

Game Development Roles

GAME DEVELOPMENT is the software development process by which a video game is produced. Games are developed as a creative outlet and to generate profit. Similar to the development of a film, an automobile, or a home, many roles make the final product possible.



Objective:



List the three stages of game development and the primary career positions and responsibilities associated with each stage.

Key Terms:



animator	game play	sound designer
design document	producer	tester
game assets	programmer	writer
game designer	project team	

Understanding the Game Development Process

Rob Crossley wrote in *Develop-Online.net* that, “Well-made games bring profit more readily.” The average development budget for a multiplatform next-gen game is \$18 million to \$28 million, according to new data. Big budgets and big profits do not happen magically. They are the result of some very skilled and talented people at each level of the development process.

STAGES OF GAME DEVELOPMENT

Three general stages of game development are design, development, and testing. In the first stage, the game must be defined and designed. Game ideas are generated, and the story script is written. Functional and non-functional requirements are documented.

In the second stage, the **game assets** (the components that make up the game) are developed. Components are created and integrated during this stage. So characters are formed, and environments are developed.

Also, the sound is added. In addition, the game code is written to integrate the assets and to initiate game play.

In the third stage, the game must be tested. A **tester** is a person who plays the game repeatedly, using every possible scenario of play. The tester tries to break the game to find bugs and problems so they can be fixed before the game is released. Problems are documented and reported to the project team, and the team works together to fix them.



FIGURE 1. Solid teams make solid games.

PRIMARY CAREER POSITIONS ASSOCIATED WITH GAME DEVELOPMENT

Several career positions are associated with each stage of development. The responsibilities that go with each position are as unique as the positions themselves.

Writer

A **writer** is a person who creates the storyline and script for an electronic game. Depending on the specific position, the person may be called a script writer or an editor. At least four aspects of the game should be included in the storyline: the plot, the setting, character development, and the storyboard. Typically, a **design document** (a detailed outline that describes the storyline, the assets needed for the game, game play details such as scoring and game challenges, and how the game is intended to be played) is created during this stage. **Game play** is a description of every experience that a player may encounter while using the game.

Game Designer

A **game designer** is a person who helps determine if the game, as written in the design document, can be or should be produced. The game designer communicates design and technical concepts to developers throughout the game creation. The game designer is actively involved in game production throughout all three development stages. He or she should have skills in all areas of design and development, including scriptwriting, programming, animation, and project management.

Animator

In the development stage, several positions of intrigue exist. An **animator** (artist) creates characters and character movements (animations) as well as environment assets (all of the artwork that makes up the setting in which the game is played) that will appear in the game.

Programmer

A **programmer** is a person who writes the code that causes the interaction between game assets and determines game play.

Sound Designer

A **sound designer** is a person who creates sound effects and music, which add to the game play experience. Just as a movie incorporates sounds and music to add to the movie experience, game sounds play a large role in the overall game play experience.

Producer

A **producer** (director) is a person who acts as a project manager to be sure that the development team is working together to meet design requirements and deadlines within budget constraints.

Project Team

The producer leads the **project team**, which consists of all individuals involved in the design, development, testing, and final outcome of the game.

