



Beasts of The Vale Documentation

Turn Based Battle & Encounter System Design Document

Quick Summary

Beasts of The Vale is a modernization of the creature collection JRPG genre with an emphasis on story and unique battle, progression, and collection systems.

Overview

- The battle system is one of the core gameplay mechanics within Beasts of The Vale. Battles take place whenever an encounter occurs between the player and a battle opponent of any kind. At the start of battle the player will be loaded into a map based on their overworld location from before the battle began. Both the player's and enemy's starting Beasts will be loaded into the game world and the first turn will begin after any introduction events. The battle will take place over the course of any number of turns until either the player or their opponent(s) no longer have characters to battle with.

Beast Structure

Overview

- Beasts are the main characters for combat within the game. There are a variety of Beasts within the game that the player can tame and utilize as a part of their party for battles. Each Beast is unique with a variety of different typings, character stats, movesets, and skills that they can have. Within battle the player commands their Beasts to utilize their moves and skills against the enemy.

Typing

- Each Beast can have up to three unique character types. These types have a structure and effect based on the order in which they apply to the Beast. Every Beast will have a Primary Typing, from there Beasts can also have a Secondary, and Tertiary Typing which affects how moves and other Beasts interact with them. Each stage of typing holds diminishing returns in terms of effectiveness. This means effectiveness multipliers for typing weakness and resistances become less effective for Secondary Typings, and even less effective for Tertiary Typings..

Stats

- Stats are values unique to each Beast that affect the outcome of move result calculations. Each Beast has 8 unique stats which are; Health, Might,

Intelligence, Dexterity, Defense, Resistance, Adaptability, and Speed. A player's Beasts stat values are enhanced based on the player character level to further strengthen the player's Beasts throughout the game progression.

Moves

- Moves are the different attacks and abilities a Beast can use in battle. Each Beast has a unique list of moves they are capable of unlocking. In battle Beasts can only utilize a selection of five of their available moves. This selection can be adjusted at any point outside of battle.

Skills

- Skills are passive effects that Beasts have active during battle. Skills function in a similar way to moves in that only a selection of Skills can be active on an individual Beast but the skills available to that Beast are unique and determined upon creation.

Beast Creation

Overview

- When a new Beast is encountered it will be a newly generated instance of that Beast. Each unique instance of a Beast will have a unique set of generated Stats, Moves, and Skills. The base values for each Beast in the game are listed in a data set which can be called from at any point.

Stats

- A new Beast's Stat values randomly generated based on a factor of their listed base values from the original data set. The factor multiplier for stat generation is a random value from a possible range.

Moves

- Each Beast has a list of possible moves stored within their data set values. The created instance of a Beast will randomly generate an instanced list of selected moves from their base move pool. This list then becomes the set of unlockable moves available to that instance of the Beast. 3 of these moves will be unlocked initially and the rest will be unlocked from using that Beast in battle.

Skills

- Done in much the same way as moves. Each Beast has a list of possible skills stored within their data set values. The created instance of a Beast will randomly generate an instanced list of selected skills from their base skill pool. This list then becomes the set of unlockable skills available to that instance of the Beast. 1 of these skills will be unlocked initially and the rest will be unlocked from using that Beast in battle.

Turn Structure

Overview

- The battle system relies on a turn based structure to determine the flow of combat. Both the player and the enemy will select which moves their Beast will use on their turn. Once all moves are selected the Beasts will take turns using their selected move.

Move Select

- The player will select which moves each of their ally Beasts will use on the upcoming turn. The player can choose from a possible 5 moves that are unique to their current ally Beast. Once a move is selected they player will then decide which Beast the move should target. Once a move and target have been selected the player will continue to the right choosing a move for each of the Beasts they have active in battle. Once all ally moves have been selected the enemy AI will do the same for each active enemy Beast.

Turn Result

- Once all moves are selected the game controller will then playout the outcome of the turn. The battling begins by having the Beast with the highest Speed stat move first. The outcome of that turn will then be determined, if the target of the attacking Beasts move is reduced to 0 Health then the targeted Beast will fall and be removed from the battle. The game will also check to determine if all active allies or enemies are removed from the battle, if so then the battle will end with either the player or the enemy winning based on who still has an active Beast(s).

Move System

Move Structure

- Each move in the game has a variety of data associated with it. Each move has a move type, potential targets, an attack style, damage value, crit chance, hit chance, additional effects, and a move cost.

Move Type

- Similar to Beasts each move in the game has a typing associated with it. Each move is affected by the effectiveness of its type compared to the type of the Beast it is being used on. Additionally if the move shares a matching type with the Beast initiating it the move will be strengthened in damage, hit chance, crit chance, and effect chance.

