

How to create theme for WMP10+



by *Ritesh Kawadkar*



Before actually starting working on my tutorial please read the following theory carefully, you can also leave that and can start directly working but it is recommended that you first read it, it will give you a general overview and will really help you a lot.

How to create skin for Window Media Player

What a skin is?

When art work (pictures), some scripts, text files and media are combined together to give Window Media Player a new look and feel, this is what I called a skin. Skin defines the basic functionality of Media Player i.e. where to place buttons, how it should perform, how it should look etc. In this tutorial I will tell you how to create a skin.

Windows Media Player already have a lot of skins, but creating your own skin is something different. Creating a skin is really something different you don't need to be a good programmer nor it needs a good work at computer graphics i.e. art work. If you have ever worked on paint or Photoshop than that is enough. If you have ever worked on HTML or some scripting language than it is well and good otherwise it is not required at all.

Source code

*What makes creating a skin easy is the source code which you can see of any skin mind it you can see the art work, script file of any skin. Basically skin file are loaded by default in **C:\Program Files\Windows Media Player\Skins** folder. These skin files are in the compressed in a package having the extension **wmz**. So to decompress the file and view the contents rename the **.WMZ** file to **.ZIP** and use an unzipping utility such as **WinZIP** or **WinRAR** to extract the containing files.*

Skin Files

As said above skin is a group of files and all files has its own function. There are mainly 3 types of file they are-

File type	Description
Skin Definition File	This is a text file and has a .wms file name extension. This is the main file which contains the position of components, and how other art file and scripts are to be used.
Art Files	It contains the graphic part of your skin i.e. how your skin would look. These include BMP, GIF, JPEG, and PNG files.
JScript Files	This is a text file and has a .js file name extension. It contains the information/command of event which has to be take place.

Skin Definition File: Skin definition files contain the basic instructions for what the skin does and where other files used by the skin can be found. There can only be one skin definition file for a skin, and it has a .wms file name extension.

The instructions in the skin definition file are written in **eXtensible Markup Language (XML)**, which is similar to HTML. If you have used HTML to create Web pages, you will find that XML looks familiar.

Creating skin

First we would start from the basic art work since it is the main part of our skin; it is the element that would decide how our skin would look like. Actually this is the only part that your users can see.

Creating necessary art work

In this tutorial I am creating a NOKIA N96 model as my primary image. The reason I choose it is that firstly, it looks good, secondly it has all the necessary features like play/pause buttons that I would need. The actual image of NOKIA N96 mobile is shown below



You can choose any art work that you like or you can simply create.

Art file has 3 main images

Primary Images

This is what your users will see when they install your skin. I have

Mapping Images

One of the most powerful features of Windows Media Player skins is that you can use image mapping to trigger events for your skin. Different controls need different kinds of image maps. For example, if you color part of an image map a specific red value, and the user clicks on the corresponding area of your primary image, a button will fire an event. Color is used to define which events are triggered by clicking in a particular area of the skin.

Alternate Images

You can also set up alternate images to display when a user does something. For example, you can create an alternate image of a button that will be displayed only when the mouse hovers over the button.

And that's all you need to know, for any further reading go to Microsoft site and search MSDN library for more.

Now we would start creating our first skin.

NOTE: save all your files in one folder

Let get start in

To start with you need a primary image (the main view of your skin that your user would see) I have chose NOKIA N96 as my primary view



So now you have your primary image which already have play/pause, previous, next & stop button in it. I have planned to show video on middle screen therefore I photo shopped the image and created a small green slider at the bottom.



Now our primary art work is completed. So we can start with the skin definition file. To create your skin definition file open Notepad and type

```
<THEME>
...
</THEME>
```

The **THEME** element is the root element for your skin. If you have ever used HTML than it is also as simple as it is.

Every **THEME** has at least one view element. It governs the particular image you see on the screen. You can have more than one view for showing playlist, visualization etc. Now I would let you explain the following attributes of **VIEW** element.

