

Game: Dragon Ball Adventures

Background & Story

Long ago, legends were told that 7 magical orbs are scattered around the earth. Anyone brave enough to travel the earth looking for them, will have his bravery rewarded by obtaining anything he could ever wish for. Recently, these magical orbs were found to be more than just old legends and some of them were actually located. It was also revealed that these orbs are called the dragon balls and were created by Kami, The Guardian of Earth, who came from the planet Namek. When you gather all the seven dragon balls together, The dragon will appear and will grant any wish made by the one who gathered the Dragon Balls.

The main character of the dragon ball universe is Goku, who had multiple adventures searching for the dragon balls with his friends saving the world from numerous threats in the process. Goku was later revealed to be a Saiyan sent from planet Vegeta as a baby to earth in order to destroy it. Instead, Goku hit his head and loses his memory resulting in him being more peaceful and saving the planet instead of destroying it.

Game Overview

The game is a role-playing game (RPG) based on Dragon Ball. It consists of both a world exploration mode where the player navigates the a map as well as a battle mode. The possible actions and characteristics depends on the chosen type of fighter.

Player characteristics

- The player chooses a fighter to play as (role)
- Fighters have the following attributes
 - a. name
 - b. level

- c. xp (Experience)
- d. target xp
- e. ability points
- The strength of a fighter is further determined by the following attributes:
 - a. health points
 - b. blast damage
 - c. physical damage
 - d. ki
 - e. stamina
- Fighters belong to one of 5 races
 - a. Earthling
 - b. Saiyan
 - c. Namekian
 - d. Frieza's race
 - e. Majin

Earthlings



The inhabitants of the planet earth are weak by nature. However, some trained really hard and became in league with other warrior races. The Human race is the most balanced of all the races in terms of strength and defence.

Famous Earthlings include: Krillin, Yamcha and Tien

Saiyans



The Saiyans are naturally born to be a warrior race. They are known for their amazing strength and skills in battle. The Saiyans were an evil race, invading other planets, destroy their inhabitants and sell the planets to the highest bidder. Their planet was later on destroyed by the evil lord Frieza destroying most of the Saiyan race leaving only few Saiyans alive, those fortunate enough to be away from planet Vegeta including Goku and prince Vegeta himself. After Vegeta's battle with Goku on earth while he was searching for the dragon balls on earth, Vegeta was defeated and little by little he knew the error of his evil ways and started to join the Z-Fighters in defending the universe. The Saiyan race has a special transformation called Super Saiyan, this transformation increases the power and strength of the Saiyans.

Famous Saiyans include: Goku and Vegeta as well as their half Saiyans sons and daughters.





The inhabitants of planet Namek are strong yet peaceful people. They have a lot of magical abilities and special powers. A Namekian can create a set of Dragon Balls, among other things. They are known for their regenerative abilities and their cunning and wisdom.

Famous Namekians include: Piccolo and Kami.

Frieza's race



Frieza was probably considered the strongest in the universe for quite so long. His hunger for power grew each and everyday. Frieza had a lot of warriors and fighters(including the Saiyans) invading planets for him expanding his empire by each passing day. Thanks to his incredible

powers he managed to keep his subordinates from defying him. However, he feared that the Saiyans might unlock their hidden potential and transform into Super Saiyans and defeat him as by then, none of the Saiyans did achieve this transformation that was known only from legends. So, Frieza decided to exterminate the Saiyans and destroy planet Vegeta. In doing so he angered prince Vegeta who vowed to get revenge for his race. Later on Frieza travelled to planet Namek in order to search for the original dragon balls and wish for eternal life. After a fierce battle with Goku, Vegeta and others on planet Namek, Goku finally transformed into a Super Saiyan and was the first one able to overpower Frieza and defeated him eventually. Even Though Frieza is now dead, others from his race continue to live on. Fighters of this race are known for their incredible speed and strength.

Famous Characters of this race: Frieza and his father King Cold.



Unleashed by the evil wizard Bibidi, Majin Buu in his original (Kid Buu) form went on a killing and destruction spree obliterating entire civilizations with just his breath. Thanks to the Grand Supreme Kai intervention, he infused his own goodness into Majin Buu making him less evil. However, the monster still remained and after a while good Buu and evil Buu separated resulting in the toughest battle the Z-Fighters had yet to encounter. Eventually, the evil Kid Buu was defeated and the good Buu lived on starting his own race. Majin fighters are known for their great health and stamina.

Famous Majin fighters: Buu in all his forms (Majin Buu, Super Buu and Kid Buu).

• The initial strength of fighters differs from one race to another. The initial values for the strength attributes of each race are shown in the following table:

Race	Max Health Points	Blast Damage	Physical Damage	Max Ki	Max Stamina
Earthling	1250	50	50	4	4
Saiyan	1000	150	100	5	3

Namekian	1350	0	50	3	5
Frieza's race	1100	75	75	4	4
Majin	1500	50	50	3	6

Gameplay

The gameplay is divided into two interchanging modes: *world exploration and battle*. There is a third special mode "*Dragon*" which is only activated in case of collection of 7 dragon balls.

