

# WebGL Nyan Cat



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# Chapter 1

## The Beginning

### 1.0.1 Creating a new Web Application

Let's create a new project "WebGL Nyan Cat".

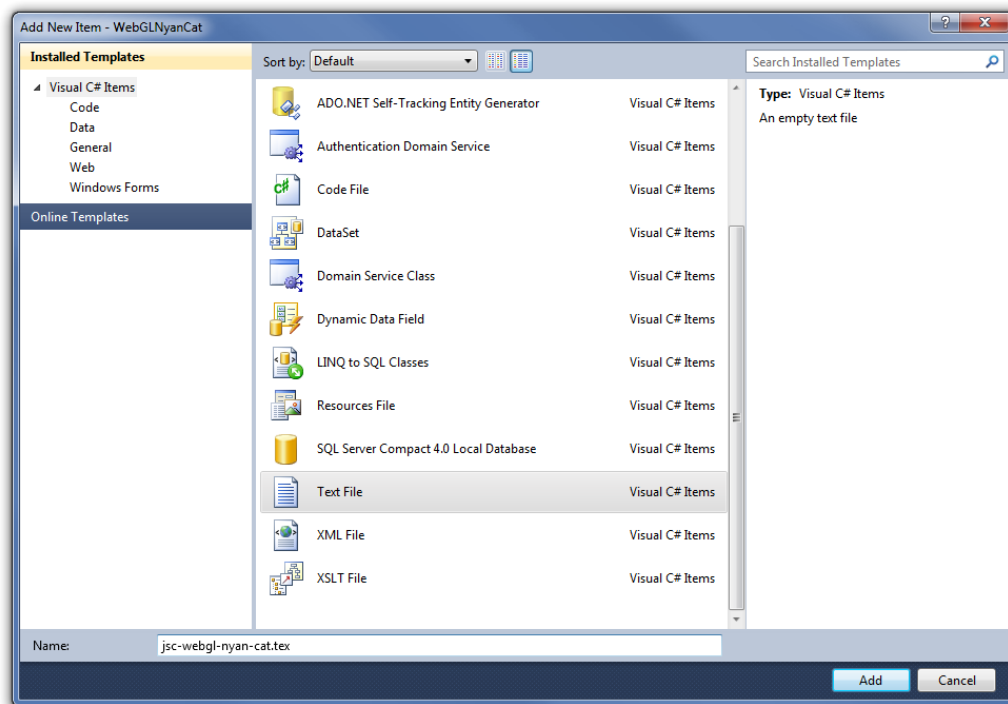


Figure 1.1: New Project

### 1.0.2 Creating a new preview image

In this document we shall port the example at <http://dl.dropbox.com/u/6213850/WebGL/nyan> to CSharp.

### 1.0.3 Setting up TeXworks for LaTeX documentation

Microsoft Visual Web Developer 2010 Express needs some additional configuration. While creating new commands in latex one needs to remember they cannot have numbers in the name.

### 1.0.4 Prebuild event

Just when our PDF is being generated we are ready to test run the project. First we should do a project rebuild. This is where JSC will generate the AssetsLibrary during the prebuild event.

At this time the most important type generated for us is the WebGLNyanCat.HTML.Pages.DefaultPage type. Essentially it will give us a typed access to all HTML elements within the HTML document with id attributes. We may however choose to ignore it and just attach to document instead.

### 1.0.5 Start Debugging

Now we should test JSC. Without changing anything else let's just run the project. A web browser will be started once the build is ready.

### 1.0.6 Inspecting the original

Now we are ready to start. JSC does not only support looking at .NET assemblies. It also supports looking at Web Applications. At this time however the HTML parser is unforgiving and does not help us. We need to do manual code review of the original Web Application to replicate it. Reading the source code reveals it makes use of some JavaScript libraries, some of which we may choose to ignore. There are also two audio files.

### 1.0.7 Preparing the assets

We need to add the Three.js, nyanlooped.mp3 and nyanslow.mp3 to our project to be dynamically loaded on demand while the application is running.