Attributes	Description
id	Every element in skin file has its unique identity which helps in identifying them.
width and height	Gives skin a particular width and height. My primary image fits best in 690*410.
resizable	Set this attribute to true or false according to your need
titlebar	In this case I don't want title bar because it distract the look
scriptFile	Write the name of the script file.
backgroundColor	If you want any background color you can write the name of the color or type none to make the skin transparent where nothing is specified
minWidth & minHeight	Restricts minimum width and height

So now the code would look like below

```
<THEME>
```

```
  <VIEW
```

```
    id="mview"
```

```
    left="0" top="0" width="690" height="410"
```

```
    resizable="false"
```

```
    minWidth="600" minHeight="267"
```

```
    titlebar="false"
```

```
    title="Batman Begins"
```

```
    backgroundColor="none">
```

```
    ...
```

```
  </VIEW>
```

```
  ...
```

```
</THEME>
```

Now we would add our primary image to the skin by using a subview element

```
<THEME>
```

```
  <VIEW>
```

```
    <SUBVIEW>
```

```
      backgroundImage="main_bg.png" >
```

```
      ...
```

```
    </SUBVIEW>
```

```
    ...
```

```
  </VIEW>
```

```
...
```

```
</THEME>
```

Now if we would write the whole code

```
<THEME>
```

```
  <VIEW
```

```
    id="mview"
```

```
    left="0" top="0" width="690" height="410"
```

```
    resizable="false"
```

```
    minWidth="600" minHeight="267"
```

```
    titlebar="false"
```

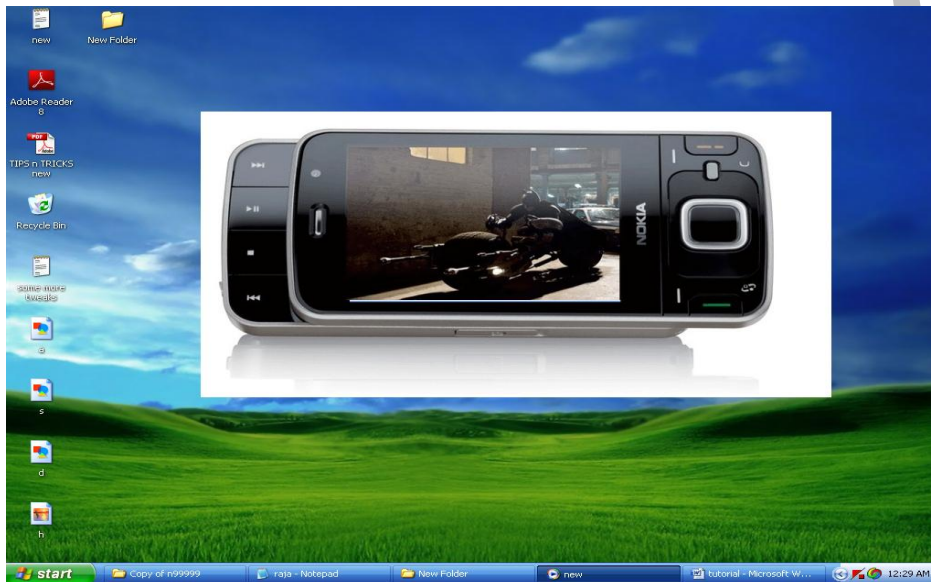
```
    title="new"
```

```
    backgroundColor="none">
```

```
<SUBVIEW  
backgroundImage="main_bg.png" >  
</SUBVIEW>
```

```
</VIEW>  
</THEME>
```

And save the file as **batman.wms** and then execute it our skin would look like this



But I don't want that white color around our image so I opened Photoshop and colored that white portion with #FF00FF so that I can clip that white portion easily. After coloring my image look like below



