

## Dev Diary #07

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### Drakensang &ndash; Official Dev Diary #7

27. 04. 2007: Workings on the User Interface

"Funny, that's the 10th time I've clicked the button [Open Inventory] and nothing happens?!" That's what it would sound like, if there were no one responsible for the functionality of the graphical user interface.

...hang on, there wouldn't even be any button to click...

As you already guessed, this entry is about the graphical user interface of Drakensang and the steps necessary to make some visible buttons that the player (you) can click on in the end. To explain how this process works, it would be best to demonstrate it with a simple ingame window, in this case the crafting window.

At some point the game design determined the function of this window and made the following requirements for the crafting window:

- recipe list for a selection of the different recipes
- ingredients for the selected recipe
- talent value of the hero has to be displayed
- [Build Button] for creating the recipe

Then, a graphic artist created a raw layout of the whole thing.

After that, the creation of the window can begin. For that purpose you create a graphic scene that covers all intended GUI elements for the Layout, like buttons, lists, text label, and so on. In the case of Drakensang this'd be 3D scenery, for which we created GUI elements like buttons, lists and so on, with some plugins specifically developed for that purpose. The look and the important attributes, like text or scroll direction of the lists, can be directly modified. These attributes are attached to the graphical objects and after exporting the scene they can be read by the programmers directly from the source code. Of course, it is also possible to change the attributes directly within the source code. So, the text of a button can still be changed when the game is already running...

The raw scene that emerged during this process can be used by the programmer and, based on this, he can start to combine the graphical elements with the code.

Ok - that sounds a little bit confusing, but it can be explained with a simple example:

We have a graphic scene, where our button [Build] is laying around. Now we press the button and the programmer provides the following thing to happen:

Build a potion based on the recipe and destroy the ingredients in the inventory!

"Hey, that was easy enough... Hang on... There's something missing already..."

- What will happen, if you don't have all the ingredients?
- What will happen, if the character can't use the recipe because of his (low) talent value?

... that's the point where the real work of a GUI programmer starts. On the one hand he has to take care that within the game things will proceed as they were meant to ("build recipe and destroy ingredients") and on the other hand those changes have to be visualised for the gamer. For example: after the creation of the recipe there must be a short note saying "Recipe created" or alternatively "not created" shown on the display. Then, after the creation of the recipe, there has to be a test to see if there are enough ingredients remaining to still display the recipe.

I hope I've provided you with a small insight into my daily work as a GUI programmer for Drakensang.

Best wishes

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