

Coding for Good Badge 2: Digital Game Design Part 2

Ambassador Badge





What is the Digital Game Design Badge?

When you play a video game, you enjoy the end product of a many-step process. Game makers have to create every aspect of the game: the scenario, challenges, goals, characters, and every possible choice players could make. It's a complex and creative process that combines imagination and a strong understanding of computer programming and design.

Step 1: Brainstorm game “for good” scenarios

Step 2: Create a G.I.R.L. avatar for your game

Step 3: Learn about decision trees in game design

Step 4: Design your game

Step 5: Playtest and iterate your game



Step 4: Design your game

What makes a game fun to play?

When game makers design a story-based game, they start with a problem or challenge for characters to solve. They build their world around the problem, creating scenarios where their characters will make choices and face the consequences of their decisions.



Each choice the player makes for her character will move the character and the story in a new direction. The possibilities for choices that players can make are limited only by the programmer's imagination. The type of choices that make the game the most interesting are ones that are equally good or bad, or that have uncertain consequences.



Step 5: Playtest and iterate your game

In cooking, people sometimes say, “The proof is in the pudding.” That means you only know how what you cooked tastes when you finally eat it. In video games, the proof is in the playing. Game makers often have other programmers play their games and provide feedback during the development process to see if they work and are fun. They call this process playtesting. The game’s developers then make changes based on the feedback. Each time they revise their game and have it playtested again is called an **iteration**. This create, test, and revise process is used in all kinds of design, not just video game creation. Testing and iterating is an important part of good design because it lets you fix any problems, and possibly include better ideas than you had when you first started developing your creation.



Have other people Playtest your game!

- Show your completed [Character Development](#) handouts to the playtester(s) so they see who their characters are.
- Game developers, start your game by placing the root node of your decision tree face up on a table or the floor. The tree could grow quite a bit, so make sure that there's enough room for your tree to grow without running into another group's tree.
- Playtesters use the characters created by the game developers to think through the different decisions given in the game.
- Once playtesters choose a decision, they should place the next card beneath the first (and to left or right).
- Make sure the numbers correspond from one card to the next, so the story unfolds in the right way.
- Play the game until you reach the end of the decision tree (the leaf node).
- Try to have multiple people play or multiple rounds so that different paths can be taken.



Here are some questions that'll help you get some important feedback!

- **What are the best parts of the narrative?** Were there moments in the game, the story arc, or an overall theme that you liked? Why?
- **What parts could change?** Were there individual situations or decisions that didn't make sense?
- **Could the story order change?** Were there situations that could move around? Or could some decisions be connected in different ways? Could some parts of the story be extended? Could some parts be shortened? Is there repetition within a story arc?
- **Do you have any ideas for things to add?** Would new decisions take the story in different directions? Could new situations add more interest or challenge for players?



Plug It In!

GSUSA has a partnership with [Vidcode](#) to support you in learning to code!

While coding on a device is not a necessary part of this badge, it can be a great way to increase your coding knowledge. Follow [this guide](#) for instructions on how to get started!



Coding For Good

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Coding
Basics



Digital
Game Design



App
Development

