

Dev Diary #09

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Drakensang – Official Dev Diary #9
25. 05. 2007: The Combat System

Today's dev diary is about the development of the combat system in Drakensang. As always, the designers have certain demands on what the combat system should look like. In addition we, the coders, incorporate our own ideas in that process.

Please note that selection markers and lifebars are not final yet.

A couple of features were essential for us:

- Both technical and cinematic combat scenes
- Round-based TDE rule set
- The least text as possible during combat

- Full control of a four-headed party
- Player can pause at any time

Please note that selection markers and lifebars are not final yet.

Aside from that, many other members of the team made propositions they would like to see being implemented. Those ideas were inspired by the team's favourite games, e.g. Guild Wars, Baldurs Gate and the old TDE games.

Recent games mostly have real time combat with only one character or tactical combat, in which all characters make their actions in strict rotation – but that doesn't look very dynamic, because only one character can act at a time.

In order to meet the expectations and to make the combat both filled with action and tactics, we agreed that all actions will be calculated in the beginning of each round and that the combat animations will be as cinematic as possible.

Please note that selection markers and lifebars are not final yet.

With that said, as a first task we had to synchronise attack- and counter-animations. The animators placed a “hot spot” on each animation, which defines where and when the combatant's weapons hit each other. With the aid of these hot spots it is now possible to let two people fight each other and to start the animations at the right time.

Things are more complicated when a third combatant is involved in the fight. To avoid the reactions interfering with each other, the attacks must take place one after another. I had to develop an algorithm which allows us to organise all animations of all characters in one round in a short space of time, so that as many actions as possible can run simultaneously. This worked after a while, but had two consequences: First, the length of each round was different, because this would depend on the lengths of the animations. Second, some characters are idling while others are still fighting, so we had to implement filling animations to make the action more dynamic (e.g. waving around with the sword).

Please note ... uhm... you know. ;)

An advantage of this system is the clearly defined end of each combat round, at which point an optional pause can take place. This makes it possible to decide ones actions at the beginning of every round. Of course, it's also possible to make a list of commands for all characters and to simply follow the action, until one wants to step back into the action to change the strategy or to react on special events. Besides that, it will be possible to stop the action at any time by hitting the space bar.

This was only of short glance on the development of the combat system, but I hope that I was able to give you a rough idea of my work.

Cheers

- Written by Michael Gehling, programmer for Drakensang -

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