LUXOCRAFT
3D Ray Tracing Block Construction Builder Free Video Game, supporting users generated free and paid items for sale.
Block building game, in which the world construction system is a very similar to Minecraft creating regime, using 346 unlimited customizing materials and 32 basic shapes in two game modes- 1st person builder and 1st person explorer/walker.
Use Ray Tracing technology to create as beautiful as you can imagine dynamic worlds, scenes, levels, items.
Share [free] or sell [paid] your items in the Steam Workshop.
Which is the most beautiful scene you can possible create, limited only by your hardware- the mind and the computer?

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I.Steam Workshop

1.Free maps and items:
https://steamcommunity.com/sharedfiles/browse/?appid=666930&section=readytouseitems
2.Paid maps and items:
https://steamcommunity.com/sharedfiles/browse/?appid=666930&section=mtxitems

50% creator revenue share:
As creator, your creator revenue split is 50% of each paid map, level, scene and item posted in the Steam Workshop.
50% is the percentage of revenue an item creator receives from direct sales of their item.
Item Creators Can Earn Royalties via Steam Workshop.
Items from this Workshop that are accepted for sale will pay the creators a 50% split of the revenue if that item is sold for a fee.
https://steamcommunity.com/workshop/about/?appid=666930

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II.Control Keys

"a","d","s","w","q","e" - moving player (by X+/X-, Y+/Y-, Z+/Z- axes)
"Mouse Move"- look around player/direction of movement
"ESC" - close current opened window
"ESC" - Load Main Menu
"SpaceBar" - jump

"1" - Switch To 1st Person Builder Game Mode
"2" - Switch To 1st Person Explorer/Walker Game Mode

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III.Details for 1st Person Builder/Creator/Constructor Game Mode (press "1")

"Tab" - Toggle (Show/Hide) Crafting Mode
"Tab" - Toggle (Show/Hide) Thumbnail Materials in the opened Options/BuilderSettings window
"Enter" - Closer Look
"SpaceBar" - open window Options/BuilderSettings.
In this window you can change materials, objects and make customized unlimited variations of all existing materials (change color, PBR, position, size, rotation, etc.).
Many other customized building options are also available here (FOV, Movement Speed, Skyboxes, Fogs, Atmospheres, etc.).
Base building instruments:
 -346 customized materials (change color, PBR, position, size, rotation, etc.)
 -32 objects (cube, sphere, pyramid, cylinder, cone, torus, tube, capsule, etc.)

You can create two major type of objects: block and instance- block can have different color/material/shape, but instance can't (they have the properties of its block).
For repeating objects use instances, for different objects use blocks.
Using of quite many objects can reduce dramatically performance of the computer (but the beauty of your creation will dramatically increase).
"Mouse Left Button" - create new block/instance
"Mouse Right Button" - delete selected block/instance
"Mouse Wheel Down" - load/switch to next material
"Mouse Wheel Up" - load/switch to previous material
Appending Selected Block - combine/attach different shapes/materials - select desire Material/Shape => then "Left Alt" (press and hold) + move red crosshair on some desired destination face of the selected object => then "Mouse Left Button" (Left Click) => then release "Left Alt".
Copying Selected Block - "Left Ctrl" (press and hold) + red crosshair on some desired object to copy => then move mouse to desired direction => then "Mouse Left Button" (Left Click) => then release "Left Ctrl".
Moving Selected Block - "Left Shift" (press and hold) + red crosshair on some desired object to move => then move mouse to desired direction => then "Mouse Left Button" (Left Click) => then release "Left Shift".
Transforming Selected Block - "Num Lock" (press for ON/OFF)
 a.Select block - put red crosshair on some desired object to transform
 b."Num Lock" (to activate/deactivate Transform mode)
 c."Num Lock 1" (move), "Num Lock 2" (rotate), "Num Lock 3" (scale)

 d."Num Lock 4/6" for X+/X-; "Num Lock 5/8" for Y+/Y-; "Num Lock 7/9" for Z+/Z-
 e."Num Lock ." to reset (X=0.0/Y=0.0/Z=0.0) selected move/rotate/scale mode
 f."Num Lock 0" (press and hold) during move/rotate/scale to deny automatic transform mode (its mean that selected block will move/rotate/scale only by "Steps" value for most accurate transform).

Materials:
Almost all materials have visual identity (thumbnails) and names to the UE4 Editor materials for easy recognizing from UE4 users community.
However, if you change only one from many customization parameters with one or two clicks, you can create completely new, unique and custom material and looks.
Grow your creativity and innovations with one click.

