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**2.6 Exercises**

**1. Q: Often, examples of bad game design can help us avoid creating a bad game design ourselves. Using your own experience and the internet, list five examples of games that failed to reach their potential because they were primarily market-driven, designer-driven, license-driven, technology-driven, art-driven. For each, detail the design flaws that prevent them from reaching wide-scale popularity.**

**A:** At initial release, the market-driven *No Man’s Sky* had procedurally generated planets, creating the illusion that the game seemed big. Players criticized this as repetitive. No multiplayer mode. The gameplay was a little bit shallow. Players thought that the game did not live up to their expectations based on promotion.

The designer-driven *E.T.*, based on the movie of the same name, is arguably one of the worst video games of all time. This game was made by Howard Scott Warshaw. Due to a tight production schedule in preparation for the 1982 Christmas holiday season, this game was rushed and completed development in just five weeks. This is obvious in the end product of the game, which has poor graphics, confusing gameplay, and a confusing and chaotic mess of a world.

The license-driven *Marvel vs. Capcom Infinite* did not have *X-Men* or *Fantastic Four* characters because there were legal issues between 20th Century Fox, Marvel, and Disney over their film rights. There was a smaller character roster largely for this reason, which invited criticism from reviewers.

The technology-driven *Mass Effect: Andromeda* was built using EA DICE’s Frostbite 3 Engine, requiring BioWare to construct systems, tools, and assets from scratch because the franchise had originally been built on Unreal Engine. The BioWare team had to outsource from third-party companies to develop the game. Character animation somewhat flawed because of this.

The art-driven *Okami* was released at a time when people were demanding more realistic games. *Okami*, however, took a completely different approach in terms of graphics. The visual design was very unique, and likely a reason that *Okami* was not commercially successful.

**2. a)**

**Super Mario Bros. 3 Game Concept Document**

**1 Concept/Genre**

Super Mario Bros. 3 is a 2D platformer video game with level progression.

**2 Technical Structure Design**

Mario and Luigi can walk or run only when they are on ground. On slanted hills, they can slide down, knocking out most enemies in their path. They can only fly when they have possessed a raccoon tail, a Tanuki Suit, or a P Wing. With all of these except the P Wing, they must first build up power by dashing until the power bar is full. The player can only play as Mario in 1 player mode. In 2 player mode, player 1 plays as Mario, and player 2 plays as Luigi.

**3 Game Systems Design**

As the player progresses through each level by moving through it towards the end, the game becomes gradually more difficult, and the worlds become longer.

**4 Shell Menu Design**

There is no menu when the game is paused. When the player hits the “Pause” button, the word “PAUSE” appears on the screen and the game is paused.

**5 Player Interaction**

Pressing A makes Mario or Luigi jump, or fly with certain power ups when the power bar is full. Holding the D pad to the right or left makes them walk in that respective direction. Doing this while holding B makes them run. Pressing down on the D pad makes them duck, unless they are in their small form.

The game is third person and avatar-based. The player must control Mario or Luigi through the world.

**6 Audio Design**

During every level, different kinds of music plays based on the kind of the level or the location in a specific level, i.e. above ground, underground, underwater, inside a castle, in the sky.

When the player completes a level, there is a happy dingle, and a victory tone when a boss is defeated.

Audio cues will play when a coin, life, or a power up is collected or lost.

**7 Target Audience**

The target audience will be fans of previous Mario games and other people who own NES systems.

**8 Key Characters**

Mario and Luigi are the two playable characters. Player one controls Mario, and player two controls Luigi. The two must travel the Mushroom Kingdom as they fight against the main antagonist, Bowser, and his minions to recover the seven stolen Magic Wands and save the kings of each of the Kingdom’s seven worlds. The brothers must also rescue the Princess.

**9 Hardware Platform**

Super Mario Bros. 3 will be released on the Nintendo Entertainment System (NES).

**10 Game World Design**

The dimensions will be defined with an X-Y coordinate system.

The user interface will be over-the-world maps which show how the player is progressing through the game. There are different over-the-world maps for every world. By pressing B on this map, the player can access a menu of all the power ups they have collected at multiple points in the game and use them prior to entering a level.

**b)** The original designers of this game wanted to add extra power ups for the players to use, building on the roster from previous games. They also wanted to expand on the user interactivity with the game by including over-the-world maps, something that this game has popularized today.

**c)** The first thing I would include is a tutorial on how to play the game with the controls, as well as a brief overview of the game story. The Hammer Suit and the Kuribo’s Shoe should be easier to find, as they are quite rare and not found in many levels. When the player collects a power up, there should also be a brief explanation of what that power up does and how to use it.

**3.**

**Bacon Bits Game Concept Document**

**1 Concept/Genre**

Bacon Bits is a shoot-em-up with level progression. The player starts out with five lives, and must shoot bullets at giant pieces of bacon floating above them. Whenever a bullet hits the bacon, a bacon bit falls off toward the spaceship. If it hits the spaceship, the player loses a life. If the player loses all of their lives, it is game over.

**2 Technical Structure Design**

The spaceship can only move from left to right and fire bullets up above it.

**3 Game Systems Design**

As the player progresses through each level by moving through it towards the end, the game becomes gradually more difficult, as the bacon becomes larger and the bacon bits start to fall faster upon the bacon being hit. This game is endless, where the player must aim for the highest score they can attain.

**4 Shell Menu Design**

When the player hits the “Pause” button, the word “PAUSE” appears on the screen and the game is paused. The player can select “Continue” to resume the game, or they can select “Quit” to quit the game, but at the expense of losing all of their progress.

**5 Player Interaction**

Pressing A makes the spaceship fire a bullet toward the bacon. Pressing left or right on the D pad allows the spaceship to move in that direction.

The game is third person and avatar-based. The player must control the spaceship through the world.

**6 Audio Design**

There will be a sound cue whenever the spaceship shoots a bullet, and when the bullet hits the bacon. If the spaceship is hit by bacon, a boom sounds, as if it has exploded.

**7 Target Audience**

The target audience will be fans of space shoot-em-ups.

**8 Key Characters**

There are no characters, only spaceships. By setting more and more high scores, the player can unlock spaceships with greater abilities, such as greater firepower and damage resistance, which will help the player score higher as they continue playing the game.

**9 Hardware Platform**

Bacon Bits will be released on PC, Xbox One, PS4, and Nintendo Switch.

**10 Game World Design**

The dimensions will be defined with an X-Y coordinate system.

The user interface will be space worlds, comparable to other shoot-em-ups like *Galaga*. There will be no world maps, as the basic user interface is the only world present in this game.