Low-Poly Greek Monster Pack

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8/30/22

Documentation Section 1: Changing the Character's Appearance

A video tutorial is available for this subject at www.ImitationStudios.com

Part 1: Basic Settings

Part 2: Character Profiles

Part 3: Extremity Manager

Part 4: Finalization

Part 1: Basic Settings

Changes to the character's appearance are made using the Accessory Manager Script.

1. Basic Setup:
    a. This script must be located on the root gameobject, the same gameobject that has the animator component attached to it.
    b. All Profiles must be assigned for the script to function. Alternate profiles may be used to limit possible/random selections. The profiles include:
        i. Body Material Settings / Creature Profile
        ii. Hair Settings / Hair Profile
        iii. Hair Settings / Beard Profile (Male-only as defined by the creature profile)
        iv. Hair Settings / Eyebrow Profile
        v. Hair Settings / Hair Material Profile
        vi. Eye Settings / Eye Material profile
    c. Is enabled must be set to true for the script to function.
    d. Runtime validation must be set to true for editor change updates to function during runtime.
    e. Character bones must not be renamed.
    f. Character hair and root hair parent gameobjects must not be renamed.
2. Body Material Changes are controlled by the following:

    a. Body Material Settings / Body Material Index
        i. This value controls the primary color of the creature (beast color for most or skin tone for giants/cyclops)
        ii. The body material index is linked to the body material list above it. The body material list is populated automatically using the creature profiles. Therefore, changes to the body material list must be made in the creature profile.
        iii. The skin tone slider adjusts the skin tone color from lighter to darker for all characters that include a beast portion. For the giant and cyclops, the body material index is used to change the skin tone, and the slider does nothing.
3. Hair Settings are controlled by the following:
    a. Hair Settings / Hair Type
        i. This is a drop-down field which controls the visible hair mesh.
        ii. Some hair meshes are male only. Gender is defined by the creature profile.
        iii. Hair coloring is controlled by the hair material index setting.
    b. Hair Settings / Eyebrow Type
        i. This is a drop-down field which controls the visible eyebrow mesh.
        ii. Hair coloring is controlled by the hair material index setting.
    c. Hair Settings / Beard Type
        i. This is a drop-down field which controls the visible beard mesh.
        ii. Hair coloring is controlled by the hair material index setting.
    d. Hair Settings / Hair Material Index
        i. The hair material index controls the hair material for the hair, eyebrow, and beard meshes. This value is used in conjunction with the hair material list.
        ii. The hair material list is automatically populated based on the hair material profile. Changes to the available hair colors must be made in the hair material profile and not the list.
4. Eye settings are controlled by the following:
    a. Eye Settings / Eye Index
        i. The eye index controls the eye material. This value is used in conjunction with the eye material list.
        ii. The eye material list is automatically populated based on the eye material profile. Changes to the available eye colors must be made in the eye material profile and not the list.
5. Random settings:
    a. Random settings have 3 options:
        i. Disabled: the setting will never be randomized.

ii. Now: the setting will be randomized immediately regardless of whether the application is playing.
iii. On Awake (Not Recommended; See Finalization): the setting will be randomized in the awake function during runtime.

b. The following settings can be randomized:
    i. Beast Color
    ii. Skin Tone
    iii. Hair Type
    iv. Beard Type
    v. Eyebrow Type
    vi. Hair Color
    vii. Eye Color
c. Limiting Random Possibilities:
    i. To limit random possibilities, change the respective profiles to not include undesired options.
    ii. The Allow Female Baldness controls if the randomization of female characters, as defined by the creature profile, can produce the bald hair style.