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IV.Details for 1st Person Explorer/Walker Game Mode (press "2")

"Space" - jump
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V.Details for Demonstration/Example/Primer/Demo Level (SkyIslands)

SkyIslands are demonstration examples how to create beautiful and gorgeous objects using text files and any desired text editors.
Each SkyIsland is constructed by two text files- "SkyIsland-XXX-Config.ini" and "SkyIsland-XXX-Data.ini", where XXX is the number (from 1 to infinity).
Here is examples of the first three SkyIslands:
1st SkyIsland is "SkyIsland-01-Config.ini" and "SkyIsland-01-Data.ini"
2nd SkyIsland is "SkyIsland-02-Config.ini" and "SkyIsland-02-Data.ini"
2nd SkyIsland is "SkyIsland-03-Config.ini" and "SkyIsland-03-Data.ini"
and so on.
By default SkyIslands are 27 (from
"SkyIsland-01-Config.ini"/"SkyIsland-01-Data.ini" to
"SkyIsland-27-Config.ini"/"SkyIsland-27-Data.ini").

Description of 1st SkyIsland Config file- "SkyIsland-01-Config.ini":
"SkyIsland-XXX-Config.ini" contains exactly 10 lines and only numbers.
Numbers are respective order numbers of shapes/objects and materials of the blocks (taken from Options/BuilderSettings window in Builder Game Mode).
 -1st line is the order number of the shape of the Ground block
 -2nd line is the order number of the material of the Ground block
 -3rd line is the order number of the shape of the Ground Grass block
 -4th line is the order number of the material of the Ground Grass block

 -5th line is the order number of the shape of the Flower or Grass block
 -6th line is the order number of the material of the Flower or Grass block
 -7th line is the order number of the shape of the Tree Bark block
 -8th line is the order number of the material of the Tree Bark block
 -9th line is the order number of the shape of the Tree Crown block
 -10thline is the order number of the material of the Tree Crown block
Here is the example with descriptions of the first SkyIsland Config file "SkyIsland-01-Config.ini":

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1       -G1 (shape, ground)
316     -G1 (material, ground)
29      -G2 (shape, ground grass)
315     -G2 (material, ground grass)
32      -F (shape, flower or grass)
260     -F (material, flower or grass)
10      -T1 (shape, tree bark)
221     -T1 (material, tree bark)
1       -T2 (shape, tree crown)
226     -T2 (material, tree crown)
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Description of 1st SkyIsland Data file- "SkyIsland-01-Data.ini":
"SkyIsland-XXX-Data.ini" contains unlimited lines and rows and only numbers (from 0 to infinity), "f" and/or "t" as prefixes of the numbers and space (empty char).
Numbers represent the count of ground objects (G1 and G2) in vertical direction (by Z axis).
Number 0 (zero) means empty space.
"f" and "t" in front of each number (prefixes) represent flower (F) and tree (T1 and T2) objects above last ground object (G2).
Each number must be separate from next one by space (empty char) except last one on the current line.

If format of 1st SkyIsland (Config and/or Data) is broken, then no one SkyIsland will be loaded. If broken last one, then all SkyIslands except last one will be loaded.

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VI.Ray Tracing support for NVIDIA 20 Series Graphics Cards [Turing RTX][Complex RT Effects][Multiple RT Effects][High Ray Count]:

- Titan RTX [$2500]
- RTX 2080 Ti [$1500]
- RTX 2080 Super [$800]
- RTX 2070 Super [$650]
- RTX 2060 Super [$650]
- RTX 2080 [$1150]

•RTX 2070 [$1150]
•RTX 2060 [$500]
Ray Tracing support for NVIDIA Volta GPU Architecture Graphics Cards [Volta][Basic RT Effects][Low Ray Count]:
•Titan V [$3600]
Ray Tracing support for NVIDIA 16 Series Graphics Cards [Turing][Basic RT Effects][Low Ray Count]:
•GeForce GTX 1660 Ti [$450]
•GeForce GTX 1660 Super [$270]
•GeForce GTX 1660 [$250]
Ray Tracing support for NVIDIA 10 Series Graphics Cards [Pascal][Basic RT Effects][Low Ray Count]:
•TITAN XP (2017) [$2000]
•TITAN X (2016) [$1200]
•GeForce GTX 1080 Ti [$1200]
•GeForce GTX 1080 [$800]
•GeForce GTX 1070 Ti [$550]
•GeForce GTX 1070 [$560]
•GeForce GTX 1060 6GB [$400]
NVIDIA graphics driver v425.31 [11.Apr.2019] - the minimum, supporting for DirectX Raytracing (DXR) technology

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VII. History:

Luxocraft is an updated and modified version of the original Celestial Creator (released on 17.07.2017) game, but with some changed, new features and most important - support of the Ray Tracing Technology - "The Magic Rays" or "The Gods Rays".