MDA Analysis: Pokémon Yellow

Pokémon Yellow is the final version of the Pokémon game from [Game Freak](#) published by Nintendo for Generation 1. It was sold internationally on the Game Boy and was loosely based on the Anime of the time. It featured updated mechanics and gameplay changes such as the player longer having to choose what Pokémon the player will have for the rest of the game. Instead, they are given a Pikachu that is seen following the player throughout the game. Since its design is based on the earlier versions of the game, the core mechanics haven't changed too much from the Red, Blue, and Green versions thus the game's dynamics and aesthetics haven't changed much either. The core mechanics are as follows:

Mechanics

Exploration: Yellow has an extensive map for the player to explore, it will have locations that the player can walk towards without restriction, but some locations are inaccessible without the proper Pokémon, level, or ability to proceed. The player will have random encounters based on probability of steps taken, against Pokémon based on the region of the map and player progression. Pokémon of different types will be encountered. Players will have scripted encounters against NPCs during their exploration. The player can find items for progression or level up Pokémon.

Battles: Yellow has battles between the player versus Pokémon via random or scripted encounters, Pokémon trainer encounters, and Pokémon gym leaders. The player may have at most six Pokémon at one time but needs at least one. When random encounter against a Pokémon occurs, the player has the option to fight or flee the battle (some may not be successful flees). When a battle occurs, it becomes a turn-based battle and the game takes into account the type of Pokémon and stats. The player can choose what abilities with limited amounts to use against the Pokémon they are fighting as well as other options like capturing or escaping unless it's a battle with a trainer. All Pokémon have six statistics or *stats*: **Hit Points, Attack**, **Defense**, **Special Attack, Special Defense**, and **Speed**. Pokémon Yellow has Special Attack and Special Defense combined into the **Special.**

Your Pokémon's Hit Points stat, or HP, determines how much damage it can take before fainting and being unable to battle. Your Pokémon's Attack and Special Attack determine how much damage it does when it attacks with physical or special moves respectively, while its Defense and Special Defense determine how much damage it takes when it is attacked by a physical or special move respectively. Speed determines how fast your Pokémon is, which effectively means it controls the order in which the Pokémon in battle will move each turn: most of the time, they will attack in descending order by their current Speed stat. Pokémon stats are governed by a formula. For Attack, Defense, Special Attack, Special Defense and Speed, the formula is this:

Stat = floor(floor((2 * B + I + E) * L / 100 + 5) * N)

__floor(something)__ stands for rounding down or taking off everything after the decimal point.

The HP formula is a slightly different:

Stat = floor((2 * B + I + E) * L / 100 + L + 10)

Pokémon Types: Pokémon will have different types based on region. Types are like elements or essences that define what kinds of moves the Pokémon is susceptible to and what kinds of moves it can shake off easily. There are 15 types of Pokémon in Pokémon Yellow (Gen 1): Normal, Fire, Water, Electric, Grass, Ice, Fighting, Poison, Ground, Flying, Psychic, Bug, Rock, Ghost, and Dragon. Each type is *weak* to some types (deal double damage against Pokémon of this type), *resistant* to other types (deal half damage against Pokémon of this type), and *immune* to yet other types (deal no damage to Pokémon of this type at all), with those leftover dealing normal damage against it. The information is usually summarized in a *type chart*, a table where the effectiveness of an attack-type against a Pokémon type can be seen (attack type on the left, targeted Pokémon types along the top):

Target → / Attack ↓	NORMAL	FIRE	WATER	ELECTRIC	GRASS	ICE	FIGHTING	POISON	GROUND	FLYING	PSYCHIC	BUG	ROCK	GHOST	DRAGON	Totals
NORMAL	-	-	-	-	-	-	-	-	-	-	-	-	×½	×0	-	1 1 13 0
FIRE	-	×½	×½	-	×2	×2	-	-	-	-	-	×2	×½	-	×½	0 4 8 3
WATER	-	×2	×½	-	×½	-	-	-	×2	-	-	-	×2	-	×½	0 3 9 3
ELECTRIC	-	-	×2	×½	×½	-	-	-	×0	×2	-	-	-	-	×½	1 3 9 2
GRASS	-	×½	×2	-	×½	-	-	×½	×2	×½	-	×½	×2	-	×½	0 6 6 3
ICE	-	-	×½	-	×2	×½	-	-	×2	×2	-	-	-	-	×2	0 2 9 4
FIGHTING	×2	-	-	-	-	×2	-	×½	-	×½	×½	×½	×2	×0	-	1 4 7 3
POISON	-	-	-	-	×2	-	-	×½	×½	-	-	×2	×½	×½	-	0 4 9 2
GROUND	-	×2	-	×2	×½	-	-	×2	-	×0	-	×½	×2	-	-	1 2 8 4
FLYING	-	-	-	×½	×2	-	×2	-	-	-	-	×2	×½	-	-	0 2 10 3
PSYCHIC	-	-	-	-	-	-	×2	×2	-	-	×½	-	-	-	-	0 1 12 2
BUG	-	×½	-	-	×2	-	×½	×2	-	×½	×2	-	-	×½	-	0 4 8 3
ROCK	-	×2	-	-	-	×2	×½	-	×½	×2	-	×2	-	-	-	0 2 9 4
GHOST	×0	-	-	-	-	-	-	-	-	-	×0	-	-	×2	-	2 0 12 1
DRAGON	-	-	-	-	-	-	-	-	-	-	-	-	-	-	×2	0 0 14 1
Totals	1 / 0 / 13 / 1	0 / 3 / 9 / 3	0 / 3 / 10 / 2	0 / 2 / 12 / 1	0 / 4 / 6 / 5	0 / 1 / 11 / 3	0 / 2 / 11 / 2	0 / 3 / 9 / 3	1 / 2 / 9 / 3	1 / 3 / 8 / 3	1 / 2 / 11 / 1	0 / 3 / 8 / 4	0 / 4 / 7 / 4	2 / 2 / 10 / 1	0 / 4 / 9 / 2	

