

ICT Gaming Essentials Lesson 1



Designing a Storyboard

Level ■□□



Note: This activity assumes that students have already completed the "Stepping Through the Design Process" activity. You should continue working with the same team and use the game idea you created in that activity to develop your storyboard.

In this activity, you will create a storyboard for a game idea you have created.

1. Meet with your design team of two to four students from the "Stepping Through the Design Process" activity.
2. As a team, discuss the basic steps that a player should complete in your game.
Remember that your game should present a problem or challenge, with the goal of play being to solve the problem.
3. Using pencil and paper, sketch the basic steps in your game. Each step should show the required characters or elements, and the action that needs to occur before the player can proceed to the next step. Show at least three scenes (steps) in your storyboard. This process helps you clarify your ideas, see the interactions, and evaluate the flow of your game.
4. All team members should make sketches. When everyone on the team has finished sketching a few steps, share the sketches with your team. Choose one storyboard for your team that you will present to the class. When selecting, look for sketches that are easiest to identify the characters and action.
Note: Remember that teamwork is essential to game development and many other projects. Each person has different skills. One member may have the best game idea, another the best characters and someone else may be the best story writer or artist.
5. After selecting your team's storyboard artist, discuss the storyboard. What additional steps does it need? What steps are not necessary? What can be improved? Have your team storyboard artist make the changes discussed by the team.
6. Optional: While the team artist modifies the storyboard drawing, other team members can create a mock-up of their storyboard using presentation software, such as Microsoft PowerPoint.
7. Final team storyboards should include at least five scenes (steps). Present your team's storyboard(s) to the class, or hand them in to your teacher as directed.

ICT Gaming Essentials Lesson 2

Excerpt from Introduction to Programming for Games – Programming Structures

- Explain that efficient algorithms make use of three main programming structures: sequential, selection and repetition (or looping).
 - A sequential programming structure is a sequence of instructions that the computer *follows in order, one by one*, from top to bottom.
 - A selection programming structure allows the computer to make a selection between alternative conditions (for example, if this condition exists, do this — if not, do that). The computer first assesses the condition and then *makes a decision* about how to proceed. An example of a selection structure is the *if/else* statement.
 - Repetition or looping programming structures instruct the computer to repeat a set of instructions, called a loop, until some condition is met. Repetition structures include the *while, do/while* and *for* statements.

Repetition structures are also called iteration structures — an iteration is a loop, or a repetition of the process.
 - Figure 2-3 compares the ways these three programming structures complete the same task of making a character move forward six steps from Start to End.

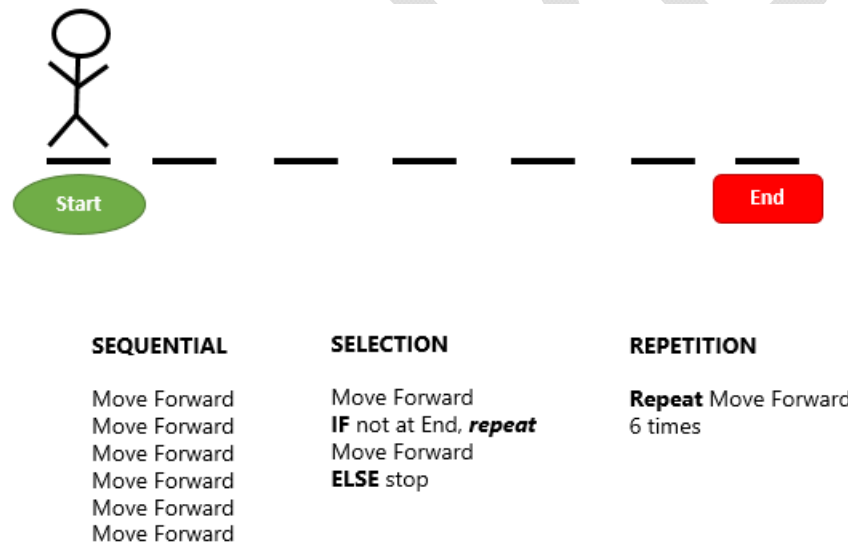


Figure **Error! No text of specified style in document.**-1: Comparison of three main programming structures

- Explain that computer programs can use any combination of these structures. The selection example in the figure also contains sequential and repetition structures.