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What Is Gamestar Mechanic?

In This Chapter

- Introducing Gamestar Mechanic
- Distinguishing the main components
- Navigating the interface with ease
- Exploring the skills you can acquire from Gamestar Mechanic

The website *Gamestar Mechanic*, created by E-Line Media and the Institute of Play, lets you create and play action games in which the player can navigate, shoot enemies, collect coins, and solve labyrinths. You can easily build your own games and publish them for other users to play and review, providing feedback on what you did well and what could be improved.

The concept of a *level editor* is prominent in a number of games, enabling you to arrange the components of the game in a unique way. Gamestar Mechanic goes the extra mile, using its official levels to teach you the elements of a fun game. Having a community of people who design, play, and review games allows you to step into the world of the game designer, the play-tester, and the critic, having fun every step of the way.

This chapter gives you an overview of what you can do with Gamestar Mechanic and introduces the main areas of the site.

Gamestar Mechanic: An Introduction

Most video game design platforms, as with all programming languages, can be intimidating to beginners — your imagination is often limited by your programming ability. In Gamestar Mechanic, you don't need to know a programming language to create a game. You're provided with *sprites* (the components used to build a game), and the goal is to apply them in a fun and innovative arrangement.

In Gamestar Mechanic, you play *quests* (games created by the Gamestar team) that teach you the core concepts of game design, build your own games in the *Workshop,* and play a nearly limitless arcade of other people's games in

Game Alley. While playing, you grasp new concepts and apply them to your own games. After you design a game, you can immediately publish it so that it shows up in Game Alley, sharing the game with other players.

Gamestar Mechanic is a safe environment for sharing and discussing and is a useful resource for all ages. Figure 1-1 shows the first page you see when you log in to the site.

Figure 1-1: This is Gamestar Mechanic.

In the following sections, I discuss the three main areas of Gamestar Mechanic and what you can do there:

- The Quest
- The Workshop
- The Game Alley

The Quest

The *Quest* is a combination of interesting games and interactive comics that follow the training of game designer Addison Cypher. Each quest involves tutorials and advice that teach you the concepts of game design, allowing you to

learn from experience by playing games, repairing broken games, and designing your own games. You must complete the first quest in order to *publish* games for other users to play, because these quests contain valuable information about how games are made. (See Chapter 4 for more on quest missions.)

The free quests introduce you to the essential concepts of game design via active play and interaction, whereas the premium quests define more advanced concepts that are weaved into a more intense storyline. (I discuss premium accounts in Chapter 14.) Whether you're a new game designer or you have experience in other programming languages, the Quest is a good place to start introducing yourself to the site.

The Workshop

The *Workshop,* shown in Figure 1-2, is your turf. You can see your rank, achievements, games, challenges, and more. The Workshop is also where you begin designing new games and where teachers manage their classes (see Chapter 16 for more on classes).

The *toolbox* is a subsection of the Workshop. You're given an array of all your *sprites* (the objects that comprise games, as described in Chapter 5), a grid to place them on, and a few tools. In this robust environment, you can build games quickly and thoughtfully, in any way you can think of. The toolbox is the heart and soul of the Gamestar Mechanic interface, the canvas on which you put into practice the concepts you've absorbed elsewhere on the site.

When you first sign up for Gamestar Mechanic, you receive a default set of sprites in your toolbox. As you proceed through the Quest, you earn additional sprites that you can use to build more elaborate games.

Understanding terms used in this book

This book often refers to the terms *games, levels,* and *sprites.* In the context of Gamestar Mechanic, a *game* is a complete, playable work to be published on the site. Every game is divided into separate *levels,* which are rooms that are cleared in sequence while playing the game. Lastly, levels are created by arranging (on a grid) little creatures or objects — known as *sprites* — that contribute different functions to the game.

I also talk about games in terms of designers, players, and reviewers on Gamestar Mechanic. A *designer* is a user who designs games; a *player* is someone who plays games; and a *reviewer* is a player who gives feedback in the form of reviews on the site. You may read phrases such as *gaining players* or *gaining reviewers,* which simply refer to attracting people to play and review your games. This book shows you how to do all three jobs for the full Gamestar Mechanic experience — as a designer, a player, and a reviewer.

Figure 1-2: Your workshop displays your profile, as well as the tools for changing it.

Game Alley

Designing games is fun, but games are meant to be played. Game Alley is the place where you can share games with friends and acquaintances, by way of a safe and private system. You can surf Game Alley and play some of the hundreds of thousands of user-created games or publish your own games for the community to try out. The reviewing system for games (discussed in Chapter 7) lets you review other users' games, and they can review yours, in a safe environment.

