Make Your Own Game Tutorial VII: Creating Encounters Part 2

Aspects of Encounter Balance

Despite what you might think, Encounter Balance is not all about difficulty. Difficulty is a portion, but there are many moving parts that you want to take into account when designing encounters.

So lets look at what I consider the important aspects

Duration: Duration is how long the encounter lasts. In general, with nonboss encounters, I prefer duration to stay low. Going into medium length in a nonboss encounter is ok, but make sure the time to reward (exp/gold) ration still stays good. No one wants to fight a battle and earn 5 xp and 4 gold when they could fight three in the same amount of time for 3 xp and 2 gold each.

Danger: Danger is the likelihood of the player losing an encounter. for nonboss encounters, this can range from low to high, depending on how you handle other aspects.

Toll: Toll is the amount of resources the battle will tend to exhuast. This includes HP, MP, potions, or any other expendable resource the player has. this can range from mid to almost non existant, depending on encounter style.
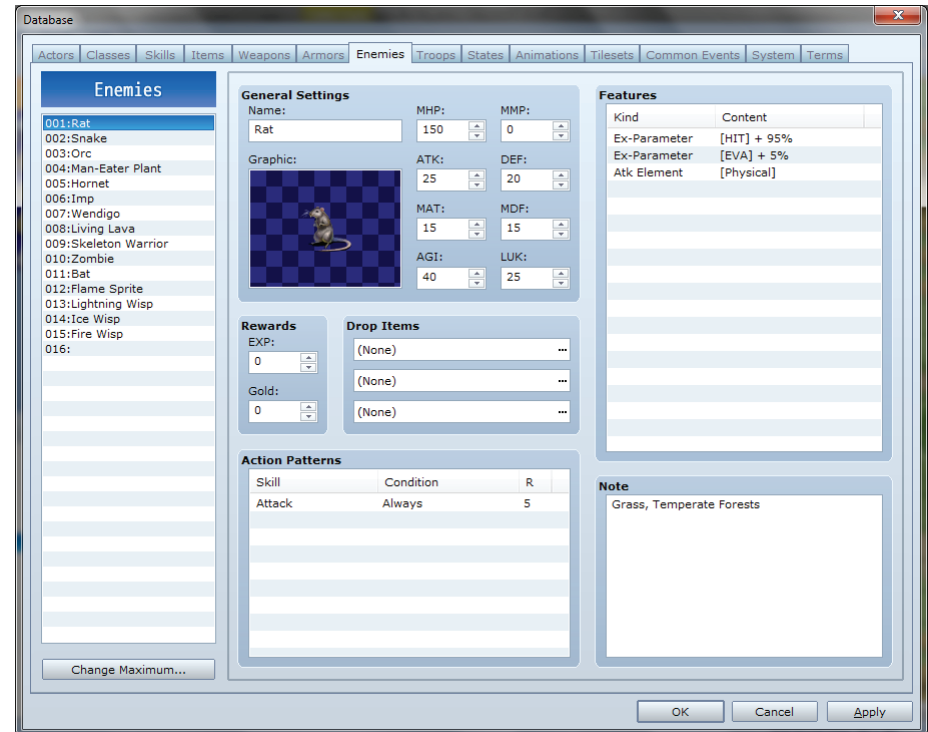
Strategy: Strategy is a level of how much good choices on the part of the player, such as party composition, equipment choices, and in battle skill use affects the Duration, Danger, and Toll of the encounter.

Swing: Swing is how much randomness, such as battle surprise, enemy skill usage, or enemy evasion, affects the Duration, Danger, and Toll of the encounter.

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Aspect Interaction

Now that we've gone over the five major aspects I use to balance encounters, let's talk about how they work together. How they work together can create a cohesive feel for your game, as well as add even more variety to your encounters.

First, let's look at two styles of gameplay that can illustrate how you can add a cohesive feel through balancing encounters properly. These two styles are by no means the only ones, but are a good representative of RPG designs.

The first style I will call attrition encounters. With attrition encounters, no single encounter is dangerous, but they instead add up over time.

