Wyrmsun

Visual Guide

by Jinn and Andrettin

Introduction:

The game's graphics reflect the mythological world incorporated in Wyrmsun's story, a mixture of fantasy, antiquity and the middle ages.

Portraits

They are the most detailed manner of presenting the characters, abilities, technologies and items of Wyrmsun's world; the artistic style is pixel art, as with nearly all the other assets of the game. The graphics have the exact size of 46x38px and a maximum palette of 256 colors in total, 4 of them being *team-colors*; generic shades which change according to the player's faction. The *team-color* can be applied to the character's clothing, to war painting, to the background of the portrait, etc. The portraits tend to comprise the most important part of the subject in question; if it is a unit, use the face or bust; if it is a technology, something that exemplifies or symbolizes it; if it is a spell or ability, a graphic demonstration of it being used or of its effects; if it is an object, a piece of it or, if possible, it in its entirety.

Artistic style:

The portraits have a lightly *cartoonish* artistic style, but with realistic shading.

This style allows better exploring facial characteristics, such as eyes and mouths; or behavioral ones, such as exaggerated expressions (should it be interesting to demonstrate the personality of the subject character); and poses (such as forcing the perspective in order to make the hand or weapon appear together with the face).

The realistic shading is very important to help balance the *cartoonish* style with the more serious themes addressed in the game).

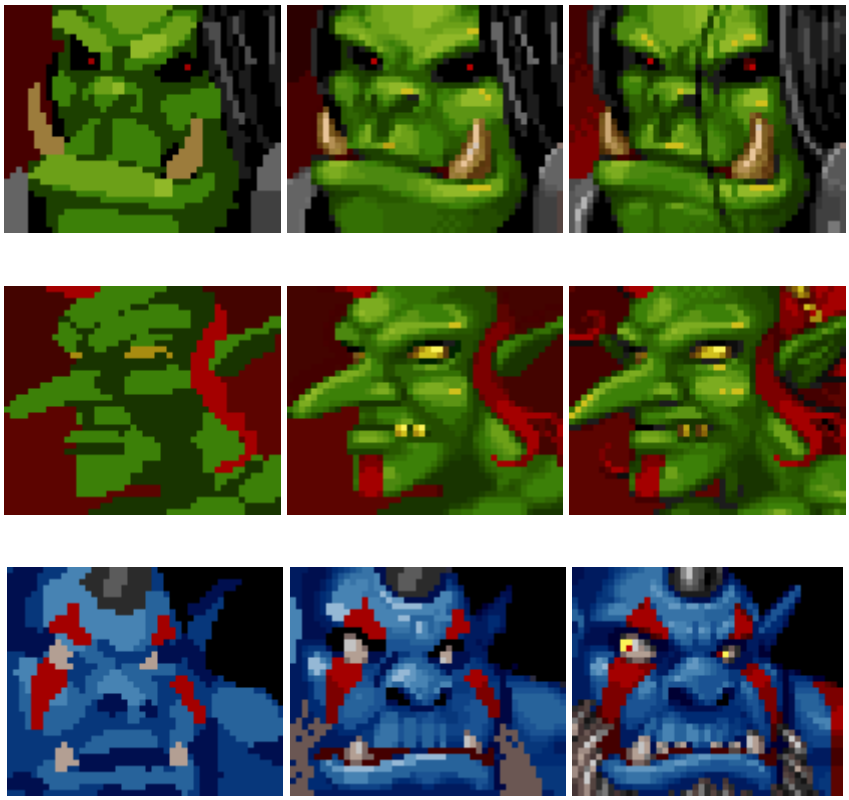
Examples:

Creation tips:

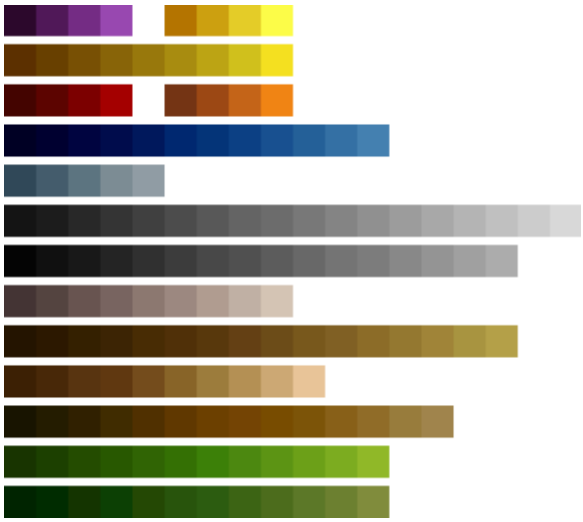
When replicating the artistic style, try always to maintain a soft and punctual shading. Work with ambient lights; avoid, at all costs, Pillow-shading. The shading should be very soft, avoid very abrupt changes of shades, and should it be necessary, create intermediary colors to help with the gradient's blend. Colors should not be affected by lighting, either directly or indirectly (ex: a portrait cannot be portrayed under colored lighting; what is gray is gray, what is brown is brown, what is green is green, etc.). Textures are encouraged, but avoid making them too stark, so that they don't conflict with the soft shading of skin/fabric/metal. Textures can be applied, for example, on the hair, beards, chainmails, wear and tear, etc.

Creation process examples:

Begin by defining the layout and the overall form of the portrait. Define light points and the shadow, and then begin to mix them with the palette's colors. Finally, apply additional details.



Recomended palette:



As you may notice, the colors begin and end without the hue varying much, this is a very important identity of the game's colors.

Remember: you can always create new colors for materials that don't match any of the listed gradients, but try to mantain consistency with the rest of the gradients; New shades can be created should they be necessary (to soften shading, for instance).

Object-Specific Guidelines

"Stand ground" icons display two crossed weapons (usually two of the same weapon), both angled upwards.

Structures

The game's structures can be represented in 3 different sizes:

Large: 128x128px

Medium: 96x96px

Small: 64x64px

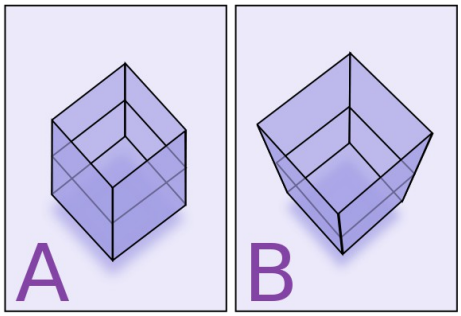
The structures normally possess two frames, one of them being for it under construction, and the other for it completed. The final images are composed in the following manner: The structure's completed frame is placed above, while the under construction frame is placed below. Each structure has two image files, one for the structure itself, and the other one for its shadows. Like this:

primary file + file with the shadows = in-game result

Like the portraits, structures also make use of *team-color*. It can be applied to cloth, paintings, etc.

Artistic style:

The structures are made in an "isometric" projection with Foreshortening (example B). Given that it is an isometric projection, the structures are viewed practically from above, and have a standard lighting that comes from the lower-right, that is, the shadows are always applied at the back of the structures being directed to the upper-left.



The structures can be rotated in their central axis, as long as the rotation values the structure as a whole (or is necessary to fit the canvas). Give preference, however, to the front of the structure being turned toward the player.

Tip: The taller the structure, the greater the effect of foreshortening should be. That helps a lot in the illusion that the structure distances itself from the ground, despite the projection being 2D.

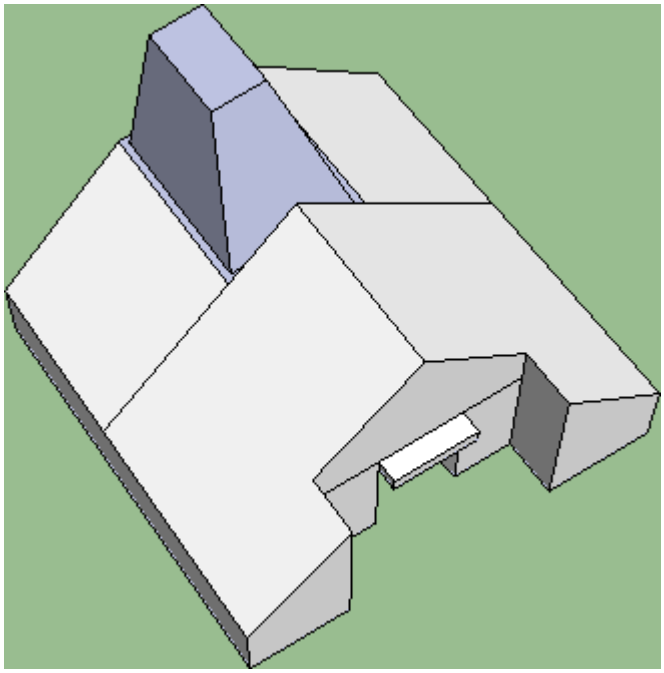
Examples:

Creation tips / Creation process examples:

Sketching the structure in a 3D program (such as Google Sketchup) can be a good way of maintaining a good geometric consistency, and likewise of finding the ideal angle without having to redo the same drawing multiple times.