As you can see it has a uniform color throughout and therefore it is easy to clip that portion out, to do that I have to just write added a one line code in subview element and i.e.

```
<SUBVIEW  
  backgroundImage="main_bg.png"  
  clippingColor="#FF00FF" >  
</SUBVIEW>
```

clippingColor="#FF00FF" this line will clip of the colored portion, now the code is

```
<THEME>  
  
  <VIEW  
    id="mview"  
    left="0" top="0" width="690" height="410"  
    resizable="false"  
    minWidth="600" minHeight="267"  
    titlebar="false"  
    title="new"  
    backgroundColor="none">
```

```
<SUBVIEW
```

```
backgroundImage="main_bg.png"  
clippingColor="#FF00FF" >  
</SUBVIEW>
```

```
</VIEW>
```

```
</THEME>
```

Now if we would execute the above line of code we would get our skin like below

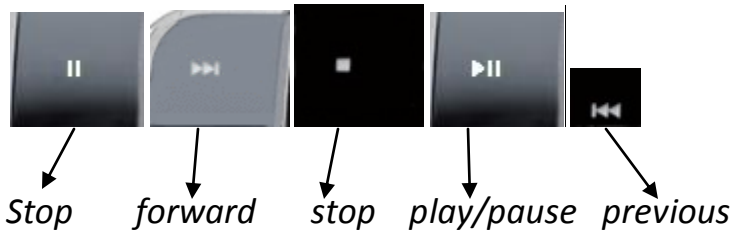


Now half of our task is completed we have a good looking skin. Now we have to add functionality in it.

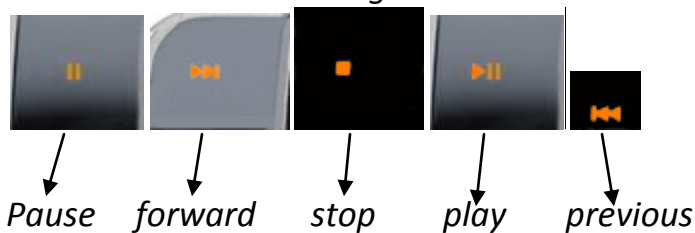
Have you ever used window media player, what happens when you place your mouse over play button or any other button? Yes, the button glows if you have not experienced that, than no problem take your mouse over start button and look the start button will glow out.

In my skin I too want to create that thing so I started with play/pause, forward, next and stop button which are there in my primary image's left portion.

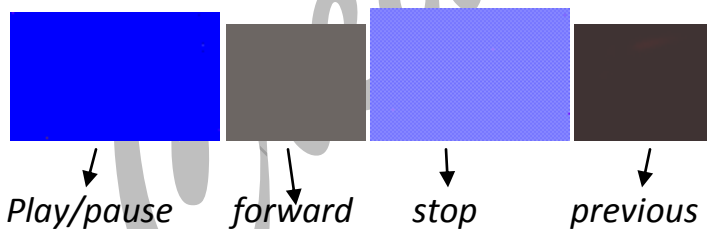
To do that open primary image in Adobe Photoshop and cut the play/pause, forward, next and stop buttons from it using rectangle, polygon or any other tool. Or you can use any other imaging software that you like. I have cut down the above button using rectangle & polygon tool



Now we have to color the white portion of these buttons to any color you can choose I have used orange.



So when you will place your mouse over them they will turn orange in color. Now again we need a mapping image for all these buttons so just again open these image in Photoshop and color them.