Note that at this time we need to define audio elements in our HTML page to make it explicit that they are needed.

### **1.0.8 Adding fullscreen and dispose**

xxx

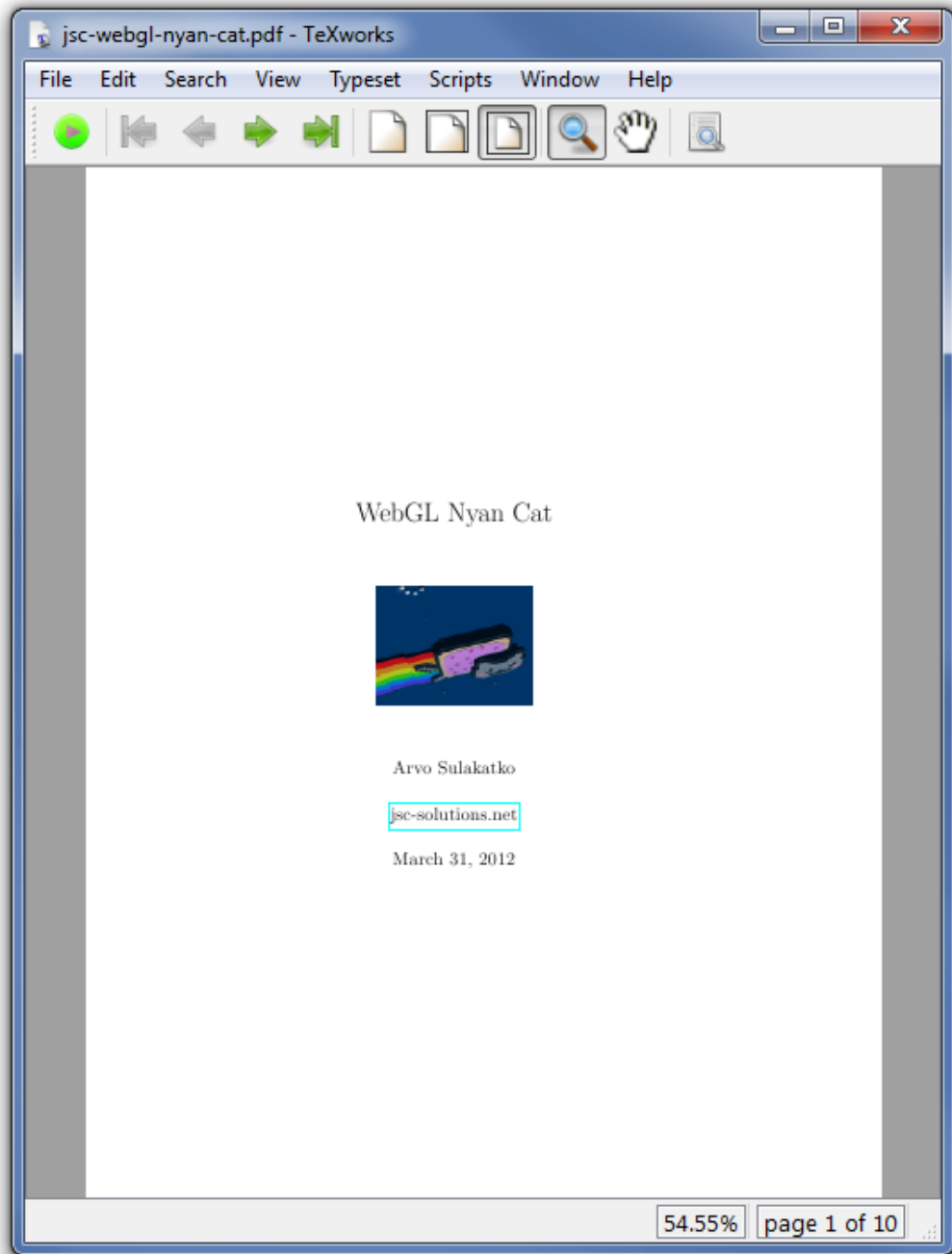
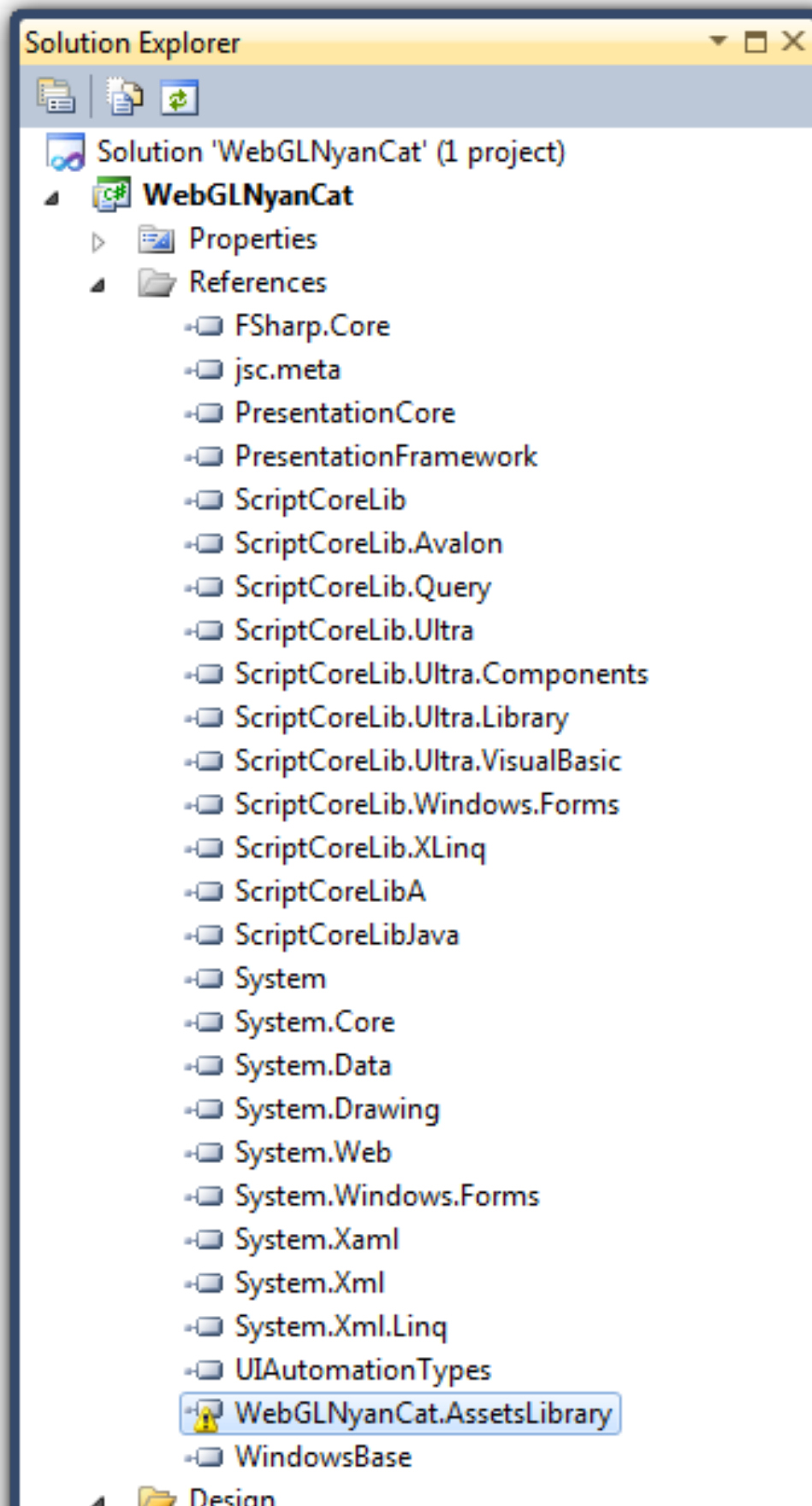


