Component GRAPHICS

Use of the labtrainer code

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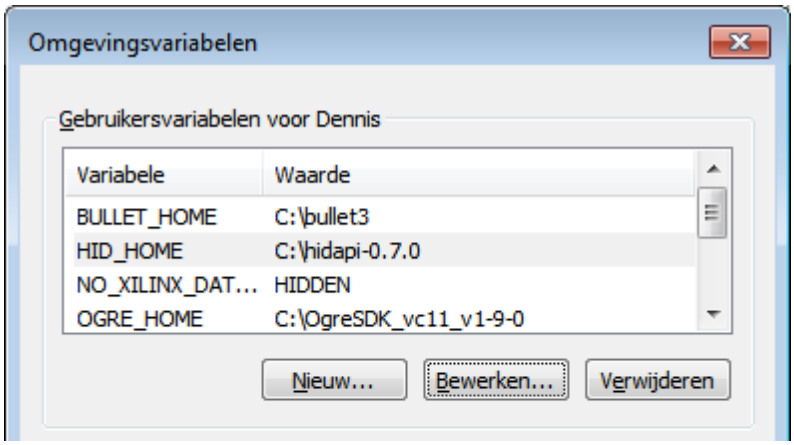
Introduction

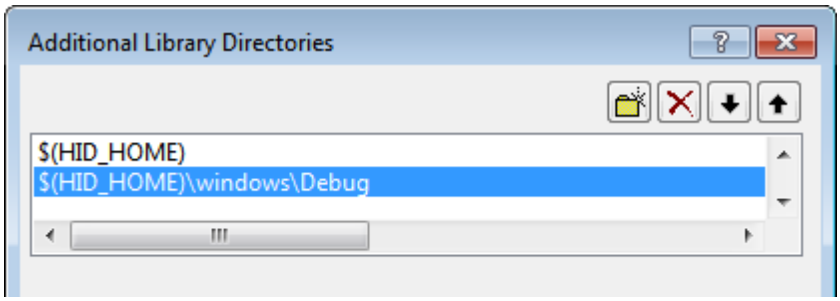
To use the program in visual studio some remarks have to be made to use it probably without understanding the whole code. The program has been changed last week so some new settings are needed before it can be compiled.

Environment variable

To don't have to change every time the place to search for the HIDAPI you can provide the place of HIDAPI to set a environment variable. This can be set like the way you install Ogre (see the manual) the variable to be set is ***HID_HOME***

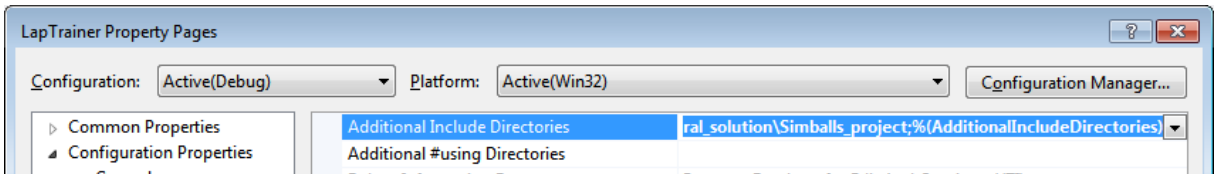


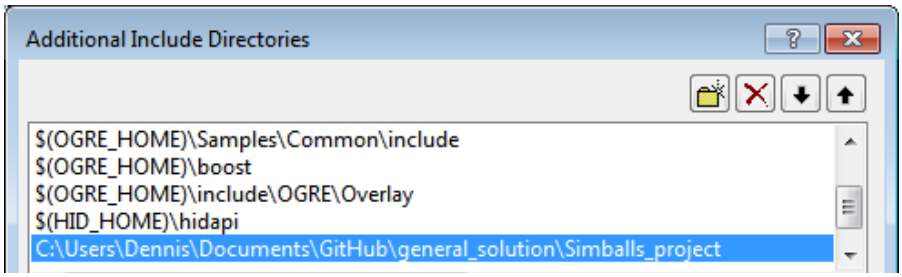
In ogre these settings look like this



Finding files from other projects

To compile the project you the compiler needs to find the files of the other projects like the simballs project. So you've to add this, this is for everybody different so you need to set this at this location.





Checking for simball connection

A check is added to check if the simballs are connected if not then the movement of the simballs will not be added.

Camera movement

The camera is placed in two scenenodes and will work the same way like the entity. You can just move, yaw, rotate etc. the sceneNodes see for an example the keyboard controls.

Keyboard movements

To debug the application keyboard movements are added and updated, the next movements are possible to use.

Key	Element	Action
1	General	Normal movement speed
2	General	Slower movement speed
3	General	Slowest movement speed
a	Left stick	Move left
s	Left stick	Move back
d	Left stick	Move right
w	Left stick	Move forward
a + shift	Left stick	Roll left
s + shift	Left stick	Pitch left
d + shift	Left stick	Yaw left
a + alt	Left stick	Roll right
s + alt	Left stick	Pitch right
d + alt	Left stick	Yaw right
q	Left stick	Move insertion negative
e	Left stick	Move insertion positive
z	Left stick	Move up
x	Left stick	Move down
arrow left	Right stick	Move left
arrow down	Right stick	Move back
arrow right	Right stick	Move right
arrow up	Right stick	Move forward
arrow left + shift	Right stick	Roll left

arrow down + shift	Right stick	Pitch left
arrow right + shift	Right stick	Yaw left
arrow left + alt	Right stick	Roll right
arrow down + alt	Right stick	Pitch right
arrow right + alt	Right stick	Yaw right
n	Right stick	Move insertion negative
m	Right stick	Move insertion positive
k	Right stick	Move up
l	Right stick	Move down
y	Camera	Pull out insertion
u	Camera	Put in insertion
i	Camera	Roll left
o	Camera	Pitch left
p	Camera	Yaw left
i + shift	Camera	Roll right
o + shift	Camera	Pitch right
p + shift	Camera	Yaw right

References