Move Targets

- Each move has a list of potential targets the move can hit. A move can either be used to hit; a single enemy, all enemies, a single ally, all allies, the move user, any single target, or all possible targets.

Hit & Damage Structure

Hit Chance

- Hit Chance is a value which shows the potential for the move to connect with its damage and/or its effect(s). When a move connects its damage and/or effect(s) are applied to the target of the move.

Damage & Crit Chance

- A move's damage value is a representation of much Health could be removed from the move target if the move connects. The Crit Chance represents the possibility for a move's damage to be doubled in value before connecting with the target.

Attack Styles

- Each damaging move can have 2 possible attack styles. The 2 styles are Kinetic and Energy. Kinetic based attacks apply damage using the attacker's

Might stat and the Defender's Defense stat. Energy based attacks apply damage using the attacker's Intelligence stat and the defender's Resistance stat.

Move Effects

- Moves can do more than just damage. Moves can also have any number of effects associated with them. Every effect has an effect chance associated with it. Even if a move hits its target it will not always apply its effect(s). If a move connects with its target it will then do another check based on its effect(s) effect chance. In the event of a success the move will apply its associated effect(s) to the target.

Terrain System

Overview

- Within the overworld there are a variety of different environments. Whenever an encounter is started the player is moved to a new map with a terrain based on the environment of where the player was in the overworld before the encounter began. Each possible terrain has certain effects associated with it. These effects impact the strengths and weaknesses of Beasts while in battle.

Terrain Type Descriptions & Effects

Plant

- Any space in the overworld that is primarily plant based (grasslands, forests, jungles, etc) will apply Plant Terrain to the battle.

Effects

- Increases the strength of Land, Monster, and Spirit moves
- Increases the Dexterity of Land Beasts
- Reduces the strength of Aquatic, Mechanical, and Power moves

Ocean

- Any space in the overworld that is primarily water (oceans, rivers, seas, etc) will apply Ocean Terrain to the battle.

Effects

- Increases the strength of Aquatic and Power moves
- Increases the Speed of Aquatic Beasts
- Reduces the strength of Land and Solar moves

Desert

- Any space in the overworld that is primarily baren or sand/dirt based (deserts, wastelands, beaches, etc) will apply Desert Terrain to the battle.

Effects

- Increases the strength of Land, Void, and Solar moves
- Increases the Might/Intelligence of Solar and Void Beasts
- Reduces the strength of Aquatic, Mystic, and Light Beasts

Industrial

- Any space in the overworld that is primarily "man-made" (cities, buildings, factories, etc) will apply Industrial Terrain to the battle.

Effects

- Increases the strength of Mechanical, Power, and Mystic moves
- Increases the Adaptability of Mechanical Beasts
- Reduces the strength of Land, Aerial, and Spirit moves

Mountain

- Any space in the overworld that is within a mountainous/rocky area (mountains, valleys, canyons, etc) will apply Mountain Terrain to the battle.

Effects

- Increases the strength of Aerial, Solar, and Light moves
- Increases the Health of Light Beasts
- Reduces the strength of Power, Monster, and Void Beasts

Sky

- Any space in the overworld that is primarily in the air (airships, rooftops, etc) will apply Sky Terrain to the battle.

Effects

- Increases the strength of Aerial, Mystic, and Solar moves
- Increases the Speed of Aerial Beasts
- Reduces the strength of Aquatic, Land, and Spirit moves

Space

- Any space in the overworld that is primarily in outer space (space, spaceships, space stations, etc) will apply Space Terrain to the battle.

Effects

- Increases the strength of Celestial Moves
- Increases every stat of Celestial Beasts

Ethereal

- Any space in the overworld that takes place within a spiritual/ethereal realm (spirit world, haunted locations, etc) apply Ethereal Terrain to the battle.

Effects

- Increases the strength of Light, Void, Mystic, and Spirit moves
- Increases the Defense/Resistance of Spirit Beasts
- Reduces the strength of Monster and Mechanical Beasts

Stat System

Stat Types & Descriptions

Health

- The health value represents how much damage a character can take before they are removed from battle. Decreases every time the character receives damage and increases from healing effects. When a character's health value reaches 0 they can no longer battle unless an effect or ability states otherwise.

Might

- The might value represents how much damage a character's kinetic based attacks will deal. Might value typically affects physical melee style attacks.

Intelligence

- The intelligence value represents how much damage a character's energy based attacks will deal. Intelligence value typically affects magical ranged style attacks.