This works well for games with save points, where the challenge isn't from any single moment (outside perhaps boss battles), but instead from the extended challenge of making it from one save point to the next.

To compare let's look at another style I'll call immediate danger encounters. With immediate danger encounters every encounter has a chance to wipe you out.

This works well in games where you can save anywhere.

Both of these playstyles can be reinforced heavily by rating what the average encounter in each of the five encounter aspects.
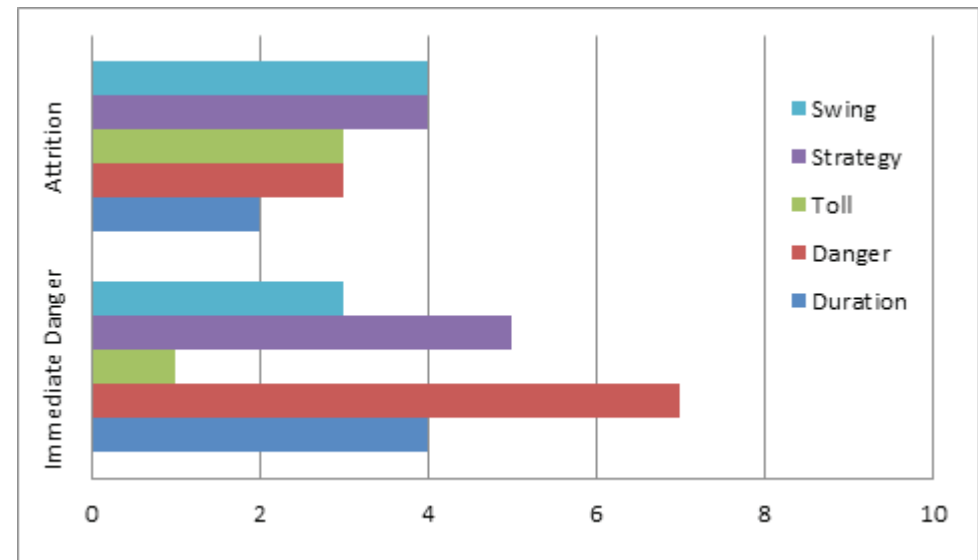
Attritions requires fairly low ratings all around. But with a high enough toll to matter over time.

Immediate danger requires high danger and trivially low toll. You want to prevent to much swing when doing high danger encounters as it this can lead to player frustration. High strategy works well in this style as well.

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Establishing a Baseline

For the sample game, I'm going to be using the Attrition model, as it is a bit simpler to balance and allows more leeway.

Now that we've decided on that, we can start looking at assigning stats and skills to individual enemies. The best place to start is with what I would consider the "baseline".

The baseline is the most average enemy you have. All other enemies can be created by starting with the base and then adjusting it for the expected level of the area and their individual type.

My baseline enemy is the Orc. He appears across the entire world map and is meant to be a bog standard encounter filler.

Let's develop the plan of attack for how we will create the orc. He is baseline, but has no magic, so we can set his MP and Magic Attack low. He doesn't use them at all.

His Attack and Defense are good to set to slightly above a level 1 character, but we need to make his HP much lower than a standard character. Why? So that encounter duration stays short.