Part 2: Character Profiles:

Character profiles control the possible changes to be made to the respective character. The character profiles include:

1. Creature Profile
    a. The creature profile contains basic information about the character, mesh, and usable body materials.
    b. Creature Gender: this controls various functionality such as disabling or enabling beards and male-only hair styles.
    c. Mesh Material index: this is the index of the body material on the imported mesh.
    d. Eye Material index: this is the index of the eye material on the imported mesh.
    e. Handle Skin Tones Separately: this value controls whether skin tone values should be used to calculate the correct body material.
    f. Skin Tones (int) this value is used in the calculation of the body material. It represents how many skin tones per beast color exist.
    g. Usable Materials
        i. This value contains all the usable body materials. This value may be changed to limit randomization.

ii. This list must be organized in the following way for the number of skin tones as defined by the skin tone integer:
    1. *Beast color 1/Skin Tone 1*
    2. *Beast color 1/Skin Tone 2*
    3. *Beast color 1/Skin Tone 3*
    4. *Beast color 2/Skin Tone 1*
    5. *Etc.…*
iii. The name value is used only in populating the body material list and does not need to be a specific value.
iv. The skin tone value is used only for organizational purposes.

h. Changes to the body material profile material list may affect the extremity manager and should be compensated for. See part 3 for more information.

2. Hair Type Profile
    a. The hair type profile contains the actual hair gameobject name and corresponding entry.
    b. To limit random hair style selections, remove the undesired entry from the list in the profile. *Do not remove 'Bald' from the list. Female characters will ignore the 'Bald' value by default in randomization. See part 1 for more information.*
3. Eyebrow Type Profile
    a. The eyebrow type profile contains the actual eyebrow gameobject name and corresponding entry.
    b. To limit random eyebrow style selections, remove the undesired entry from the list in the profile. *Do not remove 'None' from the list. The 'None' value is ignored in randomization.*
4. Beard Type Profile
    a. The beard type profile contains the actual beard gameobject name and corresponding entry*. Do not remove 'None' from the list.*
    b. To limit random beard style selections, remove the undesired entry from the list in the profile.
5. Hair Material Profile
    a. The hair material profile contains all the available materials used for determining hair, eyebrow, and beard color.
    b. The string value is used only in populating the hair material list and does not need to be a specific value.
    c. To add or remove selections and random possibilities, add or remove list entries.
    d. Several premade hair material profiles are included in the package.
6. Eye Material Profile
    a. The eye material profile contains all the available materials used for determining eye color.
    b. The string value is used only in populating the eye material list and does not need to be a specific value.

    c. To add or remove selections and random possibilities, add or remove list entries.
    d. Several premade eye material profiles are included in the package.
7. Extremity Profile
    a. See Part 3 for more information.
    b. The mesh material index is the material index of the imported mesh being altered.
    c. This profile corresponds directly with the body material profile. Alterations to the body material profile should be adjusted for in this profile.
    d. This profile contains the extremity material to be used for a range of calculated body material indices.
        i. Body material indices are calculated as: (B*C)+S
        ii. B = beast color index
        iii. C = skin tone integer
        iv. S = skin tone index
    e. The list entries allow for a range of indices to account for skin tones in the calculated value.
    f. The high and low index values form a standard high low range.
    g. The index group list allows a specific group of indices to be listed, overriding the high/low range values.
        i. Leave this list's count at 0 if you want to use the high/low range values.

Part 3: Extremity Manager:

The extremity manager uses the extremity profile and the calculated body material index of a character to apply a corresponding material to a specified mesh renderer. For example, this script is used to apply matching body materials to tails and spider legs. See the Extremity profile for more information.

Part 4: Finalization

Finalization refers to the act of removing the accessory manager, extremity manager, and unused hair, eyebrow, and beard gameobjects from the character. Finalization is recommended for characters whose appearances will not be altered during gameplay.

Please note: Altering the characters appearance often during gameplay is not recommended due to its performance cost. This includes randomization on awake.

For random spawns it is recommended to create several prefab variations of finalized, randomized characters rather than using the on awake randomization and finalization methods.

It is not recommended to re-apply the accessory manager script to a character that has been finalized. Replace the object with a character prefab instead.

Finalization may occur by changing the complete changes value of the accessory manager script:

1. Disabled: Finalization will never occur. This is recommended only for characters whose appearance will be changed often during runtime.
2. On Awake: Finalization occurs in the awake method. This is recommended for characters whose appearance may still change at a future time.
3. Finalize now:
    a. **When this option is selected, any future changes cannot be easily made.**
    b. This option will finalize the character now. This option is meant to be used outside of runtime.
    c. The gameobject's prefab must be unpacked first. The script cannot destroy gameobjects outside of runtime that are part of a prefab. After the character is finalized, the prefab may be remade.