Now the coding part for them, so that when we place our mouse over these images it glow. I am telling you coding for stop button coding for other button is also similar.




```
<button id="stop"
left="29"
top="160"
image="stopnorm.gif"
```

```

hoverImage="stopover.gif"
mappingImage="stopmap.gif"
transparencyColor="#8080FF"
mappingColor="#8080FF"
onClick="player.controls.stop()"
upToolTip="Stop"
cursor="hand"

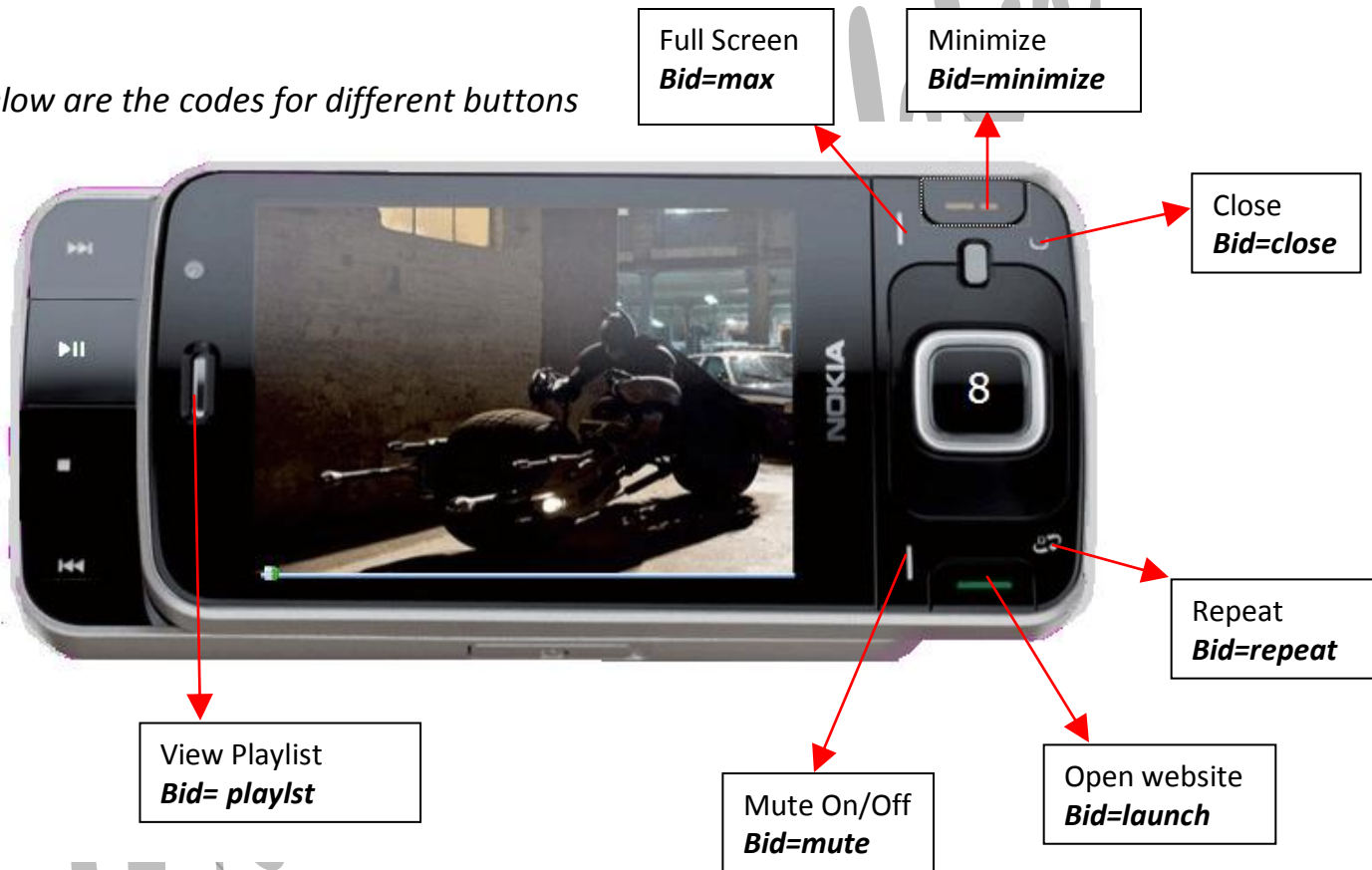
```

</>

Attributes	Description
image	It is the actual stop image 
hoverImage	It is the image which you want to see when you place your mouse above the stop button 
mappingImage	They are used for specific controls to specify which regions (i.e. the total area covered by image here it is 100*66 in pixels) will respond to mouse clicks and to determine which controls receive which events. 
mappingColor	It is the color of the mapping image #9999FF
onClick	The event which should takes place when we click on button
upToolTip	You can write the tool tip here it means when you hover your mouse on stop button it will show what it will do.