Its important that encounter duration stays short when using the Attrition model, as the idea is the character to go through many battles, and no one wants to slog through a ton of long battles. Below is the first set of stats I set for the Orc.
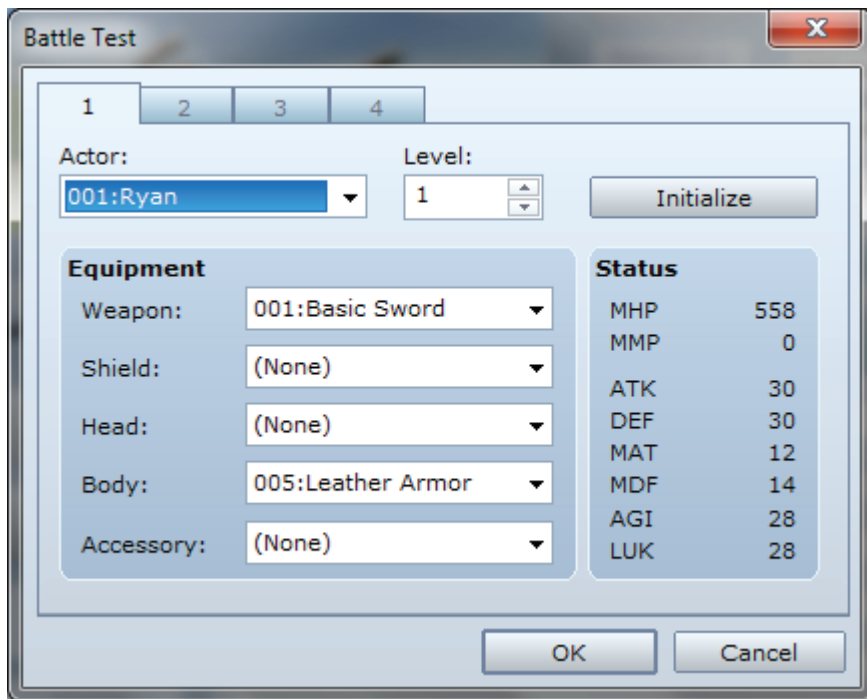
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Battle Testing

Now we can test these orcs out in a battle.

Go to the troops tab, select the Orcx2 encounter and click on Battle Test. This will pop up a window where we can select the characters, shown below.
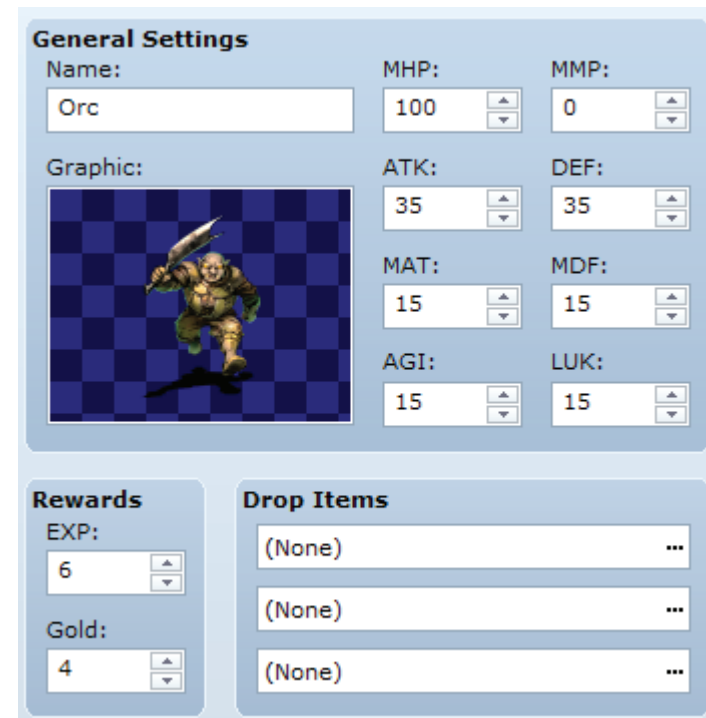

Here you can select characters, and set their level and equpment.

The tabs allow you to add up to 4 characters into the battle test. When you have the party set you want, go ahead and hit OK. I decided to test this fight with only Ryan.

After I played through it about 3 times, I noticed that Ryan wasn't really suffering much damage, and he would start killing them in one shot after a level or two.

