

10.2.4: Identify the tools and skills needed for creating games.

Development Tools

Tools necessary for creating (a) game.

Computer hardware — Desktop computers, tablets and handheld devices all work — designers should choose the tools they feel most comfortable working with (small vs. large screen, keyboard vs. touchscreen, and so forth).

If you want to create a game that can be played on Apple computers (including iPads, iPods, and so forth.), then you usually must build it on a device using the Apple platform.

Software — There are many applications you can use to create games.

Some only run program code, others help you animate art, and some will do almost everything for you.

Development Skills (?)

Graphical art — Video games consist of graphics in motion with a goal

and a plan.

Programming — Programming code is required to create a computer game

Music and sound effects —You can create your own sound files and incorporate them into your game

Design — Game designers must perform several important tasks in game development, which may require the skills of more than one person:

- Create the look and feel of the game.
- Develop the art and animation for all graphical elements, including scenes, characters, the website, and so on.
- Develop scenarios that occur between characters during play.
- Write scripts and dialog for the action and characters.

Testing — After you develop the first version of your game, you will need to do lots of testing to see how it performs on various devices and find any bugs in the program.

Enlist the help of friends and other people to test it as well.

The best group of testers will have varying levels of gaming experience and no familiarity with your game.

Graphic Design (Tools)

Pixlr — A free, web-based tool used to create original images or edit existing images.

Adobe Photoshop — A well-known graphical art creation tool.

Gimp — A free open-source graphical art and simple animation tool.

Pixelmator — A Mac-based application similar to Adobe graphics tools

Game Design Engines (Tools)

Scratch — A free game-programming environment.

Game Salad — This game design program enables you to design games in a drag-and-drop environment with no coding, and publish your games as apps for iOS and Android devices.

Quest — Makes playable text-only adventure games.

Yoyo Games — Accessible yet powerful professional-level 2D and 3D game creation.

Clickteam — Game design and development tools for amateur game creators, both new and experienced.

3D Gamemaker — Create games quickly with pre-made scenes and objects.

Blender — A free 3D creation tool.

Maya (Autodesk) — Create games and 3D animations.

3DS Max (Autodesk) — Create 3D animation for games and motion graphics.

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