Introduction:

Creating your own art work is a necessity for most independent developers. Due to the budget restraints or in a lot of cases the complete lack of a budget a lot of young indie game developer can't afford to hire an artist or buy art assets.

With the help of free software like gimp, inkscape, truespace, daz studio and vue pioneer (just to mention a few) combined with a basic understanding of art creation pretty much anyone can create impressive and professional looking results.

I will try to start with some basic ideas and exercises to improve this kind of understanding. All of the examples will be based on free software. The workflow will be similar if you work with different software like Adobe Illustrator, Adobe Photoshop, CorelDraw or others. I will try to mention the different approaches for those software packages. With the vast variety of software available at the moment and the sheer endless amount of our art creation tools and techniques it is impossible to cover everything but I will try to keep my examples basic enough to work with the software of your choice.

Let me start by clarifying some common beliefs when it comes to creating game art.

"I need expensive software tools to create truly professional game art."

No, you don't! There is a huge amount of free tools available that offer a true alternative. Gimp is one of the most well-known examples in the 2D realm as well as Blender in 3D field.

For the full time game artist upgrading your tools to 'industry standards' makes sense. Especially when collaborating with others using standard file format makes sharing and exchanging art a lot easier.

"Buying an expensive tool will automatically create better art."

No, it won't. It's always the artist creating the art that makes it great. Given the simplest tools like pen and paper a good artist can still create stunning pieces, while the most sophisticated tools still need a good artist to create something special.

"I can't do art. I can't even draw a stick figure."

Yes, you can. This is where modern computers to come in and allow you to create good game art without having a graphic arts degree.

"My game is good as it is. I don't need art."

Yes, you do. The independent game market is getting larger and larger and is attracting a lot more attention than it used to a few years back. In order to stand out your game should be the whole deal - have a great game play as well as rewarding and consistent visuals and matching sound and music.

Common hurdles

High Expectations:

One of the main problems facing independent developers are the expectations they have themselves. For single developers or small studios it is close to impossible to create AAA games match the quality of big studios. You should try and aim for the stars. Making games is all about that. Do the best you can and constantly push your limits and improve your skills...

but thinking realistically and adjusting your expectations to your abilities and your budget is a big step towards creating the best game you can create.
Defining a theme:
A lot of the time game creation happens with a spark. We have an idea of how the game playing might work and start creating. Creating very concrete in game art in the early stages of development can often lead to problems as the game evolves during development. It usually helps to create a working game engine/ core gameplay before starting on the actual artwork. Once you know how the game plays it’s a lot easier to find a visual theme that encompasses the whole game.

Consistency:
Creating a consistent look and feel is a key element in creating a good gaming experience. It starts with the icon, the splash screen and goes all the way through to the game over screen. The most common mistakes are:
- the overuse of fonts - stick to 2 or 3 for the whole game UI [unless the font is used in images as lettering for shops/ packaging/ etc.]
- drastic changes in light and contrast - keep screens on a similar level - you can progress through the colour realm - usually starting out less colourful and getting more colourful for boss/ epic scenes
- photoshop effects - they are fun but a lot of ‘artist’ think the more you use the better the image will be... My suggestion is limit your use of fx to a few and keep reusing and varying them
- lighting - look at your screens and imagine the light sources needed to create the highlights, shadows of your ingame/ ui elements... It’s scary how often you find lights being randomly used for objects that appear on the same screen

Losing focus:
It is only easy to get carried away with your art work as well as game play or coding. We all tend to focus on those elements we like to do while neglecting those we don’t. A good example is generally the menu system/ UI. These usually are implemented at a late stage in the development with motivation at a low point. Yet they are one of the first things the player gets to see and they can greatly define the look and feel of the game.

Let’s get started

The first tutorial is based on inkscape using mainly the circle tool [marked in orange in the tool bar on the left] and the nodes tool [marked in green].
Indie Games

Start with a circle.
Add another smaller circle in the same colour and an even smaller white one.
Change the colour to black and add another circle with a fifth circle in white for the highlight.

Duplicate the four 'eye circles' and move them over to the other side.
Add a small circle in a darker colour above the eye.
Convert the circle to a path (Path / Object to Path) and use the Edit path tool to deform.

Add another darker circle and deform it's top and bottom nodes to form a mouth.
Duplicate the mouth and change the fill to white.
Create another small dark circle to add some detail to the face...

... and our simple game character based on circles is done.
A very similar result can be created in a bitmap tool [e.g. using circle shapes in gimp]. The work flow is a little different but as long as you keep elements on different layers it’s easy to move, alter and modify.
The second tutorial works the same way - this time using squares:
Start by creating a simple square. Take the square, duplicate and scale it. By using the bottom modifier we keep the new square aligned.

Add more squares to add detail... and alter the nodes to deform them.

Add another square to the design and round the edges by altering the RX and RY values.

Add another squares without rounded corners and rotate it 45 degrees.

Use the noise tool to elongate the diamond shape.

Duplicate it with varied size and rotation.

Add a lighter square at the top to create and deformed copies of the rock to create highlight.

With all the core elements in the design we can easily create variations to make the platforms look less repetitive.
A variation of the common tile is the wooden crate.

After adding two smaller duplicates of the square...

...and we duplicate them again to create boards.

Adding some highlights...

...and a little decor...

...we end up with a quick and simple element for a 2D game.

By combining these basic shapes it's easy to create a simple platformer game. Add more variations to the tiles (e.g., the corner pieces or some simple plants or diamonds to pick up the game will quickly come to life).
The outline version still looks somewhat messy but it shows that the whole scene is made up of nothing but squares and deformed rectangles.

One very useful tool is the gradient fill. Let’s have a look at it in the next tutorial:
1. Start with 3 circles and squash the slightly.
2. Use the gradient tool and choose radial. The two slides show the extent of the gradient.
3. Add a wider duplicate of the centre circle with a 10% opacity dark purple and 2 deformed black circles.
4. Duplicate the eyes and mouth twice with a 20% opacity light yellow and dark purple.
5. After a few more deformed circles at the top and as eyes we end up with a nice halloween pumpkin.
   ... and a first step towards shading out vector illustrations.
Next we are moving on to more complex shapes with the help of combined shapes using union, intersection, difference, exclusion and division.
Start with a circle. Add another smaller circle with a different color. Combine the two with the Path/Difference option to form a ring.

Duplicate the ring twice and scale the rings up. Add another ring a little smaller than the largest and not as wide.

Time to add a gradient fill. Select the linear radiant and draw the gradient direction straight down the last ring.

Do the same with the inner ring and move the darker second ring a little bit upwards.

Create another circle, convert it to a path and use the node tool to deform it.

When double clicking a shape you see a little cross. This is the pivot point. Drag it down to the bottom tip.

...duplicate the object and rotate the copies to form the beams. By selecting all five shapes and then using the gradient fill tool they will be evenly coloured.

I added a lighter duplicate of the 5 shapes with a circle in the centre and a star for decoration as well as a deformed circle at the bottom of the tire for an additional highlight.

The gradient fill is an excellent tool to create shine and metallic looks as well as depth.
This concludes the first post. I hope you have fun trying to recreate some of the tutorials yourself or just play around with inkscape, gimp & co.

...and please let me know what you think about the tutorials, tell me what you would like to see featured or would like me to change.

Read more in Part 2.

Comments

E Zachary Knight 15 Oct 2011 at 7:14 am PST

This is a really awesome tutorial. As a programmer who dabbles in art using Inkscape, this kind of tutorial can really help me. Thanks.