At this point, I altered the Orc's stats as follows:

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Adding Skills

Right now, our Orc is somewhat balanced for what we want (we will do heavier playtesting in game later when we are polishing), but he is pretty boring.
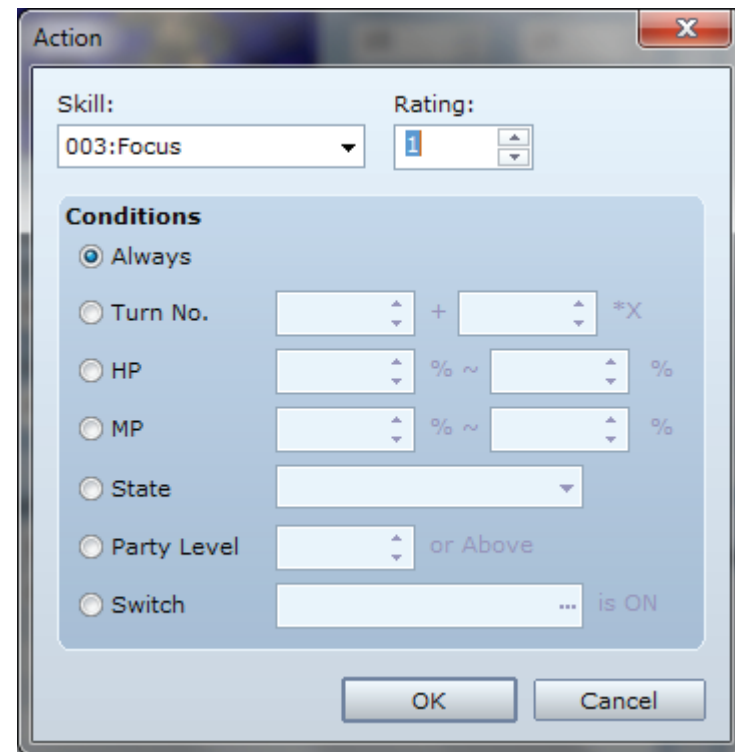
Just attack after attack and nothing to break it up. My initial thought was to add guard in, but all that does is increase the duration of the encounter. Since we want to keep duration short, this is a bad choice.

Instead, I decided to give it the option to Focus. I could have created a new skill for the Orcs, but this one works perfectly. Buffs alter which enemies we see as priority targets, which is a great way to add variety to encounters.

The first thing we need to do is double click an empty space in the Action Patterns section.

This will bring up the box for a new put in a new potential action for the enemy to take.

For the moment, leave the conditions on Always. We will discuss conditions more when creating our boss fight. Select Focus for the skill you want to add.

The Rating is the likelihood the skill will be performed. Basically the higher the number, the more likely the AI will select it over other applicable skills. I started with it set to 1.

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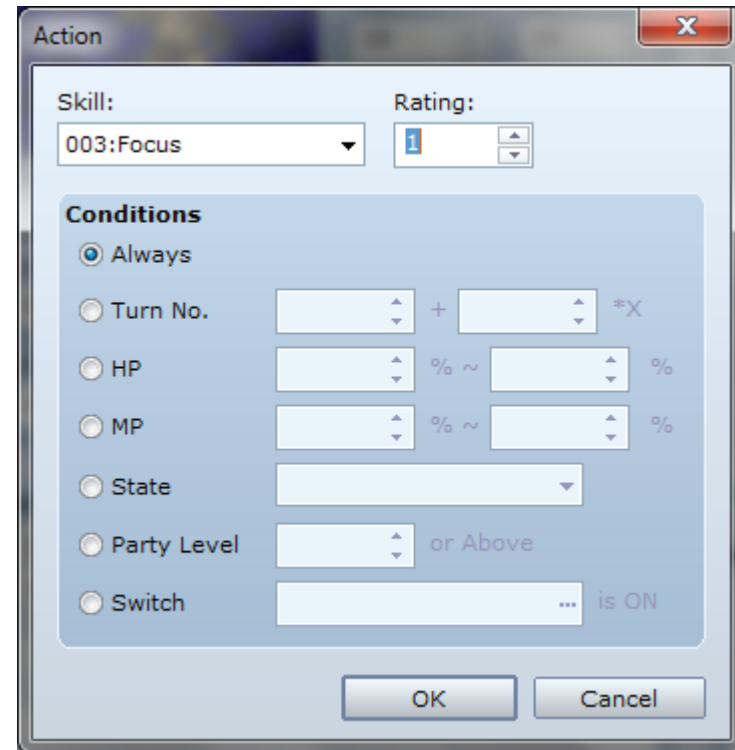
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More Battle Testing!