Note: In the above case when the mouse come in area of mapping image it will turn into hand shape and when we click on the button it stops our song.
So mapping image defines the area where mouse turns into hand

Below are the codes for different buttons



here Bid is button id

```
<button id="minimize"  
  left="530"  
  top="32"  
  hoverImage="minover.gif"
```

```
mappingImage="minmap.gif"
transparencyColor="#ff00ff"
mappingColor="#00ffff"
onClick="view.minimize()"
upToolTip="Minimize"
cursor="hand"
/>
```

<PAUSEBUTTON

```
visible = "wmpenabled:player.controls.pause"
zindex = "2"
left = "30"
top = "99"
image = "pause.gif"
hoverimage = "pauseover.gif"
cursor="hand"
/>
```

```
<button id="play"
left="30"
top="98"
image="play.gif"
hoverImage="playover.gif"
mappingImage="playmap.gif"
transparencyColor="#ff00ff"
mappingColor="#0000FF"
onClick="player.controls.play()"
upToolTip="Play"
cursor="hand"
```

/>

```
<buttongroup  
id="nextbtn"  
left="35"  
top="41"  
showBackground="false"  
image="for.gif"  
mappingImage="formap.gif"  
hoverImage="forover.gif"  
transparencyColor="auto"  
cursor = "hand" >  
<nextelement id="next" mappingColor="#6C6663" />  
</buttongroup>
```

```
<button id="pre"  
left="40"  
top="225"  
image="prev.gif"  
hoverImage="prevover.gif"  
mappingImage="premap.gif"  
mappingColor="#3F3333"  
onclick="jscript:player.controls.previous()"  
upToolTip="Previous "  
enabled="wmpenabled:player.controls.previous"  
cursor="hand"  
/>
```

```
<button id="close"  
    left="587"  
    top="62"  
    image="close.gif"  
    hoverImage="closeover.gif"  
    mappingColor="#7A3636"  
    onclick="view.close()"  
    upToolTip="Close"  
    cursor="hand"/>
```

```
<button id="max"  
    left="513"  
    top="47"  
    hoverImage="maxover.gif"  
    mappingColor="#7A3636"  
    onClick="view.returnToMediaCenter()"  
    upToolTip="Return To FullMode"  
    cursor="hand"  
/>
```

```
<button id="repeat"  
    left="589"  
    top="226"  
    hoverImage="repeat.gif"  
    onclick="player.settings.setMode('loop', down);"  
    upToolTip="Repeat On"  
    downToolTip="Repeat Off"  
    sticky="true"
```

```
        cursor="hand"  
    />
```

```
<button id="mute"  
    left="517"  
    top="232"  
    hoverImage="mute.gif"  
    mappingColor="#7A3636"  
    onclick="jscript:player.settings.mute=down;"  
    upToolTip="Mute On"  
    downToolTip="Mute Off"  
    down="wmpprop:player.settings.mute"  
    sticky="true"  
    cursor="hand"  
/>
```

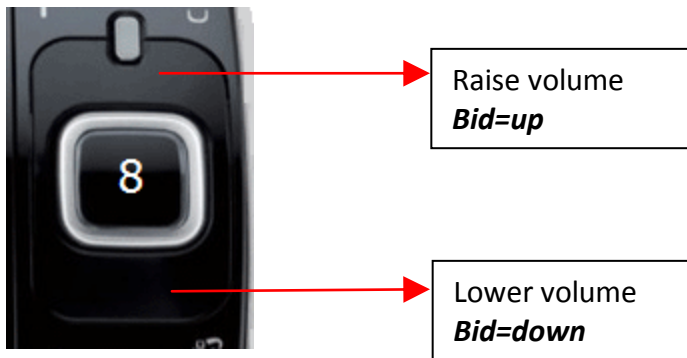
```
<button id="launch"  
    left="546"  
    top="251"  
    hoverImage="logo.gif"  
    downImage="logo.gif"  
    onClick="jscript:player.launchURL('http://riteshhowto.wordpress.com/')"  
    upToolTip="visit: Ritesh Kawadkar's website"
```

```
cursor="hand"  
</>
```

```
<button id="playlst"  
  top = "128"  
  left = "125"  
  sticky="true"  
  hoverImage="playlst.gif"  
  downImage="playlst.gif"  
  mappingImage="playlstmap.gif"  
  mappingColor="#47F9FB"  
  upToolTip = "Show playlist"  
  downToolTip="Hide playlist"  
  cursor = "hand"  
  onClick="myPlaylist.visible=down;tVisible.value=(down?upToolTip:downToolTi  
p);"  
>
```

