

Dev Diary #12

Contributed by André Blechschmidt
Friday, 13 July 2007

Drakensang – Official Dev Diary #12
10. 08. 2007: The Camera

Today's entry is somewhat more technical than previous entries. Technical director André Weißflog was responsible for camera control and camera behaviour. Today he's reporting about its design and conversion within the game.

Camera Control

While pressing the right mouse button, you can rotate the camera horizontally and vertically around the current center of interest. The bottom line is fixed so that the player can take a closer look at details that are above the horizontal line.

Using the mouse wheel you can zoom to the center of interest in three steps (near, standard, far) unless the camera collides with environment. The grade of distance might vary from indoor to outdoor levels (balancing, testing). During cutscenes and several other occasions (e. g. open inventory) the camera perspective is not variable.

Three different zoom levels

Camera Behaviour

These are the basic requirements for the camera behaviour:

- The camera behaviour should not be intrusive and annoy the player
- The camera should support immersion of the player through its behaviour, without restricting his/her control possibilities.
- Corrections by the gamer should not be necessary, but s/he should still have the option to do so.
- The camera has to fit to the group aspect of the game (the player is not alone on his journey, he's travelling with a group of heroes)
- The camera has to work correctly and equally both for point & click and keyboard control of the lead character.

Camera Modes

The camera implements two different patterns of behaviour that are changed automatically. The player has no option to

switch manually between these modes. The change results indirectly from the position of the group leader directed by the player in relation to the camera.

Resting Mode is active when the leader of the group does not move. In this mode the camera tries to hold position and keep the leader in focus. Depending on the distance (between the leader and the camera), there is an area within the screen where the character will be tolerated to move without the camera changing perspective. If the character leaves that area, the camera follows without changing it's position. Because of this smooth behaviour the player doesn't have to reorientate all the time because of the camera changing position and perspective. Instead he can give instructions to the leading character via mouse click, just like a strategic simulation. This puts more emphasis on the aspect of an adventuring group than would a camera bound to the leading character (e. g. Knights of the Old Republic -ed).

If the player changes the lead character, the camera makes the smallest adjustment necessary to bring the new leader into focus. Depending on the distance of the new leader to the former leader, the camera does not change, does a pan without changing direction, a pan with changing direction or an immediate shift towards the new leader (that happens e.g. if there is no free line of sight towards the new leader). The camera leaves resting mode when the leader reaches a particular distance to the camera or when the player uses the keyboard to move the lead character. The camera then switched to Follow Mode.

Once activated, Follow Mode remains active until the leader stops. When the Follow Mode gets activated, the camera is directed behind the leading character - in a zoom level as already set - and keeps that direction, i.e. in direction of movement (nevertheless the player has the option to adjust the direction of the camera to take a look around while moving). The

idea behind Follow Mode is, that the position of the camera does not have to be corrected all the time while moving. Instead the camera is always aimed at the direction of movement of the leader (unless the player changes the direction manually).

All movements of the camera become directed through so called feedback loops. That results in an overall consistent camera behaviour that slows down when you reach your destination. Thus the camera movement is less rigid and mechanical, as well as more fluent and smoother.

- Written by André Blechschmidt, Technical director at Radon Labs -

Comment this article at our forum!