And now, we go back to battle testing again! Honestly, get used to doing this. A lot. There is just no way around it, without testing, your game balance will be awful.

I play through with the Orc again, and I notice that he is rarely ever using his Focus attack, so there is no real change from how things were going before I added in the skill.

With a quick trip back to the enemies tab, I change the rating of the skill to 3, and then finally after another bout of playtesting, down to 2.

At this point, they seem to be performing the action often, but not too much. Perfect!

There are other things I learned from these battle tests. Pommel Strike is a great skill for Ryan, as it takes one of the Orcs out of the fight while I can focus on the other.

This shows that some level of strategy can cut down on the Danger and Toll of the encounters. Alone he can take out the two nearly every time, with some damage.

Other Enemies

From here, you can use the Orc as a basis to create other enemies.

Take the stats the Orc has, raise and lower them based on the type of enemy (fast vs slow, def vs offense) to create a wide variety. Also, be sure to adjust for the expected level of the party.

Don't be shy about makin new skills either. I created several elemental attacks for the various wisps. And KEEP TESTING. Constantly test all your battles. Get used to seeing the screen below. Also, keep in mind your encounter style.
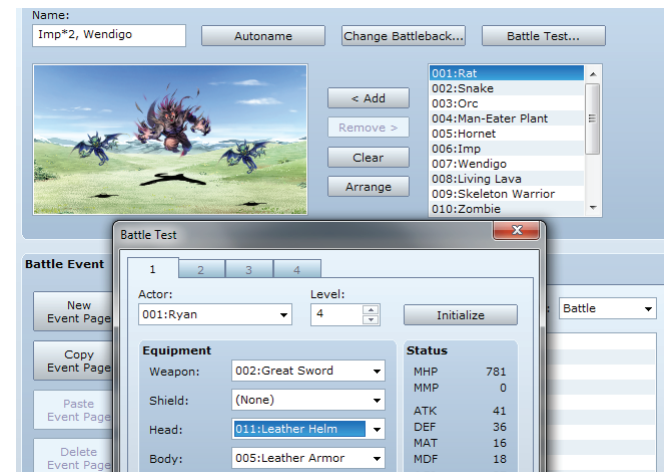
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Encounter Aspects and Boss Fights

Now that we've gotten all the regular encounters out of the way, let's focus on the boss fight.

Unlike regular encounters, boss fights get to break the rules of your encounter style completely.

Danger is almost universally high during boss fights, Duration ends up longer than the average, Toll is generally not a concern as most boss fights are at the end of areas.

As with most encounters with high Danger, you want to keep Swing down. No one wants to die due to randomness. Every time a player loses, they should be blaming themselves ("If I had chosen to heal then instead of pressing the attack, I wouldn't have lost!"), not your game.

Strategy is the one part of an encounter that we can vary pretty heavily with boss fights depending on how "casual" or "hardcore" you want the game to be.

For the example game, I'm going to try for around a 5 on a scale of 1-10 for Strategy. I want the game to be accessible, while still being interesting.

Planning the Boss Fight: Story

A boss fight, especially the final boss fight, is a really important concern both from a gameplay perspective and a story perspective. I want to create a villain who can cause a lot of damage, but isn't individually a great threat.

The villain for the sample game is known as Morris. Morris is a cultist who wants to resurrect an ancient evil.

While a major player in the cult, he isn't the leader, leaving room for the sample game to be expanded at a later date if I want to.

He also has a connection with Winter, allowing some interactions on that front. His plan is to break a magical seal in the ruins on the volcanic island that helps hold the ancient evil.

He is accompanied by his personal pet, an incredibly aggressive three headed cerberus.

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Planning the Boss Fight: Mechanics

Mechanicly, creating a boss fight is not much different from creating a regular encounter. The only real difference is everything is custom crafted for that encounter specifically, and being longer, you need to create more variety to enemy actions to keep it interesting.

I decided to do a two enemy encounter for a different dynamic, allowing me to craft two enemies with different purposes to play off of each other.

