and a non-hazardous work atmosphere.
- May be requested to work additional hours to meet the needs of the business.

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to stand; sit; use hands to finger, handle, or feel; reach with hands and arms; and talk or hear. The employee is occasionally required to walk; climb or balance; and stoop, kneel, crouch, or crawl. The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, and ability to adjust focus.

In the performance of the duties of this job the employee is required to travel (frequency), drive a motor vehicle, communicate using telephone, virtual meeting services online, and e-mail.

- Grasps, turns and manipulates objects of varying size and weight, requiring fine motor skills and hand-eye coordination.
- Visually verifies information, often in small print and various formats.
- Reads information, often in small print and various formats.
- Enter and locate information on a computer or system communication device.
- Standing, walking, sitting for various amounts of time during work period.

Affirmative Action / EEO Statements
Shadow Health is committed to equal-employment principles, and we recognize the value of committed employees who feel they are being treated in an equitable and professional manner. We strive to find ways to attract, develop, and retain the talent needed to meet business objectives, and to recruit and employ highly qualified individuals representing the diverse
communities in which we live. Employment policies and decisions on employment and promotion are based on merit, qualifications, performance, and business needs. The decisions and criteria governing the employment relationship with all employees are made in a non-discriminatory manner—without regard to age, race, color, national origin, gender (including pregnancy, childbirth or medical condition related to pregnancy or childbirth), gender identity or expression, religion, physical or mental disability, medical condition, legally protected genetic information, marital status, veteran status, military status, sexual orientation, or any other factor determined to be an unlawful basis for such decisions by federal, state, or local statutes.

No legally protected characteristic will be a factor in decisions regarding any of the following:

- Recruiting
- Hiring
- Termination of employment
- Discipline
- Promotion/demotion
- Training
- Compensation and Benefits
- Scheduling
- Assignments, or
- Any other terms or conditions or privileges of employment.

Moreover, in accordance with federal and applicable state law, we will make reasonable accommodations whenever necessary for individuals with known disabilities, provided that such individuals are qualified to perform the essential functions and assignments of the job, with or without accommodation, and provided that any accommodations would not impose an undue hardship on the company. Shadow Health wishes to have timely, good faith discussions with a disabled applicant or employee to determine what accommodations may be appropriate. Any applicant or employee who requires an accommodation during the application process or in order to perform the essential functions of the job should contact human resources to request such an accommodation.

If you have any reason to believe that you (or someone else) haven’t been treated in accordance with this policy, you should immediately inform human resources or an officer of the company. All managers should immediately report any such matters to human resources.
Acknowledgement
I have read and understand the essential functions for this position and certify that:

_______ I have the ability to perform the essential functions of this position with or without a reasonable accommodation.

_______ I do not have the ability to perform the essential functions of this position either with or without a reasonable accommodation.

Employee / Applicant Printed Name    Employee / Applicant Signature    Date