GPS Cinema - Locative Storytelling



Tell your Story, Anywhere.

Described by some users as "Geocaching for Stories", GPS Cinema is a simple SDK for authoring locative media experiences. Create your own audio walks, video landscapes, and other expressive works using the GPS signal to orient your viewers. As a viewer, you simply walk to the point indicated on the map and a video clip will play. Want to make your own project? If you are a registered iPhone developer you can download the project, and simply match the GPS coordinates to the clip you wish to play in your playlist. All of your clips are loaded right to the phone to ensure a responsive experience. The code is provided free of charge and you are permitted to submit it to the Apple App store.*

Requirements: Mac OSX 10.6.8 or higher Xcode 4.4 or higher including iOS SDK (6.0 or higher) iOS Device running iOS 6.0 or higher (iPhone, iPod, iPad) iOS (paid) Developers Account for running software on a device.

- 1. If you have not done so already, install Xcode including the iOS SDK.
- 2. Unzip the project and copy the folder into your iPhone development directory. For the purpose of this tutorial we will be using the directory Macintosh HD:/ Developer/Examples/iPhone
- 3. Open the GPS Cinema xcode project (GPSCinema.xcodeproj)

4. If the project does not report "missing base SDK" skip to step 5: a. Select the folder icon above the project name.



(Figure 1. "missing base SDK" and Folder icon)

b. In the Project column, select the GPSCinema Xcode project icon.



(Figure 2. Project and Target Column)

i. Select the Build Settings tab, click the Base SDK and select iOS 6.0 from the popup.

Info	Build Settings	
Levels	Q	
📐 C	PSCinema	_
\$(AF	RCHS_UNIVERSAL_IPHONE_OS) - \$	
ipho	neos4.3 (SDK not found) 🛊	

(Figure 3. Build Settings Tab and Base SDK tab showing incorrect setting)

- ii. Select GPSCinema from the Target Column. Select the Build Settings tab, click the Base SDK and select iOS 6.0 from the popup menu.
- 5. If there are any assets missing (shown in Resources folder in red):

a. shift select all of the missing files shown in red.



(Figure 4. Missing Resources Files shown in red)

b. Select the information tab for multiple items on the left of the screen, point them towards your GPSCinema directory.

Identity and	Туре	
File Name	Multiple Values	
File Type	Default - (Empty Selection) ‡	
Location	Relative to Developer Dir \$	(C)
	Multiple Values	
Full Path		
Localization	1	
	Make localized	
Target Mem	bership	
🗹 题 GPS Cir	nema	

(Figure 5. The very small Information Tab on the right of the screen)



(Figure 6. select the folder that the resources are in)

6. To add Movie files to your project, ensure they've been compressed to work on an iOS device. In iMovie, simply Share for Mobile. In the free software <u>MPEG Streamclip</u>, use File> Export to Other Formats... Format: iPhone and select the iTunes preset button in the top right. Then in Xcode, select Project>Add to Project... and select the movies you wish to add. It will ask a number of options which you may leave as the

default, but you can choose whether or not to copy the files into the xcode project directory.

7. To Change the project and App name, select the project in the left Folders column and change the project name in under the Right Identity inspector column. Once you have entered the name, push the tab key and Xcode will automatically change the project and app name. It's up to you if you wish to take a project snapshot.

	D B
Identity	
Project Name	GPSCinema
Location	Not Applicable *

8. Edit the mapPoints.xml file as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<site>
    <name>YOUR NAME</name>
    <location>
           <desc>DESCRIPTION OF SCENE</desc>
           <lat>LATITUDE</lat>
           <long>LONGITUDE</long>
           <rad>APPROXIMATE RADIUS OF SENSITIVITY IN METERS</rad>
           <media>NAME OF MOVIE FILE</media>
    </location>
    <location>
           <desc>example</desc>
           <lat>43.76697787382056</lat>
           <long>-79.50124382972717</long>
           <rad>30.0</rad>
           <media>examplemovie</media>
    </location>
</site>
YOUR NAME <name>: Name of the application author.
```

```
DESCRIPTION OF SCENE <desc>: simple identifier so you may remember the location.
LATITUDE<lat>: in Decimal Degrees
```

LONGITUDE<long>: in Decimal Degrees APPROXIMATE RADIUS OF SENSITIVITY IN METERS <rad>: 20 is recommended.

Enter coordinates			
43.772736,-79.500171			
(like 37 23.516 -122 02.625, but it's flexible)			
Convert and Map			

NAME OF MOVIE FILE <media>: do not include the extension. All movies must be .m4v

To create multiple scenes, duplicate and edit a location tag for each scene (keeping each



location tag between the <site> tags.

```
<location>
        <desc>example</desc>
        <lat>43.76697787382056</lat>
        <long>-79.50124382972717</long>
        <rad>30.0</rad>
        <media>examplemovie</media>
```

</location>

- 8. Here is a suggested method of choosing your map points:
 - a. <u>Go to: http://boulter.com/gps/</u>
 - b. Enter the sample coordinates (37 23.516 -122 02.625) beneath the search box or cut and paste them from this manual. Click Convert and Map.
 - c. Find the area you wish to map and click in the window. The decimal degree coordinates of where you clicked will appear under the map. You can copy and paste those coordinates into mapPoints.xml.
- 9. You can also select a point in Google Maps, right click and select "what's here". The Latitude and Longitude will appear in the search bar, but the coordinates may not be quite as accurate.
- 10.Once you've selected your points and added your movies, your project should build and run in the simulator in Xcode.
- 11.In Xcode 4.2 or higher, you can use a .gpx file to test the coordinates. A GPX file has the following format. It takes a bit of editting but this will allow you to test the path your user will be walking. It does not allow you to control the speed at which the current location changes so testing this way may be a little unpredictable.

```
<?xml version="1.0"?>
<gpx version="1.1" creator="Xcode">
<wpt lat="43.776427659694185" lon="-79.50445175170898"></wpt>
<wpt lat="43.77586214780121" lon="-79.50424253940582"></wpt>
</gpx>
```

- 12.If you wish to run the experience on a device, sign into the Apple iOS developers account and use the iOS Provisioning Portal Assistant to download a provisioning profile. Ensure your App ID and Bundle Identifier are the same:
 - a. If you App ID is GPSCinema, then your Bundle Identifier in HackXMLDoc-Info.plist should be com.yourcompany.GPSCinema
 - b. once you've downloaded your provisioning profile, just double click it and it will install itself in Xcode.
- 13. Once your device is connected and Xcode says it's ready for development, Click Run and Build. Fingers Crossed! If it builds, the App will ask to use your location. Make sure you "Allow". You should see the Google maps begin to load, and the blue dot will locate you. When you reach a zone you will see a movie play back in fullscreen landscape mode.

14. All the videos will play through once. Once a video plays, the refresh button will appear in the bottom right. Pushing it will allow you the user to trigger all the scenes

again (though it will only play back another video immediately if the user is standing close to a point of interest.

Questions or Comments to info@futurestories.ca

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