Let's look at them one at a time:

Morris is a cultish fanatic with a knife. He looks and sounds like a caster type, and I'm going to run with that idea. To keep it from being a slugging match where both sides just trade blows until one dies, I'll give him a support role.

He should be able to do damage on his own, but that shouldn't be his primary way of affecting the encounter. I decide to draw from some of Winter's moves, as I picture him as having once belonged to the same organization as she is.

I give him Darkness and Distracting Strike, allowing him to debuff and apply a negative status to the characters. For the moment I leave them at Rating 3.

Giving him an ability to heal both himself and Cerberus when he is low on HP is also a good idea. That is where we will work with Conditions in the Action Patterns.

Open up a new action and select Aura, the heal-all skill that we made earlier for our Priestess.

Give it a high rating and select Conditions HP between 0~25%.
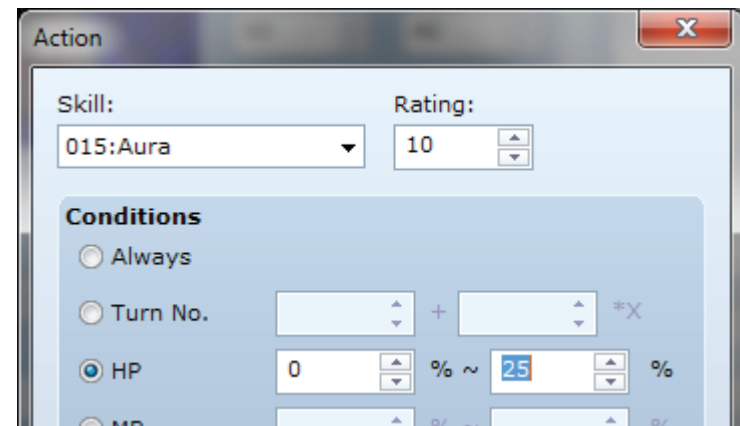
This keeps it from being used when his HP is high, while making him use it often when his HP is low.

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Planning the Boss Fight: Mechanics, Cont.

Now onto the Cerberus. If Morris is a support enemy, Cerberus should be the damage dealer.

The first thing I decide to do is give Cerberus a special Feature that will allow him to go twice each round.
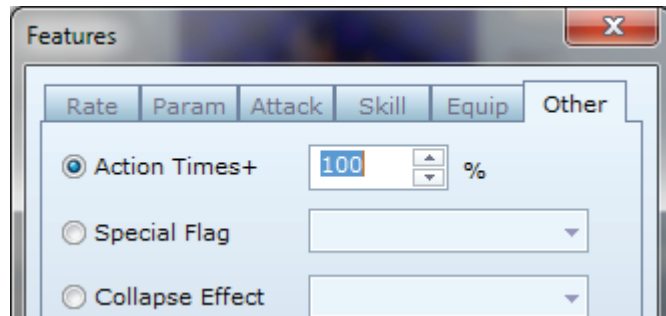
Combined with a high attack stat, this makes the Cerberus dangerous on its own. But I decide to go a few steps further. I give him the Drain skill to use regularly when he is below 50% HP. I also build a custom skill for the Cerberus: Fire Breath. Because of his three heads, I change the target to 3 Random Targets.

Remember to set Cerberus and Morris's MHP much higher than a standard encounter, but not to the point that it gets boring.

Playtest! Playtest! Playtest!

Now its time to playtest. With this battle I playtested with the characters at various levels, with various equipment to see what the character could have done to better prepare. I changed the stats for the enemies up and down, trying to find the perfect balance. Its very simiar to the work with the Orcs, only taken with more care.

Normally this is where I put an overview of what we've went over, but instead I'm going to put a disclaimer. Encounter balance is time consuming. It takes a lot of dedicated playtesting, and lots and lots of practice. Never give up on it though.

Keep tweaking, keep trying one more small thing. If there was one thing that you can do to improve your game the most, this is it.

Next Tutorial Preview

Now that we've laid out most of the mechanics, in our next tutorial, we are going to start connecting everything together with story and events.