



Serious Game Design Assessment Framework: Case Study 1

What is the Game About?

Zoombinis' homeland, has been taken over by the evil Bloats. The Zoombinis flee but end up in a mysterious and treacherous land.

Characters: cartoon characters (Zoombinis) that are assembled by the gamer by selecting a group of available attributes.

Music/sounds: Background music, different for each puzzle, mystery sounds, character voices and narrator.

Visual elements: digital colorful cartoon characters and landscapes.

Setting: Fantasy land, Zoombini way to Zoombiniville.

-Gameplay:

What Role(s) Will Players Play?

Players must guide the Zoombinis through this land to reach the safety of Zoombiniville.

What Actions Can They Take?

The player starts at Zoombini Isle, they assemble a team of 16 Zoombinis, picking from 5 different options each in hair, eyes, nose color, and footwear, for a total of 625 possible combinations. The player then has to do a series of minigames, helping the Zoombinis traverse through dangerous places until they reach the next location on the island. By the end of a minigame, a number of Zoombinis may be left behind. At the end of a section, the Zoombinis can be stored to join another group of Zoombinis.

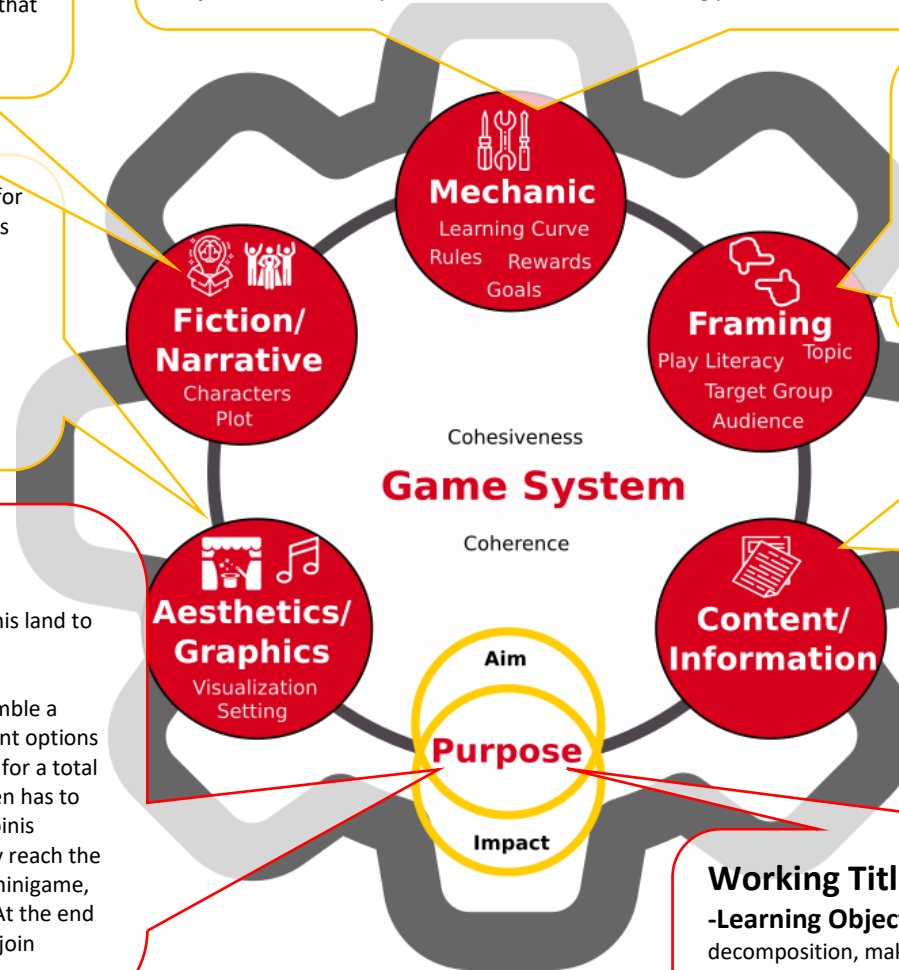
Goal: Solve 12 puzzles and carry as many zoombinis as you can to the Zoombiniville.

Action/verbs: move zoombinis and match to designated spot. Select attributes to build characters.

Constraint(s): Zoombinis can travel by groups of 16, each combination of zoombinis attributes can be used twice in the game.

Victory Condition(s): The game is won when 625 Zoombinis make it to Zoombiniville

Player Structure: competitive and collaborative, scoring points.



Play literacy/Audience: computer game to play alone or in groups. Aimed for students (K-12) but also for general public.

Theme/Topic: Logical Thinking (comparing, grouping, sorting and algebraic thinking) / Implicit computational thinking (pattern recognition, problem decomposition, abstraction and algorithmic thinking)

Facts and data offered: The game doesn't tell the player what to do, it gives them the freedom to figure out each problem or puzzle and invent a solution.

Data: number of zoombinis rescued, number of attributes to be used.

Facts and data used: Player selection and combination of attributes will determine the complexity and level of challenge. Puzzles rules are generated randomly by the computer each time the players play. No puzzle is equal, they have to figure it out each time.

Working Title of the Game: **Zoombinis**

-Learning Objectives: Systematic testing, pattern recognition, problem decomposition, making and testing hypothesis and implementing solution.

-Impact - Player Experience/Feeling: Recognize the importance of careful observation to make/test hypothesis that would allow prediction of outcomes that would help in problem solving situations.