Dexterity

- The dexterity value represents a character's ability to crit with outgoing attacks and dodge incoming attacks. Dexterity typically only affects crit and dodge chance, but can occasionally affect move damage/results.

Defense

- The defense value represents a character's ability to negate a percentage of kinetic based damage received.

Resistance

- The resistance value represents a character's ability to negate a percentage of energy based damage received.

Adaptability

- The adaptability value represents a character's ability to enhance their chance to hit with their outgoing attacks as well as the success chance of their outgoing move effects.

Speed

- The speed value represents the priority a character will have in the turn order of battle. The higher a character's speed the more likely they will be to move first.

Type System

Typing Structure

- Every Beast and move in the game has a Type associated with it. Each type has a set of variables associated with it. These include the Type Icon, Type Color, Type Weaknesses, Type Resistances, and Type Immunities.

Effectiveness

- Each type has 4 possible effectiveness modifiers; neutral, weak to, resist, and negate. When a Beast is targeted by a move the effectiveness of that move is impacted by the Beast's Type's Weaknesses, Resistances, and Immunities. If the move type is not among any of the targeted Beast's Type's Weaknesses, Resistances, or Immunities it will have neutral effectiveness.

Weaknesses

- If a move type is a part of a targeted Beast's Type's Weaknesses it will have increased damage, hit chance, crit chance, and effect chance.

Resistances

- If a move type is a part of a targeted Beast's Type's Resistances it will have reduced damage, hit chance, crit chance, and effect chance.

Immunities

- If a move type is a part of a targeted Beast's Type's Immunities it will not be able to connect with the targeted Beast..

Typings & Descriptions

Aquatic



- Water based character typing. Focuses on supporting moves for healing and status mending. Attacks are typically energy based. Focuses more on resistance than defense.

Weaknesses: Land, Power

Resistances: Aquatic, Solar, Spirit

Immunities:

Color: #5662D6

Land



- Earth based character typing. Focuses on area of effect attacks and enemy debuffs. Can use moves which alter terrain effects. Stat focus leans more towards might and defense with mostly kinetic attacks.

Weaknesses: Aerial, Mechanical, Void, Spirit

Resistances: Monster, Light, Mystic

Immunities: Power

Color: #8C9B31

Aerial



- Air based character typing. Focuses on a mix of strong kinetic and energy attacks which leave the opponent impaired. Incorporates utility moves which affect the battlefield in various ways. Focuses on might, adaptability, and speed; will typically have lower defensive stats.

Weaknesses: Solar, Power, Monster

Resistances: Land, Aerial, Spirit

Immunities:

Color: #83B6C6

Solar



- Fire based character typing. Focuses on high burst damage and damage over time attacks. Moves typically focus on dealing damage with some terrain effects. Hybrid style typing with no distinguished attack style or stat focus.

Weaknesses: Aquatic, Light

Resistances: Land, Solar, Spirit

Immunities:

Color: #FF9248

Power



- Electricity based character typing. Focus on a variety of damage attacks and ally stat boost moves. Moves are mostly energy based and can empower ally through stat boosts or damage increases. Stat focus leans towards intelligence and speed.

Weaknesses: Land, Mechanical, Void

Resistances: Power, Mystic

Immunities:

Color: #E6AC00

Monster



- Standard beast based character typing. Focus mostly on powerful damage attacks and self buffing. Damage style is mostly kinetic. Applies self buffs to boost stats and damage output. Stat focus is mostly on might and health.

Weaknesses: Aerial, Solar, Monster

Resistances: Aquatic, Mystic, Mechanical

Immunities:

Color: #C48F5B

Mechanical



- Technology based character typing. Hybrid focus on a variety of attacks as well as increasing the strength of other mechanical beasts and moves. Mechanical moves synergize with each other as well as ally mechanical beasts. Hybrid style typing with no distinguished attack style or stat focus.

Weaknesses: Aquatic, Land, Mystic

Resistances: Aerial, Power, Monster, Mechanical

Immunities:
Color: #4C5860

Light



- Light based character typing. Mix between support and damage. Focus on moves which heal and strengthen allies as well as ward against certain types of attacks. Can reflect various moves and effects back at enemies. Hybrid style typing with no distinguished attack style or stat focus.

Weaknesses: Mechanical, Void, Spirit

Resistances: Power, Light

Immunities: Solar

Color: #FFC34D

Void



- Dark based character typing. Focuses on debuffing/tricking opponents and high burst damage. Moves can apply status effects to opponents and even trick them into hitting the wrong target or missing. Moves often benefit from attacking debuffed enemies. Stat focus leans towards intelligence and adaptability with an energy attack style.

