**BuildingManager.cs**

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**Description:**

Handles spawning new building, where they are placed, and how they are placed.

They can be rotated, placed, or destroyed.

**Global Variables:**

* **Private Variables:**
  + enum CreateMode { ID, NAME };
    - Which mode to find the building template with.
  + BuildingTemplateCollection \_buildingTemplates
    - Collection of building templates
  + List<GameObject> \_buildings
    - Collection of buildings
  + float \_currBuildY
    - The building that is currently being placed y value stored here.
  + Rect \_rotateLeftRect
    - Rect for the rotate left button. Used to prevent clicking through the button and placing a building.
  + Rect \_rotateRightRect
    - Rect for the rotate right button. Used to prevent clicking through the button and placing a building.
* **Public Variables:**
  + Transform \_currentBuild
    - Current building to be placed
  + Texture2D \_leftArrow
    - Image for the rotate left arrow button
  + Texture2D \_rightArrow
    - Image for the rotate right arrow button

**Functions**

* Start
  + Private
  + No Parameters
  + Des: Load the buildings from Resources.
  + Returns Void
* Update
  + Private
  + No Parameters
  + Des: Check if building is currently following mouse position and assign rotation.
  + Returns Void
* PlaceBuilding
  + Private
  + No Parameters
  + Des: Place the building in the world and add it to buildings list.
  + Returns Void
* DeleteCurrBuild
  + Private
  + No Parameters
  + Des: Delete that current building that has been instantiated and was waiting to be placed.
  + Returns Void
* UpdateMouseBuild
  + Private
  + No Parameters
  + Des: Update the position of the building object that is following the mouse position to the new mouse position.
  + Returns Void
* CalcCurrentY
  + Private
  + No Parameters
  + Des: Calculate the Y coordinate for the current building selection.
  + Returns Void
* Create
  + Public
  + Parameters: string buildName.
  + Des: Get the index of the building with the name provided, then set the current building to the building found.
  + Returns Void
* GetBuildingIndex
  + Private
  + Parameters: int id, string name, CreateMode mode
  + Des: Get the template index using the name or id, whichever mode is passed in, returns -1 if not found.
  + Returns Int.
* LoadBuildings
  + Private
  + No Parameters
  + Des: Load buildings from Assets/Resources.
  + Returns Void
* OnGUI
  + Private
  + No Parameters
  + Des: Display buttons for rotation.
  + Returns Void

**Edits:**

1. Edited By: Jacob Miller
   1. Date : 09/10/2016
   2. Changes made:
      1. Added in onGui()
      2. Rect for the buttons
      3. 2d Textures for the buttons
      4. Removed generic unused prefab
      5. Added in some comments