Now we have written the code for all of our button but in this mobile we don't have any volume button, at first I thought of creating a volume slider but then I stick with buttons to let the integrity of a mobile as it is.

So I have used the right middle portion for the volume, the upper and lower button will act as volume buttons and the middle portion will show the volume



To do that I can cut the portion of that image, then created a hover image for them



And the code for two buttons and the text that shows volume is

```
<button id="up"
  top = "95"
  left = "541"
  width = "40"
  hoverImage="up.gif"
  onClick = "player.settings.volume =
  player.settings.volume + 5"
  upToolTip="Increase Volume"
  cursor = "hand"
/>
```


```
<button id="down"
  top = "193"
  left = "541"
  width = "40"
  hoverImage="down.gif"
  onClick = "player.settings.volume =
  player.settings.volume - 5"
  upToolTip="Decrease Volume"
```

```
        cursor = "hand"  
    />
```

Now code for the volume text

```
<TEXT  
    top = "133"  
    left = "462"  
    width = "200"  
    fontSize = "17"  
    justification = "Center"  
    ForegroundColor = "white"  
    value = "wmpprop:player.settings.volume"  
/>
```

Now our skin is complete oooooooops! I forgot to tell where we will see the video That's the main part of any skin; I have chosen the middle portion of the skin for that.

We will start this with the smallest thing i.e. slider, we already have edited our image for that in the very start. We need a slider button  and the strip at which it should slide that we have already done. Now we have to place this slider button on the green part of the mobile.

The code for slider is

```
<SEEKSLIDER
```

```

left="165"
top="246"
width="295"
height="10"
backgroundColor="none"
thumbImage="thumb.gif"
borderSize="0"
tooltip="Seek (current position)"
/>

```

Now our slider is also ready now we should work on video
To add the video at the middle of the mobile here is the code

```

<VIDEO
id = "hiddenvideo"
backgroundColor = "none"
top = "47"
left = "150"
width = "320"
height = "201"
/>

```

Now our video is also complete but what about audio, yes, your audio is also completed, you can also play your audio and your slider will also respond to it. But to give a good skin you must inherit some audio properties in it too. I.e. you can provide the basic information of your file and the time left etc.



For displaying time

```
<text id="time"  
    left="385"  
    top="50"  
    width="100"  
    fontSize="9"  
    scrolling="false"  
    scrollingAmount=""  
    scrollingDelay="10"  
    fontSmoothing="true"  
    foregroundColor="#000000"  
    fontStyle="bold"  
    justification="center"  
    value="wmpprop:player.controls.currentPositionString"  
    fontFace="arial narrow,arial,tahoma,verdana"  
>
```

For displaying file name

```
<TEXT  
    top = "50"  
    left = "160"  
    width = "200"  
    height = "24"  
    backgroundColor = "none"  
    foregroundColor = "black"  
    justification = "Center"  
    scrolling = "true"  
    scrollingAmount = "1"  
    scrollingDelay = "50"  
    value = "wmpprop:player.status"
```

</>

But we have left one more thing that is the playlist section, first I thought of creating a playlist in another view but then I found that I can utilize me mobile also for that.