Depending on your preferences, designing a game can take anywhere from five minutes to days on end. No matter how you design it, though, your game will be playable by a community of thousands who can review and comment on it. Even if you only occasionally check the site to play or design games, you can immediately find new ways to enjoy and understand game design.

The Gamestar Mechanic community includes a database of over 500,000 games, all of which have been created by its huge community of users. Thousands of games are published every week, and users have played these games more than 15 million times in the history of the website. In addition, more than 6,000 schools use Gamestar Mechanic to teach a number of different subjects. On this site, you'll never find a shortage of players, designers, reviewers, or mentors.

Exploring What You Can Do on the Site

Gamestar Mechanic contains a number of intuitive interfaces, which you can quickly pick up and then master over time. The following sections introduce you to the interfaces for playing, designing, and reviewing games.

Playing games

The games designed in Gamestar Mechanic all follow the same general system: A single avatar sprite is placed in a level, and the avatar responds to the commands that the player enters from the keyboard. The player controls the movements of the avatar with the keyboard.

Game *levels* are a series of independent challenges that lead players through the game. Each level has a *perspective,* which determines how sprites function within the world. Here is a quick rundown of the two perspectives in Gamestar Mechanic (which are covered in more detail in Chapter 2):

- In a **top-down** game, the player looks down on the level from above, and sprites can move up, down, left, or right.
- In a **platformer** game, the player has a side view: Sprites can move only left or right, but they can also jump into the air or fall down because of gravity.

Games can take on many different forms, depending on the kinds of sprites you use to build them. You can design your own goals by adjusting sprites' settings and properties and adding parameters (in the form of *system sprites*) for completing the level. You are provided with lots of different sprites that have different abilities and behaviors. You can place various sprites in each level of your game and adjust their settings to decide what they do. A little creativity can unfold into millions of ideas, concepts, innovations, and patterns. For more on the five categories of sprites (avatar, enemy, block, item, and system), check out Chapter 5.

Designing games

The interface for designing games is simple: The levels are split into square grids, and designers can drop sprites from the library onto the grid to use. The simple click-and-drop interface, combined with four tools for manipulating sprites and patterns, provides an intuitive experience (see Figure 1-3).

Designers often test their levels multiple times during the design process. The Edit/Play button in the upper-left corner of the toolbox allows you to quickly switch between editing and playing, enabling you to revise and expand on levels.

You can save or publish a game with the click of a button. As long as you've beaten all the levels you've created, you can publish the game immediately to be played by others. (See Chapter 5 for details on designing and publishing a game.)

Figure 1-3: Gamestar Mechanic's design interface, the toolbox, is easy to use.

The interface for designing, testing, and publishing games not only requires no knowledge of programming or marketing but also eliminates the tedious bits, allowing you to focus on the design and how the elements of your game system come together. In this way, Gamestar Mechanic provides a useful training ground for future game designers.

Reviewing games

You primarily communicate with other users by way of reviews and comments. Every game page has a list of reviews and comments from other users saying how they felt about the game. (The lower-right corner of Figure 1-4 shows the fields you fill out to submit a review.) The Mechanic Rank system rewards users for playing, designing, and following the Quest, but it also rewards good reviews and *digital citizenship,* the process of being polite and well-adjusted in your interactions with the online community.

Reviews and comments are updated as players try out the game and submit their feedback, with the most recent comments appearing at the top. The more reviews a game accumulates, the more precise the average rating becomes. This safe, friendly system provides a way for users to indirectly discuss game design. (See Chapter 7 for more on reviewing games.)

Figure 1-4: When you're done playing a game, you can review it to tell the designer what you thought of it.

The time commitments of Gamestar Mechanic

In short, Gamestar Mechanic has no time commitments. While working on a game, you can save it as a draft and easily return to it later. You can stop using the site for months and then go back whenever you have a new idea. Even if you're out of ideas or motivation, you can still visit the site and play some games for inspiration. Designing games in Gamestar Mechanic is similar to riding a bike: Even after a long break, you can jump right back in.

Remember: Don't use the site to the point that it interferes with your work. Limit your time, and use Gamestar Mechanic as a reward for completing other work. You can even use Gamestar Mechanic as a supplement to a job or class, by designing games based on the subject you have to work on. Of all the time-consuming activities available, Gamestar Mechanic is a constructive choice.