Figure 1.2: TeXworks



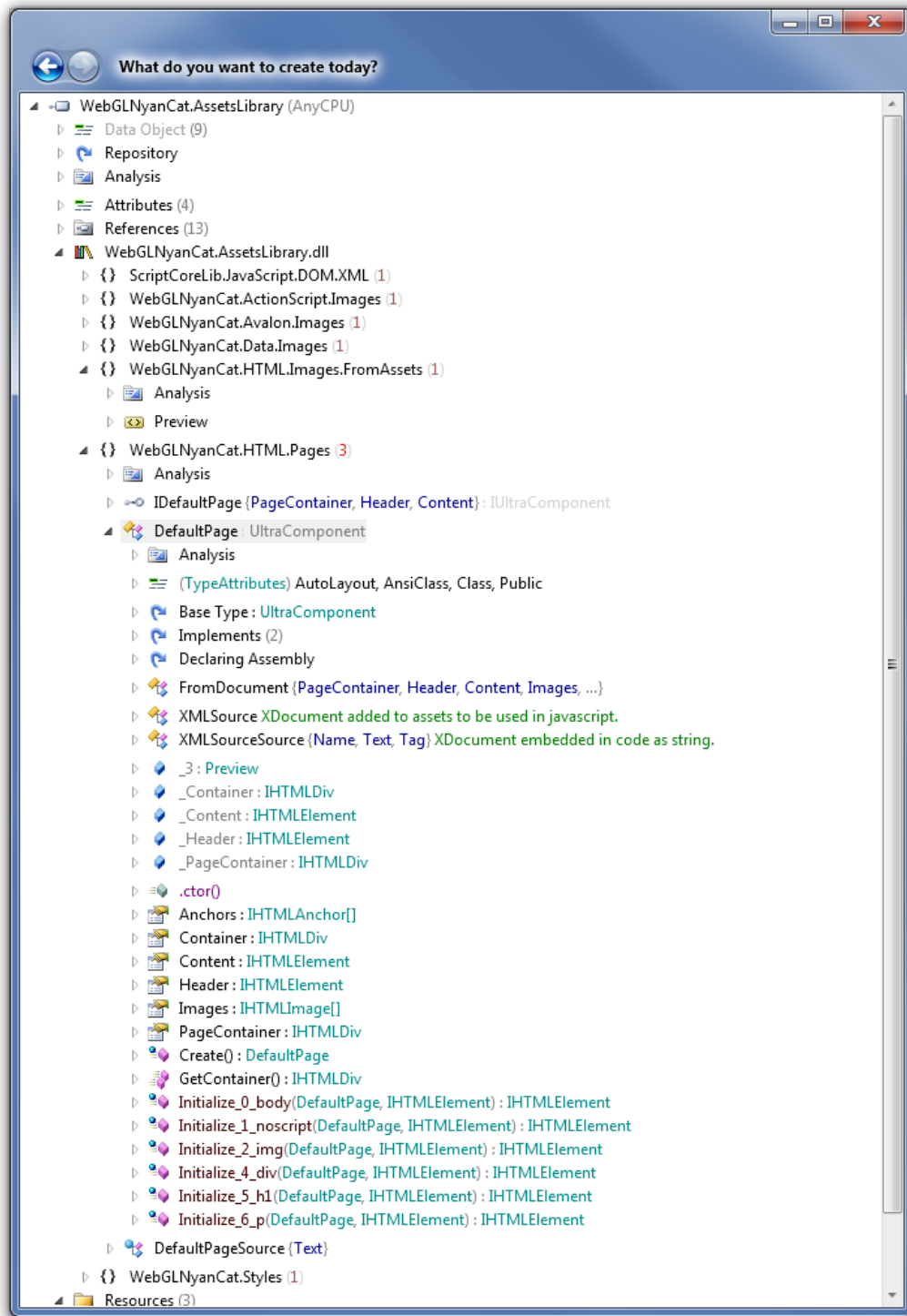


Figure 1.4: JSC eXplore - WebGLNyanCat.AssetsLibrary



Figure 1.5: Application running inside Chrome

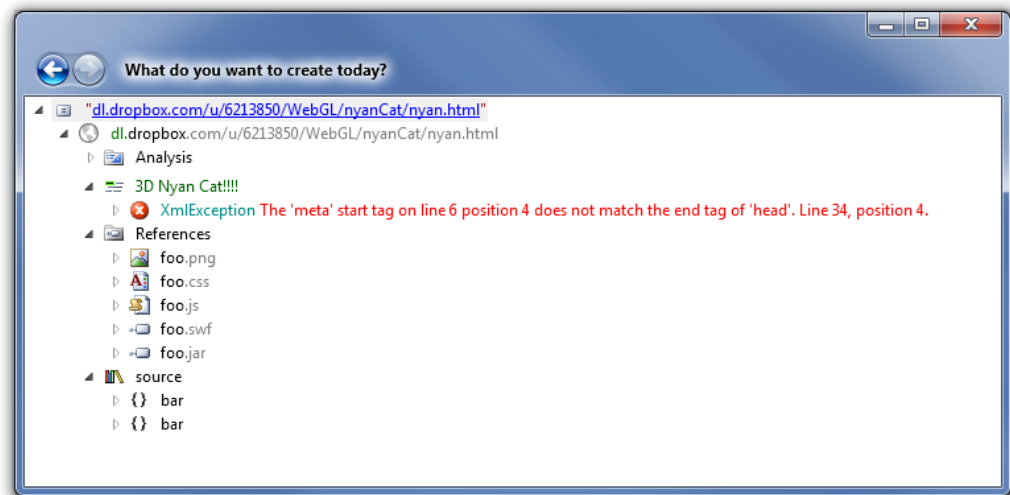


Figure 1.6: JSC eXplore - Web Application

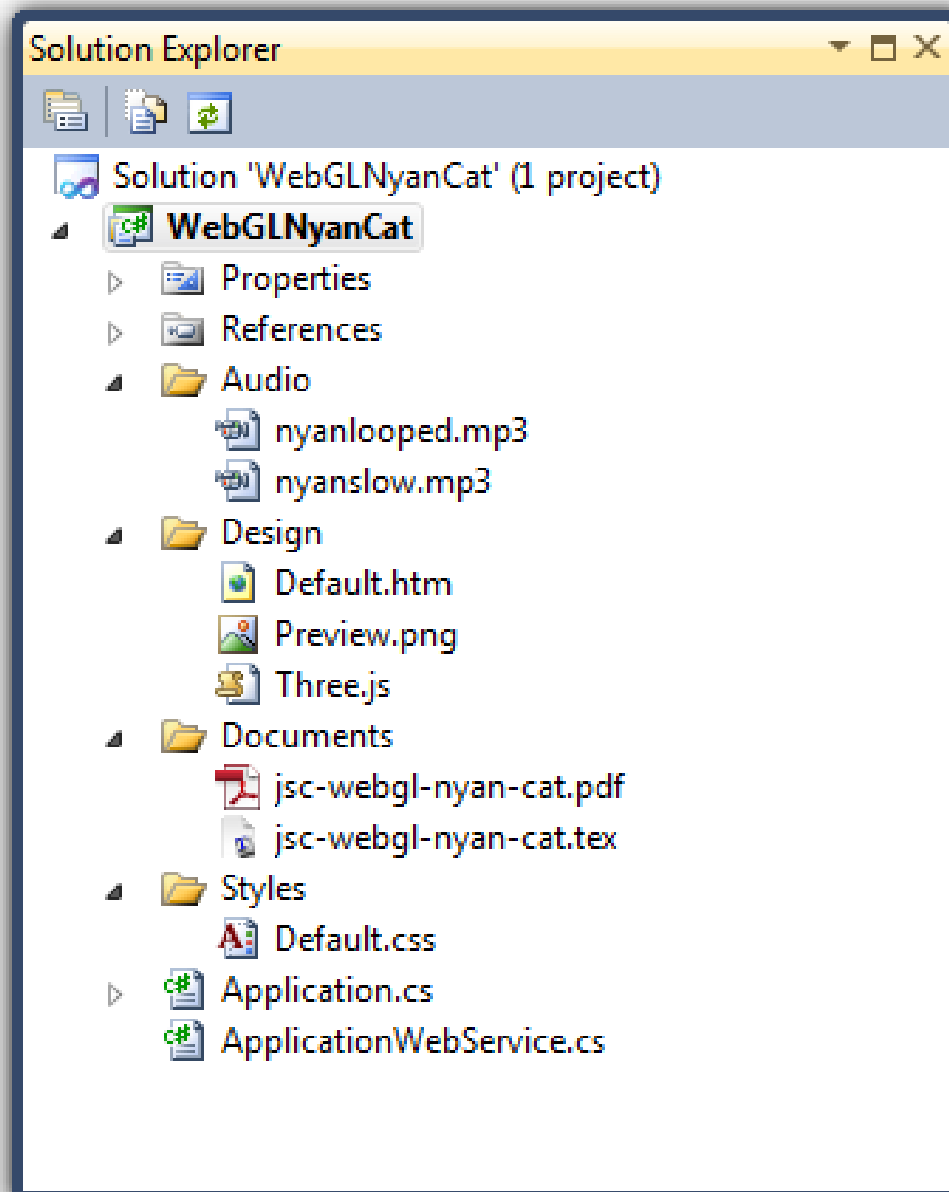


Figure 1.7: Solution Explorer - New Assets

