Extension – Custom Resources

by JNA Mobile

Description

Custom Resources allow you to add your own resource types purely through configuration.

The sample scene is found at :

./Extensions/CustomResources/CustomResourcesSample

In the sample a new resource type called **Mana** is added. Mana is required to build the **Temple** and can be generated by launching the **Study** activity from the temple.

Custom Resource Data

Custom Resources are defined in an XML file. The sample XML file is called **CustomResourceData** and is found in:
./Extensions/CustomResources/Resources/

This file includes entries similar to the following for each new resource type:

```
<CustomResourceType>
  <id>MANA</id>
  <name>Mana</name>
  <spriteName>castspell_icon</spriteName>
  <defaultAmount>50</defaultAmount>
</CustomResourceType>
```

There are four parameters defining a custom resource:

id	A unique id for the resource.
name	A human readable name for the resource.
spriteName	The name of a sprite in the UI atlas to use for the resource icon.
defaultAmount	The amount the player will start with if this is a new game.

You can add as many of these resources as you want however the sample UI code (UIResourceView) will only show two. It can be easily extended to add more.

Requiring Custom Resource to Build

Any building data file can be extended to require additional resource by adding an additional costs item to the XML file. For example the following means that the building would requires 50 mana to build (in addition to its other costs):

```xml
<additionalCosts>
   <CustomResource>
     <id>MANA</id>
     <amount>50</amount>
   </CustomResource>
 </additionalCosts>
```

You can include multiple additional costs (although note that the UI sample supports only one):

```xml
<additionalCosts>
   <CustomResource>
     <id>MANA</id>
     <amount>50</amount>
   </CustomResource>
   <CustomResource>
     <id>STONES</id>
     <amount>250</amount>
   </CustomResource>
 </additionalCosts>
```

Check out the sample file **CustomResourcesBuildingData** found in: **./Extensions/CustomResources/Resources/**

Generating Custom Resource from an Activity

You can award custom resources using the **CUSTOM_RESOURCE** reward type that can be defined for an activity. The **rewardId** should match the id of the custom resource. It can be defined in any Activity XML file. For example the following xml will create a STUDY activity that generates 10 mana:

```xml
<ActivityData>
 <type>STUDY</type>
 <durationInSeconds>60</durationInSeconds>
 <description>Study.</description>
 <reward>CUSTOM_RESOURCE</reward>
 <rewardAmount>10</rewardAmount>
 <rewardId>MANA</rewardId>
</ActivityData>
```