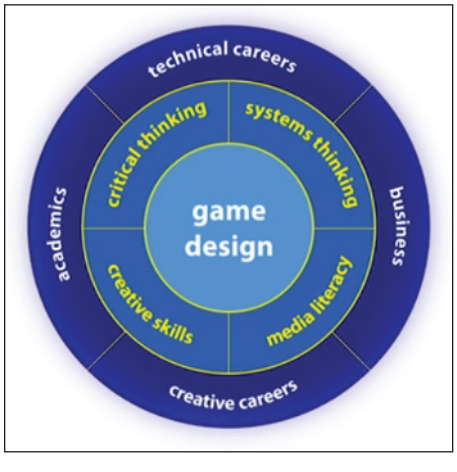
Teaching and Learning via Gamestar Mechanic

Gamestar Mechanic is built around the idea that designing a video game can be a positive and constructive learning experience. Thus, the program is useful for not only budding designers but also teachers and the parents of young users.

Developing skills through game design

Gamestar Mechanic is an effective way to learn game design, allowing you to build games right away and learn from both professionals and other users. You discover how to build balanced and detailed games, and capture the elusive element of fun in an activity. Moreover, the field of game design contributes to development in other areas, such as science and processes, programming, creative composure, art, and critical analysis.

As Gamestar Mechanic shows, game design teaches the four major components shown in the inner ring of Figure 1-5, which lead to mastery of the subjects shown in the outer ring.



Courtesy of E-Line Media

Figure 1-5: The positive effects of game design.

The following list describes some of the skills that you can develop by designing games:

- **Critical thinking:** Critical thinking is the process of breaking down and analyzing something (such as text, an argument, or a game) and understanding it at a deep level. Making a game that's fun to play isn't easy, and you can discover a lot of critical-thinking principles while trying to complete your game. Because no formula exists for creating

and measuring fun, you must critically analyze your game to determine what's working and what isn't. Chapter 11 details how you can evaluate and improve your game.

- **Systems thinking:** Systems thinking is the thought process that deals with *systems* — objects composed of several interlocking functions, such as environments or computer programs. Games are composed of challenges that players must solve in order to win; each of these challenges is a system in itself.

  A game is an interesting type of system: Its components are tuned to challenge users and reward them for their input, creating an engaging, intriguing, and enjoyable experience. To make a game fun, you (the designer) must therefore understand how to build robust and interesting systems. You can learn this skill through practice with the website and game design in general, as well as the Quest and this book. Video games are excellent examples of applied systems, and the process of creating such systems is a vital skill in process-oriented careers.

- **Media literacy:** As a game designer, you have to keep up with the media in order to make your games successful. In Gamestar Mechanic, this *media* is represented by the huge community of players and reviewers roaming the website. Game Alley, where you publish your games for other users to play and review, is a training ground for *media literacy.* Media literacy refers to understanding the particular parameters, constraints, challenges, and components of various media (for example, film, music, art, literature, and in this case, games) and how you can use and relate to them.

  Game Alley provides a preparatory environment for the many careers involving digital citizenship. Lots of jobs require people to communicate online or use social media programs, whether to collaborate with coworkers or reach an audience, so Gamestar Mechanic is a great resource for getting started in a safe environment.

- **Creative skills:** Being able to apply creativity to practical goals is a helpful skill throughout life. For a game to be truly successful, it must be innovative in some way. Designing video games is an extremely creative process, with many ways to succeed and many ways to learn from failure.

Gamestar Mechanic can be used as a supplemental resource to other subjects of learning. For example, the annual STEM Video Game Challenge (`www.stemchallenge.org`) supports Gamestar Mechanic, giving you the challenge of creating a game that reflects an academic subject in a fun and engaging way. (See Chapter 15 for more on contests and challenges.)

Designing games can give you a great sense of pride and self-accomplishment. As a designer, you can produce lots of creative content quickly, making a big impact in a short time. Whether you're creating a level, reading a positive review, or beating a difficult game, Gamestar Mechanic excels at making you (rightfully) feel good about yourself.

Examining the role of teachers

Because students don't always have the drive to teach themselves, Gamestar Mechanic offers the Teacher system. Teachers can lead classes ranging from small groups to school-wide activities.

When a class is created, the teacher can

- View the statistics and progression of students.
- Customize and assign projects for students.
- Leave feedback on students' games and projects.

Teachers may have as many or as few class meetings as they want, online or offline, but always provide hands-on work for students, enabling classes to provide a combination of fun and education.

Gamestar Mechanic offers extensive resources for active teaching and lesson plans at `https://gamestarmechanic.com/teachers`. For more on how teachers can create classes and projects, see Chapter 16.