The coding for this is

```
<PLAYLIST id="myPlaylist"  
    top = "44"  
    left = "160"  
    width = "301"  
    height = "201"  
    visible="false"  
    enabled="true"  
    dropDownVisible="false"  
    columns="Name;Duration"  
    foregroundcolor="yellow"  
    itemPlayingBackgroundColor="black"  
    BackgroundImage="playlstimage.gif"  
>
```

Now the complete code

<theme

```
title="Batman Begins"  
author="Ritesh Kawadkar"  
copyright="Ritesh Kawadkar BATMAN BEGINS™ . All rights reserved."  
version="1.0"  
>
```

<view

```
left="0"  
top="0"  
width="690"  
height="410"  
resizable="false"  
titlebar="false"  
title="Batman Begins"  
scriptFile="Batman Begins.js"  
onload="init()"  
backgroundColor="none"
```

>

<subview

id="mainview"

backgroundImage="main_bg.png"

transparencyColor="#ff00ff"

>

<button id="minimize"

left="530"

top="32"

hoverImage="minover.gif"

mappingImage="minmap.gif"

transparencyColor="#ff00ff"

mappingColor="#00ffff"

onClick="view.minimize()"

upToolTip="Minimize"

cursor="hand"/>

<PAUSEBUTTON

visible = "wmpenabled:player.controls.pause"

zindex = "2"

left = "30"

top = "99"

image = "pause.gif"

hoverimage = "pauseover.gif"

cursor="hand"

/>

```
<button id="play"  
  left="30"  
  top="98"  
  image="play.gif"  
  hoverImage="playover.gif"  
  downImage=""  
  mappingImage="playmap.gif"  
  transparencyColor="#ff00ff"  
  mappingColor="#0000FF"  
  onClick="player.controls.play()"  
  upToolTip="Play"  
  cursor="hand"/>
```

```
<button id="stop"  
  left="29"  
  top="160"  
  image="stopnorm.gif"  
  hoverImage="stopover.gif"  
  downImage=""  
  mappingImage="stopmap.gif"  
  transparencyColor="#8080FF"  
  mappingColor="#8080FF"  
  onClick="player.controls.stop()"  
  upToolTip="Stop"  
  cursor="hand"
```

/>

```
<buttongroup id="nextbtn "  
    left="35"  
    top="41"  
    showBackground="false"  
    image="for.gif"  
    mappingImage="formap.gif"  
    hoverImage="forover.gif"  
    transparencyColor="auto"  
    cursor = "hand">
```

```
    <nextelement id="next" mappingColor="#6C6663" />  
</buttongroup>
```

```
<button id="pre"  
    left="40"  
    top="225"  
    image="prev.gif"  
    hoverImage="prevover.gif"  
    mappingImage="premap.gif"  
    mappingColor="#3F3333"  
    onclick="jscript:player.controls.previous()"  
    upToolTip="Previous "  
    enabled="wmpenabled:player.controls.previous"  
    cursor="hand"  
  
/>
```

```
<button id="close"  
    left="587"
```

```
top="62"  
image="close.gif"  
hoverImage="closeover.gif"  
mappingColor="#7A3636"  
onclick="view.close()"  
upToolTip="Close"  
cursor="hand"  
/>
```

```
<button id="max"  
left="513"  
top="47"  
hoverImage="maxover.gif"  
mappingColor="#7A3636"  
onClick="view.returnToMediaCenter()"  
upToolTip="Return To FullMode"  
cursor="hand"  
/>
```

```
<button id="repeat"  
left="589"  
top="226"  
hoverImage="repeat.gif"  
onclick="player.settings.setMode('loop', down);"  
upToolTip="Repeat On"  
downToolTip="Repeat Off"  
sticky="true"  
cursor="hand"  
/>
```

```
<button id="mute"  
    left="517"  
    top="232"  
    hoverImage="mute.gif"  
    mappingColor="#7A3636"  
    onclick="jscript:player.settings.mute=down;"  
    upToolTip="Mute On"  
    downToolTip="Mute Off"  
    down="wmpprop:player.settings.mute"  
    sticky="true"  
    cursor="hand"  
>
```

```
<button id="up"  
    top = "95"  
    left = "541"  
    width = "40"  
    hoverImage="up.gif"  
    onClick = "player.settings.volume =  
player.settings.volume + 5"  
    upToolTip="Increase Volume"  
    cursor = "hand"  
>
```

```
<button id="down"  
    top = "193"  
    left = "541"  
    width = "40"
```

```
        hoverImage="down.gif"  
        onClick = "player.settings.volume =  
        player.settings.volume - 5"  
        upToolTip="Decrease Volume"  
        cursor = "hand"  
    />
```

```
<button id="launch"  
    left="546"  
    top="251"  
    image=""  
    hoverImage="logo.gif"  
    downImage="logo.gif"  
    onClick="jscript:player.launchURL('http://riteshhowto.wordpress.com/')"  
    upToolTip="visit: Ritesh Kawadkar's website"  
    cursor="hand"  
/>
```

```
<TEXT  
    top = "133"  
    left = "462"  
    width = "200"  
    fontSize = "17"  
    justification = "Center"  
    ForegroundColor = "white"  
    value = "wmpprop:player.settings.volume"  
/>
```