Capture: The player will have the opportunity to capture Pokémon during battles with wild Pokémon or, in certain cases, through trade. The player can decide when to capture Pokémon depending on the HP of the opposing Pokémon. Yellow also takes into account other factors such as the status of the Pokémon, the base catch rate of the Pokémon species, ranging from 3 (legendary Pokémon) to 255 (common Pokémon). Capturing Pokémon in Yellow also takes into account the Poké Ball the player uses with addition of a Ball Modifier or a Great Ball Modifier into an equation. Finally, it also takes into account the amount of wobble the Poké Ball has when a Pokémon is in the process of being captured. Mathematical calculations are always being used to determine the chance of a successful capture however, there is one item that always has 100% success in capturing Pokémon regardless of any factors.

Dynamics

The player's choices ultimately change how the mechanics are implemented on the player dynamically while not changing the fundamental mechanics of the game. With the core mechanics of Pokémon Yellow, the mechanics of Yellow interacts with the player in a way that is reflected by the player's choice when acting on these mechanics. While the player explores the map, the player changes the Pokémon that the player will randomly encounter based on the region they are exploring. That means the game will have the player encounter Pokémon of different types which means the player will have to adapt to the changes in the environment. This also means that when in a Pokémon battle, the core mechanics of the battle don't change much like the menu used during the turn-based fight or player input such as choosing abilities to use, using items, switching Pokémon, escaping, or capturing. However, based on the players chooses, the experience changes. Did the player use the correct Pokémon? Is the player's Pokémon under or over-leveled? Is the Pokémon type at an advantage or disadvantage? The player's choices and input change how the game reacts to the player. Since one of the main goals of the game is to capture all 151 Pokémon in the game, how the player decides to use the battle system and capture mechanics can determine how successful capturing Pokémon can be. Some Pokémon require the player to trade, some require you to capture Pokémon while they are affected with a status ailment, there is even one where the formula calculates the odds being so low that it's better to use a Master Ball than just regular Poké Balls.

Another goal of the game also has the player input affecting the progression of the game. In order for the player to progress in Pokémon Yellow, the player needs to beat Pokémon gym leaders in order to progress into another area of the map as well as certain abilities to traverse the map. The player will need to use the exploring and battle mechanics in the game to boost up the stats of the Pokémon they are using, maybe even capture a few Pokémon of opposing types or neutral types in order to beat a gym leader. The game's mechanics also expects the player to have Pokémon up to a certain level depending on how far the player has progressed in the game if not, the player will have to battle Pokémon in the surrounding area or previous area in order to progress without being forced back to a Pokémon center. The player can expect to progress with systems that will help guide the player on the requirements needed to order to complete the ultimate goal of beating the Elite Four and your rival, thus the game.

Aesthetics

With the mechanics and systems in place, the game will have the player have various different emotional responses that various Pokémon games usually invokes. With the large open-world map with over 151 Pokémon and the various towns to visit, Pokémon Yellow gives the player a sense of discovery. The battle mechanics also gives the player the feeling of a challenge since, while playing the game, the player will need to think about the choices that need to be made while fighting different Pokémon as well as Pokémon type knowledge in order to successfully win a battle against a Pokémon in the wild or against a trainer. Since the player's ultimate goal of the game is to become known as a Pokémon Master, the game provokes a sense of fantasy, of being this Pokémon Master and known as the best trainer in the world of Pokémon. This also ties into the capturing mechanic of the game, the series motto is "Gotta Catch'em All!", which also helps gives that emotional response of the being the best Pokémon trainer there ever was by capturing all the Pokémon in the world. The game also provides a sense of rivalry with a character you meet at the beginning of the game that you will encounter periodically and do a Pokémon battle which is very challenging as well. These encounters with your rival also change with the choices you made throughout the game, so no battle is the same. Pokémon Yellow also has a feeling of friendship since your little Pikachu companion will always be traveling with you on your journey to become a Pokémon Master. Overall, the mechanics of the game allows the player to choose how they want their adventure into the world of Pokémon to be; it can be challenging, it can fun, it can be whatever the player wants it to be. That is the beauty of Pokémon Yellow and why the formula of the game hasn't really change since its release, only the scope of the adventure just gets larger and the feelings of the player get larger as well.