**Unity序列化和反序列XML并添加属性**

Posted on 2013年07月08日 by U3d / [Unity3D脚本/插件](http://www.unitymanual.com/category/script) /被围观 40 次

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| --- | --- |
| 001 | **using** UnityEngine; |
| 002 | **using** System.Collections; |
| 003 | **using** System.Xml; |
| 004 | **using** System.Xml.Serialization; |
| 005 | **using** System.IO; |
| 006 | **using** System.Text; |
| 007 |  |
| 008 | **public** **class** Reward |
| 009 | { |
| 010 | **public** Task task; |
| 011 | **public** Attribute attribute; |
| 012 | **public** Reward () {} |
| 013 | **public** **struct** Task |
| 014 | { |
| 015 | [XmlAttribute("taskNo")] |
| 016 | **public** **int** taskNo{ **get**; **set**;} |
| 017 | [XmlAttribute("taskReward")] |
| 018 | **public** **int** taskReward{ **get**; **set**;} |
| 019 | **public** Id id1; |
| 020 | **public** Id id2; |
| 021 | **public** Id id3; |
| 022 | } |
| 023 | **public** **struct** Id |
| 024 | { |
| 025 | [XmlAttribute("flag")] |
| 026 | **public** **bool** flag{ **get**; **set**;} |
| 027 | [XmlAttribute("name")] |
| 028 | **public** **string** name{ **get**; **set**;} |
| 029 | } |
| 030 | } |
| 031 | Unity3D教程手册：www.unitymanual.com |
| 032 | **public** **class** AchievementManager: MonoBehaviour { |
| 033 | Reward reward ; |
| 034 | FileInfo t ; |
| 035 | **string** \_data; |
| 036 | **void** Start () |
| 037 | { |
| 038 | reward = new Reward(); |
| 039 | t = new FileInfo(Application.dataPath+"**\\**"+ "Achievement.xml"); |
| 040 | LoadXML(); |
| 041 | reward.task.id1.name = "杨纯/nate"; |
| 042 | reward.task.id2.name = "有点笨"; |
| 043 | reward.task.id3.name = "dlnuchunge"; |
| 044 | Save(); |
| 045 | } |
| 046 |  |
| 047 | **void** LoadXML() |
| 048 | { |
| 049 | **if**(t.Exists) |
| 050 | { |
| 051 | StreamReader r = t.OpenText(); |
| 052 | **string** \_info = r.ReadToEnd(); |
| 053 | r.Close(); |
| 054 | \_data=\_info; |
| 055 | **if**(\_data.ToString() != "") |
| 056 | { |
| 057 | reward = (Reward)DeserializeObject(\_data); |
| 058 | } |
| 059 | } |
| 060 | } |
| 061 | **public** **void** Save() |
| 062 | { |
| 063 | \_data = SerializeObject(reward); |
| 064 | StreamWriter writer; |
| 065 | **if**(t.Exists) |
| 066 | { |
| 067 | t.Delete(); |
| 068 | } |
| 069 | writer = t.CreateText(); |
| 070 | writer.Write(\_data); |
| 071 | writer.Close(); |
| 072 | } |
| 073 | **string** UTF8ByteArrayToString(**byte**[] characters) |
| 074 | { |
| 075 | UTF8Encoding encoding = new UTF8Encoding(); |
| 076 | **string** constructedString = encoding.GetString(characters); |
| 077 | **return** (constructedString); |
| 078 | } |
| 079 |  |
| 080 | **byte**[] StringToUTF8ByteArray(**string** pXmlString) |
| 081 | { |
| 082 | UTF8Encoding encoding = new UTF8Encoding(); |
| 083 | **byte**[] byteArray = encoding.GetBytes(pXmlString); |
| 084 | **return** byteArray; |
| 085 | } |
| 086 | *//Unity3D教程手册：www.unitymanual.com* |
| 087 | *// Here we serialize our Reward object of reward* |
| 088 | **string** SerializeObject(**object** pObject) |
| 089 | { |
| 090 | **string** XmlizedString = **null**; |
| 091 | MemoryStream memoryStream = new MemoryStream(); |
| 092 | XmlSerializer xs = new XmlSerializer(typeof(Reward)); |
| 093 | XmlTextWriter xmlTextWriter = new XmlTextWriter(memoryStream, Encoding.UTF8); |
| 094 | xs.Serialize(xmlTextWriter, pObject); |
| 095 | memoryStream = (MemoryStream)xmlTextWriter.BaseStream; |
| 096 | XmlizedString = UTF8ByteArrayToString(memoryStream.ToArray()); |
| 097 | **return** XmlizedString; |
| 098 | } |
| 099 |  |
| 100 | *// Here we deserialize it back into its original form* |
| 101 | **object** DeserializeObject(**string** pXmlizedString) |
| 102 | { |
| 103 | XmlSerializer xs = new XmlSerializer(typeof(Reward)); |
| 104 | MemoryStream memoryStream = new MemoryStream(StringToUTF8ByteArray(pXmlizedString)); |
| 105 | XmlTextWriter xmlTextWriter = new XmlTextWriter(memoryStream, Encoding.UTF8); |
| 106 | **return** xs.Deserialize(memoryStream); |
| 107 | } |
| 108 | } |
| 109 |  |