<SEEKSLIDER

```
left="165"  
top="246"  
width="295"  
height="10"  
backgroundColor="none"  
thumbImage="thumb.gif"  
borderSize="0"  
tooltip="Seek (current position)"/>
```

<text id="time"

```
left="385"  
top="50"  
width="100"  
fontSize="9"  
scrolling="false"  
scrollingAmount=""  
scrollingDelay="10"  
fontSmoothing="true"  
foregroundColor="#000000"  
fontStyle="bold"  
justification="center"  
value="wmpprop:player.controls.currentPositionString"  
fontFace="arial narrow,arial,tahoma,verdana"
```

/>

<TEXT

```
top = "50"  
left = "160"
```

```
width = "200"  
height = "24"  
backgroundColor = "none"  
foregroundColor = "black"  
justification = "Center"  
scrolling = "true"  
scrollingAmount = "1"  
scrollingDelay = "50"  
value = "wmpprop:player.status"  
/>
```

<VIDEO

```
id = "hiddenvideo"  
backgroundColor = "none"  
top = "47"  
left = "150"  
width = "320"  
height = "201"  
/>
```

<PLAYLIST

```
id="myPlaylist"  
top = "44"  
left = "160"  
width = "301"  
height = "201"  
visible="false"  
enabled="true"  
dropDownVisible="false"  
columns="Name;Duration"
```

```
        foregroundcolor="yellow"  
        itemPlayingBackgroundColor="black"  
        BackgroundImage="playlstimage.gif"  
    />
```

```
<button id="playlst"  
    top = "128"  
    left = "125"  
    sticky="true"  
    hoverImage="playlst.gif"  
    downImage="playlst.gif"  
    mappingImage="playlstmap.gif"  
    mappingColor="#47F9FB"  
    upToolTip = "Show playlist"  
    downToolTip="Hide playlist"  
    cursor = "hand"  
    onClick="myPlaylist.visible=down;tVisible.value=(down?upToolTip:downToolTi  
p);"/>  
</SUBVIEW>  
</view>  
</theme>
```

So here your skin definition file ends now you have to create java script file for the events to take place

We have only used one javascript function in the above written code that is for increasing and decreasing volume save this code as **batman.js**

```
function init()
{
}

function updateVolToolTip(id){
    vol = "";
    vol += player.settings.volume;
    eval(id + ".toolTip = vol");
}
```

When all your files are ready compress all the file to a zip file then open command prompt and rename the zip file to **batman.wmz** and this is your skin package file which you can distribute.

I have enclosed all the artwork, script file and skin definition file in the **batman source** folder.

Creating a skin is a tough task but if you want any reference at any where you can ask me but a better option is decompress different **wmz** files and view their actual coding.

If you found any problem or confusion then ask me I am available at ritesh_kawadkar@hotmail.com or visit my blog and leave a reply there at www.riteshhowto.wordpress.com.