Mode (1): World exploration

The player navigates a 10x10 grid map which is randomly generated, according to the following:

- 1. Active fighter: bottom right of the map (visible)
- 2. Boss: top left of the map (visible)
- 3. Weak Foes: Set number randomly positioned in map (invisible)
- 4. Senzu Beans: Random number randomly positioned in map (invisible)
- 5. Dragon Ball: One ball randomly positioned in map (invisible)

The player is allowed to move in any direction, 1 cell at a time and can randomly encounter:

- 1. Collectibles (**Consequence:** The player collects this collectible):
 - i. Dragon ball
 - ii. Senzu bean
- 2. Fightables (**Consequence:** go to battle mode):
 - i. Normal foe
 - ii. Boss (Strong foe)

During the World Mode players can:

- 1. Create a new fighter.
- 2. Switch the active fighter.
- 3. Assign Super and Ultimate Attacks to their fighters from the list of unlocked attacks; up to 4 Super Attacks and 2 Ultimate Attacks per fighter. Note that a player can replace one of their fighter's attack with another one from the unlocked list; meaning an assigned attack could be changed later on.

- 4. Upgrade his fighters' attributes using the available ability points. One ability point could be spent on one of these options:
 - a. Increase Max Health Points by 50 points.
 - b. Increase Physical Damage by 50 points.
 - c. Increase Blast Damage by 50 points.
 - d. Increase Max Ki by one bar.
 - e. Increase Max Stamina by one bar.

Mode (2): Battle



Objective:

Once a fighter hits a cell containing a fightable the game mode automatically changes to battle. In a battle there is the fighter and his opponent; the fighter's objective is to win the battle and gain xp. Whenever the battle starts, each fighter's health points and current stamina bars are set to the maximum while the current Ki bars are set to 0.

Actions possible during a battle:

1. Attack

a. Physical Attack
 Damage = 50 + fighter's physical damage
 Using the physical attack charges 1 Ki bar

b. Super Attack

Damage: Specific attack damage + fighter's blast damage

Usually requires and consumes: 1 ki bar

There is a special type of super attack called Maximum Charge. This attack's damage is zero, and *doesn't require nor consume any Ki bars*. Its effect is that it charges 3 Ki bars (i.e. 3 empty Ki bars become full).

c. Ultimate Attack

Damage: Specific attack damage + blast damage

Usually requires and consumes: 3 ki bars

There is a special type of ultimate attack called Super Saiyan. This attack's damage is zero, and *requires but does not consume 3 Ki bars* and it can only be used by *fighters whose race is Saiyan*. Its effect is that the Saiyan fighter becomes transformed. When a Saiyan is transformed into a Super Saiyan he/she does not require nor consume any Ki for performing super or ultimate attacks. Additionally, the damage inflicted by Super Saiyans is increased by 25%. This extra power comes at the cost of losing 1 Ki bar per turn. Once the Ki becomes 0 then the transformation state ends and the fighter's stamina becomes 0.

Each super and ultimate attack has a name and a damage value which will be provided in a file containing all possible attacks in the game.

2. Block

Blocks the opponent's next turn attack

Fighters can choose to use their stamina to block attacks. For each 100 damage 1 stamina bar will be consumed and the HP will remain the same. If stamina reaches zero the remaining unblocked damage will be inflicted on the fighter's HP.

3. Use item

The fighter can use a Senzu bean that is collected by the player in the world mode restore health and stamina to maximum.

Winning a Battle:

In case of winning the battle (opponent's HP reaches zero):

- gain XP, according to the opponent's level
- unlock foe's super and ultimate attacks i.e. skills
- gain 2 ability points, in case the gained xp causes the fighter to level up. The fighter should keep on leveling up until all the gained xp has been used. Upon each level up the target xp is updated, ability points are gained and the fighter's xp is set to 0.
- unlock new map, in case the opponent was a boss

XP rules:

Gained XP = foe's level * 5.

Whenever a fighter's xp has reached the target XP, he/she levels up (level increases by 1) and gains 2 ability points. The new target XP will then be increased by 20 and the XP will be reset to 0.

Default actions per turn:

Regardless of the action performed by the fighter during his/her turn, there are some race-specific actions that happen by default each turn. These actions are mainly concerned with regenerating some of the fighter's attributes:

Race	Default Actions
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Earthling	+1 stamina/turn +1 ki/my turn
Saiyan	+1 stamina/turn If transformed: -1 Ki/turn. If Ki becomes 0 then the transformation state ends and stamina becomes 0
Namekian	+1 stamina/turn +50 health/turn
Frieza's race	+1 stamina/turn
Majin	+1 stamina/foe turn

Note:The opponent's actions per turn during battle are randomly chosen without any Al considerations (Al will be an extra feature and not a mandatory one).

Mode (3): Dragon



Once a player has gathered 7 dragon balls, the dragon appears to grant him one wish.

The player can choose between:

- 1. senzu beans
- 2. ability points
- 3. unlocking a new random super attack
- 4. unlocking a new random ultimate attack

Game flow

one.

- The player should be able to create and choose between different characters to start a game
- For the gameplay to be possible the game needs to have state saving capabilities.
 The game contents alongside the player's current characteristics and belongings need to be saved each time the game is *closed*.
 Upon *starting* the game the player should be able to start a new game or continue a saved
- The game starts in the world mode and switches to the battle mode only for the duration of a battle. After the battle the player is returned to the world mode.

- The Dragon mode is only activated in case of gathering 7 dragon balls. After choosing a
 wish the player is returned to the world mode and the collected Dragon Balls are reset to
 0.
- The game play can theoretically run forever. There is no *game over* state.

Milestones Distribution

[M1] Hierarchy: All Data Structures + Roles [M2] Engine: World, Battle and Dragon Modes

[M3] Exceptions + State Saving

[M4] GUI + Integration