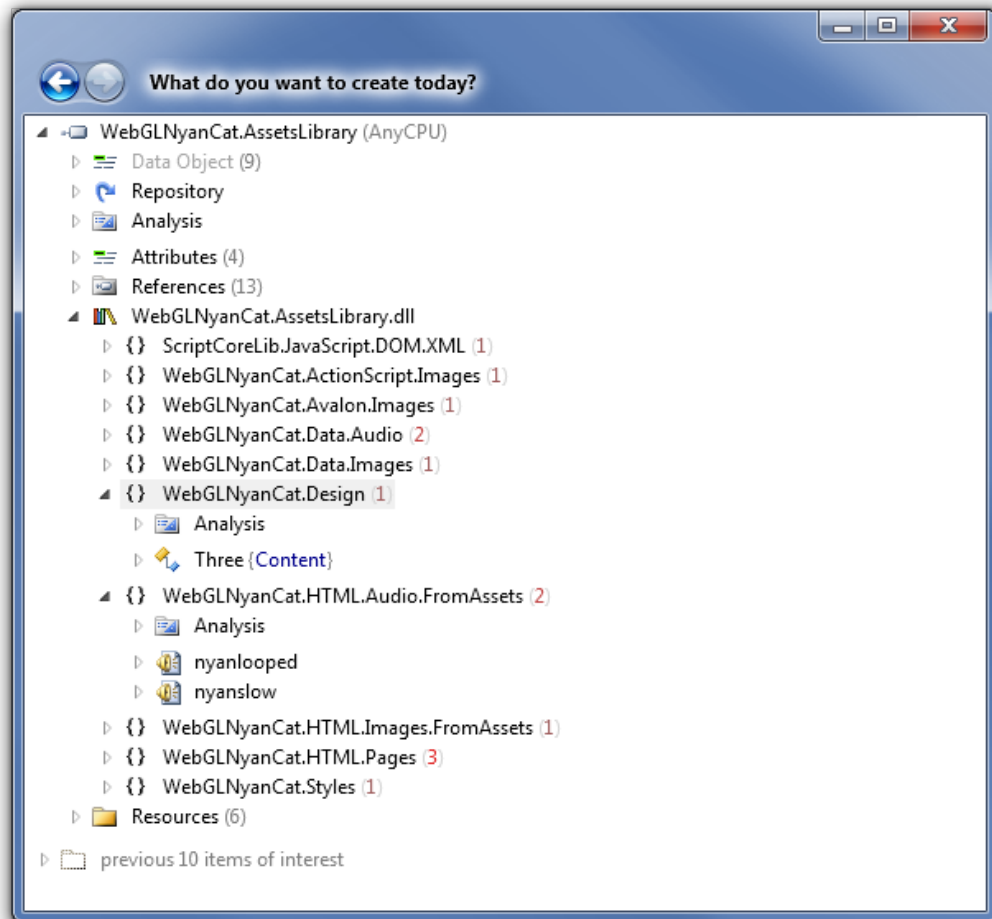


Figure 1.8: JSC eXplore - New Assets



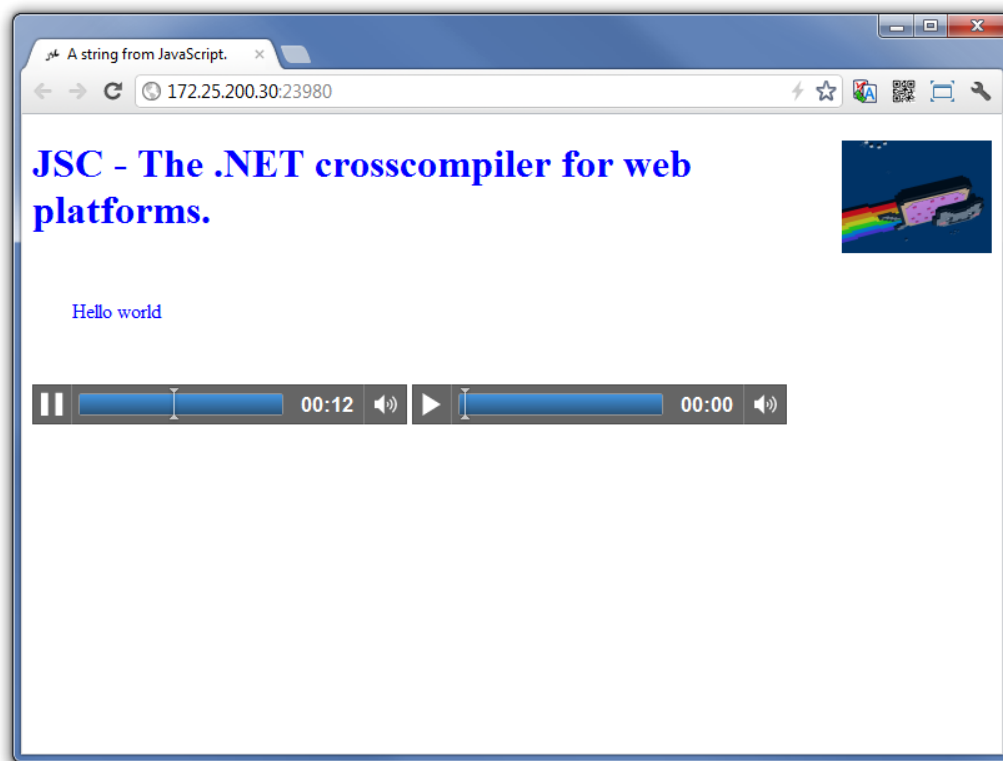


Figure 1.9: Application running inside Chrome with audio



## Chapter 2

### Notes for future work

#### **2.0.9 Less references**

Future versions of JSC shall consider merging ScriptCoreLibr assemblies to keep the number low.

#### **2.0.10 Exclude from Project Template**

Some files should be excluded from project template.



# Chapter 3

## References

### 3.0.11 Document Source

<https://jsc.svn.sourceforge.net/svnroot/jsc/examples/javascript/ArduinoSpiderControlCenter/SpiderModel/Documents/spider.tex>

### 3.0.12 Project Source

<https://jsc.svn.sourceforge.net/svnroot/jsc/examples/javascript/ArduinoSpiderControlCenter/SpiderModel/>

### 3.0.13 Video

<http://www.youtube.com/v/hKksAVmekAE>

### 3.0.14 JSC Web Installer

<http://download.jsc-solutions.net>

### 3.0.15 Website

<http://www.jsc-solutions.net>

### 3.0.16 Blog

<http://zproxy.wordpress.com>