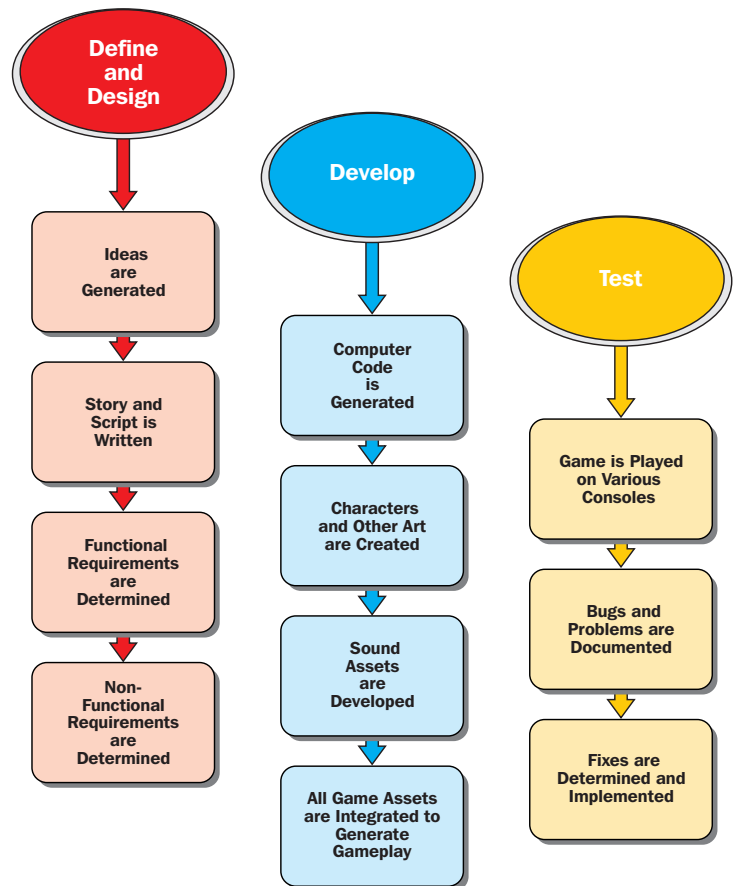


FIGURE 2. Three general stages of game development are design, development, and testing.



FURTHER EXPLORATION...

ONLINE CONNECTION: Video Game Producer

If you are interested in becoming a video game producer, use the Internet to conduct a search. Take notes. You may want to start with the following sites:

<http://www.artofmanliness.com/2010/09/29/so-you-want-my-job-video-game-producer/>, http://www.gamasutra.com/blogs/HarvardBonin/20140412/215368/The_Future_of_Being_a_Video_Game_Producer.php, and http://en.wikipedia.org/wiki/Video_game_producer. Share the information you discovered.

In the third and final stage of game development, there is another position of interest. During the test phase, a tester plays each component of the game repeatedly in an attempt to find problems or to break the game. He or she must effectively communicate problems to the project team so the problems can be fixed.

Summary:



Three general stages of game development are design, development, and testing. In the first stage, the game must be defined and designed. In the second stage, the game assets are developed. In the third stage, the game must be tested.

Several career positions are associated with each stage of development, and the responsibilities that go with each position are as unique as the positions themselves. Career positions in the define and design stage include writers and designers. A game designer is a person who helps determine if the game, as written in the design document, can be or should be produced.

In the development stage of the process, several positions of intrigue exist. An animator creates characters and character movements as well as environment assets that will appear in the game. A programmer writes the code that causes the interaction between game assets and determines game play. A sound designer creates sound effects and music, which add to the game play experience. A producer acts as a project manager to be sure that the development team is working together to meet design requirements and deadlines within budget constraints. In the third and final stage, a tester plays each game component repeatedly in an attempt to find problems or to break the game.

Checking Your Knowledge:



1. What are the components of the design document?
2. Describe the role of an animator.
3. Describe the role of the tester.
4. Describe the game assets.
5. Who leads the project team, and what are the primary responsibilities?

Expanding Your Knowledge:



The indie game industry has seen a rise in recent years with the growth of new online distribution systems and the mobile game market. Visit the *Occupational Outlook Handbook* at <http://www.bls.gov/ooh/>. Research some specific salary and outlook information for various gamer careers.

Web Links:



The Stages of Game Development

<http://game.ezinemark.com/the-stages-of-game-development-31f633b4f98.html>

Video Game Development Process

<http://www.buzzle.com/articles/video-game-development-process.html>

Development Costs

<http://www.develop-online.net/news/33625/Study-Average-dev-cost-as-high-as-28m>

The Art & Business of Making Games

<http://www.gamasutra.com/>