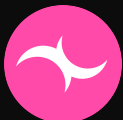
Weaknesses: Monster, Light, Mystic

Resistances: Solar, Void, Mechanical

Immunities:

Color: #4F288C

Mystic



- Magic based character typing. Utilizes moves that manipulate various aspects of the game and moves which do aoe damage. Moves can adjust things like terrain effects, turn order, and damage calculation. There is no focus for attack style, stat focus leans towards intelligence and dexterity.

Weaknesses: Power, Monster, Mystic, Spirit

Resistances: Aquatic, Aerial, Light

Immunities:

Color: #FF4AA9

Spirit



- Spiritual based character typing. Utilizes moves which take setup, but offer high value in return. Moves will often have requirements for when they can go off or take a turn of rest before they are used. Hybrid style typing with no distinguished attack style or stat focus.

Weaknesses: Aquatic, Aerial, Solar, Mystic

Resistances: Land, Void

Immunities: Monster

Color: #2ABAA8

Celestial



- Space based character typing. Never a primary typing. Moves focus on enhancing or being enhanced by the character's primary typing. Moves will utilize the attributes of the characters primary typing to determine the result of the move. No stat focus as it is not a primary typing, move style is dependent on the primary typing.

Weaknesses:

Resistances:

Immunities: Monster, Mechanical

Color: #000000

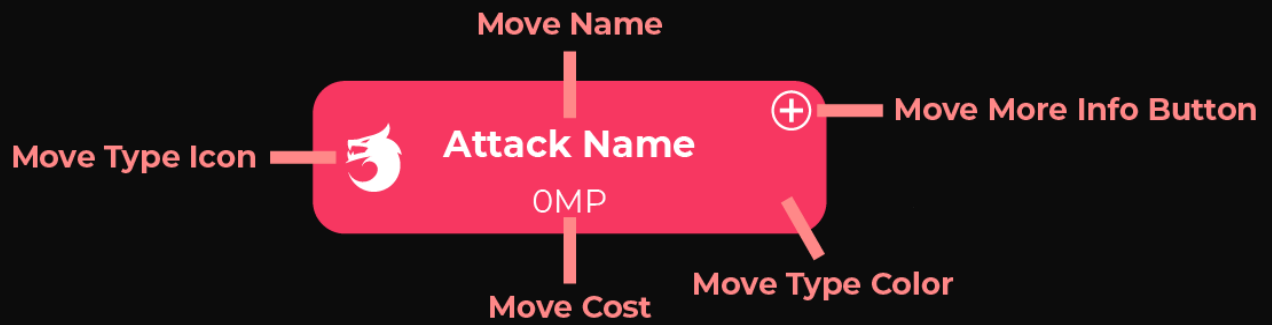
User Interface

Layout

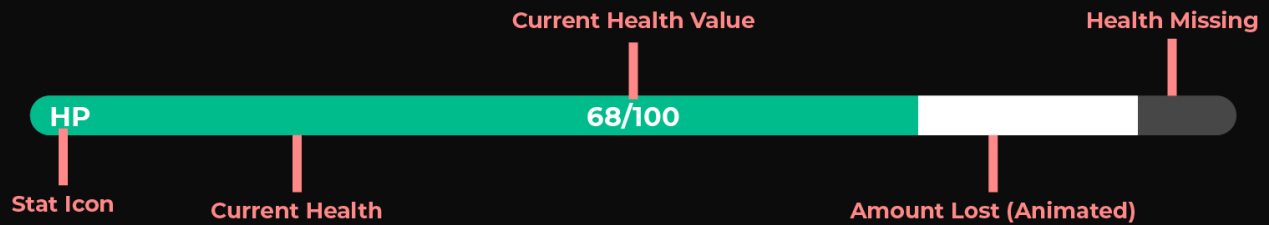
Full Battle UI



Move Buttons



Health and Mana Bar



Camera

- The battle camera starts off by focusing the first ally spawned into battle. When the player is selected their moves they have control over the camera and can move it by holding down the right mouse button. When the player selects a move for their Beast the camera will move to focus on the next ally Beast that needs a move selected.
- During the playout phase of battle the camera will move around to focus on whatever Beast is attacking, once an attack animation the camera will switch focus to show the Beasts hit by the move and their react animation.

Controls

- During the move select phase of battle the player will have control over the camera and be able to select their moves. The player can control the camera by holding down the right mouse button and moving their mouse. The player can select a move by hovering their mouse over the desired move button and pressing the left mouse button.