

Unity CSV Imports User Manual

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The CSV Importers allow you to import copies of existing prefabs into positions specified in the CSV file and adds AttributeClass objects to the copies which contain the attribute data included in the CSV file.

1.0 Requirements

The importer tools require the user to add the appropriate prefabs to the project in the correct location prior to running the importer script. The location is determined by the CSV file. The only exception to this rule is the CSVBuildingImporter which also has a string visible in the inspector that is used as the prefix to the path it uses to locate the prefabs.

1.1 File Formats

The CSV files may contain any fields the user wishes to be included in the attribute data of the created objects, but the following fields are required to properly generate and place the objects.

CsvBuildingImporter

- Href – This field is combined with the path prefix contained in the script to get the path to the prefab
- X,Y – These fields are used to determine placement of the generated object
- SCALE_X, SCALE_Y, SCALE_Z – These fields are used to determine the scale of the generated object
- BEARING – This field is used to determine the Y-axis rotation of the generated object

CsvLightPoleImporter

- MODEL– This field contains the path to the prefab and starts with “/Assets”
- X,Y – These fields are used to determine placement of the generated object
- SCALE_X, SCALE_Y, SCALE_Z – These fields are used to determine the scale of the generated object
- BEARING – This field is used to determine the Y-axis rotation of the generated object

CsvTreeImporter

- MODEL_PATH, MODEL_NAME – These fields are combined to get the path to the prefab
- X,Y – These fields are used to determine placement of the generated object
- MAX_WID_FR, MIN_WID_FR – These fields are used by the Unity terrain system to set the maximum and minimum width of the tree
- MAX_HGT_FR, MIN_HGT_FR – These fields are used by the Unity terrain system to set the maximum and minimum height of the tree

CsvVehicleImporter

- MODEL_PATH, MODEL_NAME – These fields are combined to get the path to the prefab. Model path is relative and starts with “/Assets”
- X,Y – These fields are used to determine placement of the generated object
- SCALE_X, SCALE_Y, SCALE_Z – These fields are used to determine the scale of the generated object
- BEARING – This field is used to determine the Y-axis rotation of the generated object

CsvNavigationLinearImporter

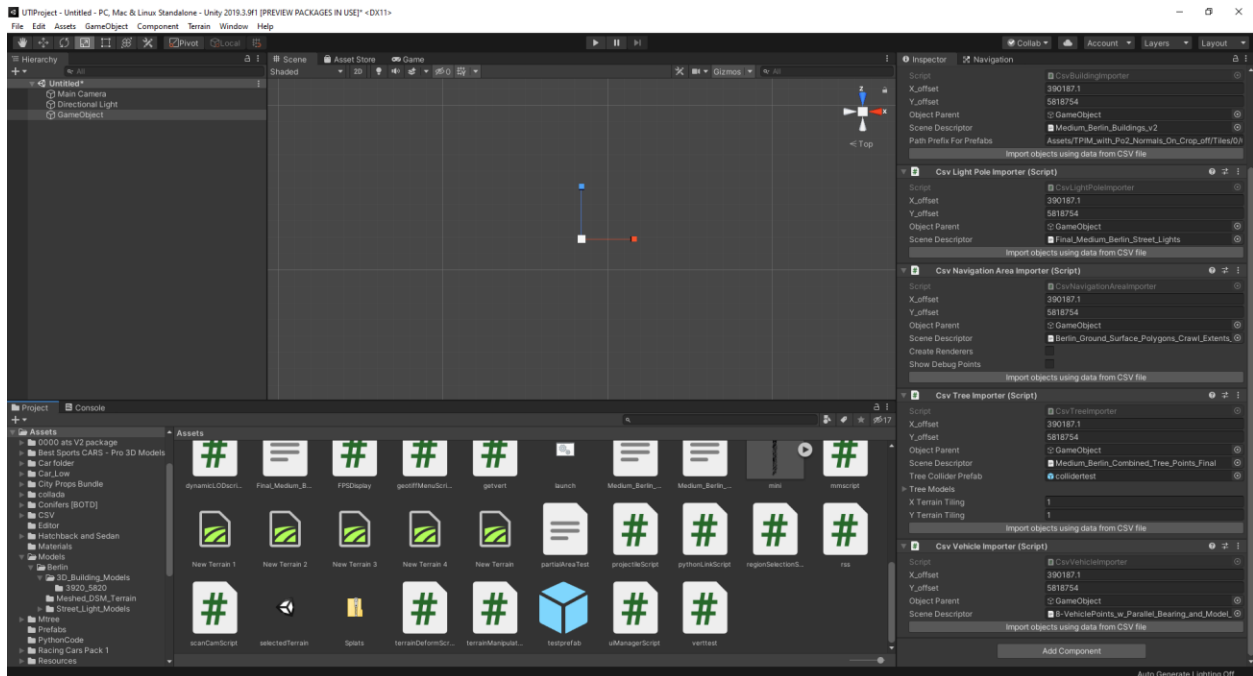
- GEOMETRY – This field contains the points that make up the line. The format is “LINESTRING(point_x point_z, point_x point_z, point_x point_z)”

CsvNavigationAreaImporter

- GEOMETRY – This field contains the points that make up the perimeter of each polygon. The format is “POLYGON((point_x point_z, point_x point_z, point_x point_z)(point_x point_z, point_x point_z, point_x point_z))” where each group of points between a set of parentheses describes a closed polygon with the first and last points being the same

1.2 Operation Overview

1. Import the CSV_Importers.unitypackage to the project. This unitypackage contains the CSV importers, their dependencies and the AttributeClass script which holds each objects attribute data when it has been imported into a scene.
2. Add the csv file to the Unity project Assets folder
3. Add the appropriate csv importer script to a gameObject in the scene



4. In the inspector of the script fill in the appropriate values
 - a. X_offset and Y_offset – The offset value subtracted from each entry’s X and Y positions respectively, to account for centering the objects near 0 in the Unity scene
 - b. Object parent – The object in the scene which all newly imported objects will be added under
 - c. Scene Descriptor – The file that contains the CSV data you wish to import
 - d. [CSVBuildingImporter only]
 - i. Path Prefix For Prefabs – A string used as a prefix to the href field for each entry when searching for the prefab associated with the object
 - e. [CSVTreeImporter only]
 - i. Tree Collider Prefab – The prefab object that contains the additional colliders that will be located at the same position as the imported tree
 - ii. X Terrain Tiling and Y Terrain Tiling – The number of terrain tiles used in the scene. These terrain tiles should be edge to edge for the tool to work properly
 - iii.
5. Hit the “Import objects using data from CSV file” button to start the import process.
6. After the process has completed check the console for error messages to see if any of the objects referenced in the CSV file failed to import
7. Once the import process has completed successfully you may delete the importer script from the scene