For the shading, feel free to use textures and good lighting in abundance (maintaining the standard of the other structures). Always try to place elements that represent the structure's purpose (for example: put logs and axes in a lumber mill, hay and fences in stables, weapons and anvils/furnaces in a smithy, etc.).

The scale of structures is flexible, but try to maintain a standard as well, don't create doors or windows that are too incompatible with those of the other structures. That helps to maintain the immersion and the homogeinity of the graphics.



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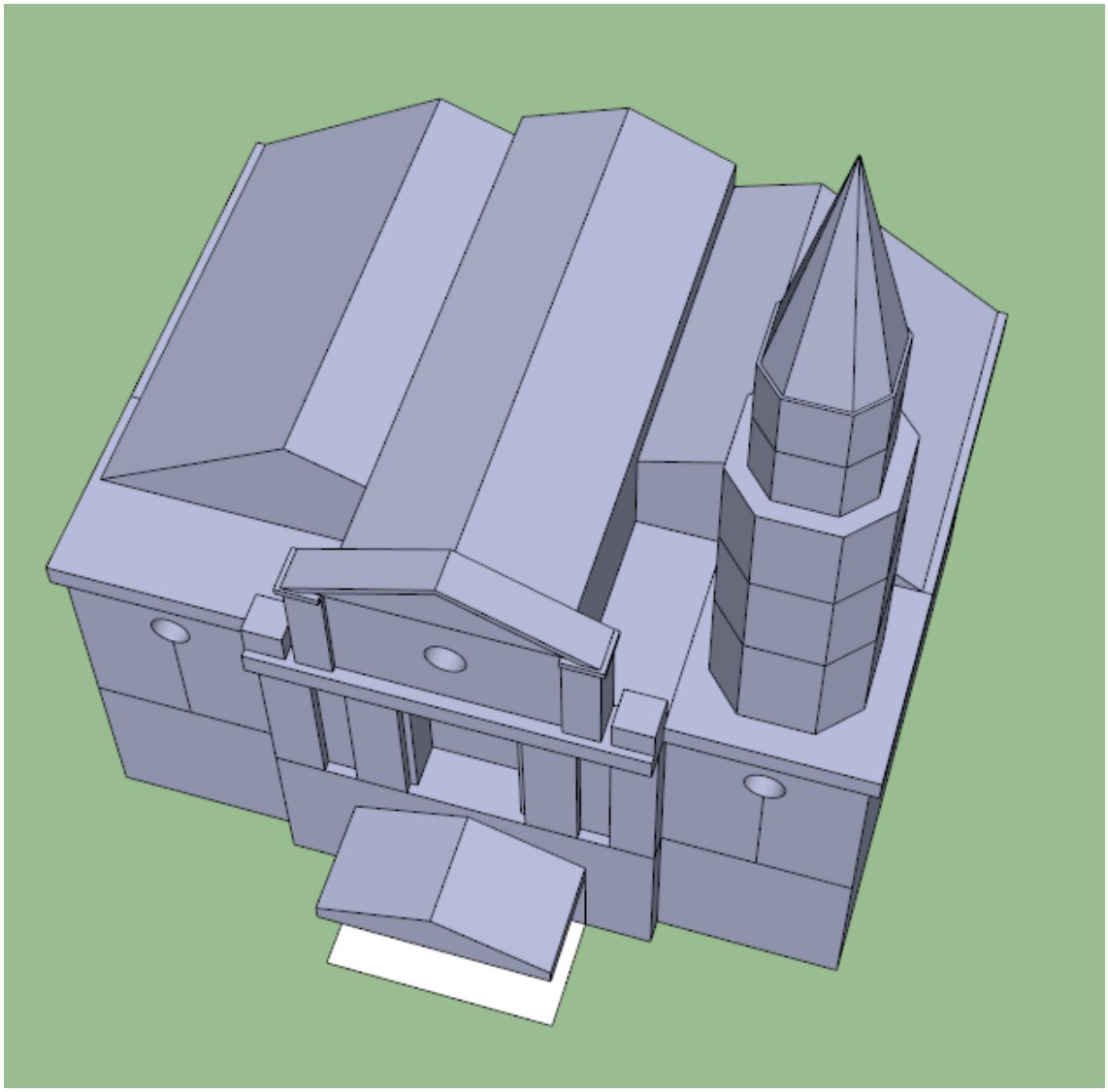
More detailed sketches can be of GREAT help to build more complex structures:



The under construction frame should give the idea that the structure is not yet ready for being used, while also making it clear to the player (and the opponents) which structures is being built (that is, the stage of construction represented shouldn't be a too early one). The construction of all buildings begins from two fixed frames used regardless of structure or faction; And, when being destroyed, they also use two fixed frames:

Under construction frames

Destruction frames

Units

Animated unit graphics are stored in spritesheets, each of which contains multiple frames of animation. A typical spritesheet contains frames for five directions: north, northeast, east, south and southeast. Each of these directions occupies a column in the spritesheet. The rows of the spritesheets are organized based on the sort of animation they belong to: 5 rows being used for the walk animation, 4-5 rows for the attack animation, and 3 rows for the death animation. The first row of a unit's spritesheet is used both for the walk animation and for when the unit is still. The order of frames in the walking animation is typically 1-2-3-1-4-5-1-etc.

Frames can be of any size (as long as all frames in a spritesheet have the same size), as the game draws them centered on the tile(s) they occupy. The size of a unit's graphics should roughly correspond to how many tiles they occupy in-game. It is alright to let a unit overflow the tile(s) it is in, but this shouldn't be exaggerated. For organic units it is a good idea to leave a bit of extra space when choosing the size of their frames, since they will likely need it for certain parts of their animation (i.e. when raising a weapon above their heads, or when falling on their backs and dying).

As with portraits, unit graphics can make use of *team-color*. It should be present for units that aren't meant to be neutral-controlled. *Team-color* is usually applied to a part of the unit's clothing or its shield (if any is present).

The graphics of some units are composed of various layers, each with its own spritesheet. All these spritesheets need to have the same frame size and quantity of frames. They all follow the same animation pattern. The Germanic Erala, for example, is composed of 12 spritesheets, for the following layers: main body, left arm, right arm, hair, clothing, left arm clothing, right arm clothing, pants, boots, weapon, helmet and shadow (with a further layer for the shield being used after the corresponding upgrade is researched). Besides these, the game also supports a layer for the right hand (for units that need to have their right hand from their right arm for drawing-order purposes) and one for a backpack (can also be used for quivers and the like).

The drawing order of the layers is determined dynamically by the engine, based primarily on the direction the unit is facing. The layer drawing order is generally the following, for each direction:

North: Shadow, Shield, Left Arm, Weapon, Right Arm, Body, Left Arm Clothing, Right Arm Clothing, Pants, Clothing, Hair, Helmet, Boots, Backpack

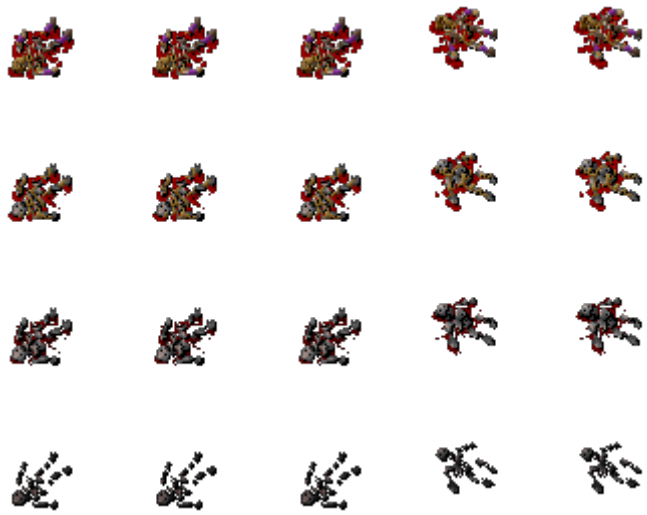
Northeast: Shadow, Shield, Left Arm, Body, Left Arm Clothing, Pants, Clothing, Hair, Helmet, Boots, Weapon, Right Arm, Right Arm Clothing, Backpack

East: Shadow, Shield, Left Arm, Body, Left Arm Clothing, Pants, Clothing, Backpack, Hair, Helmet, Boots, Weapon, Right Arm, Right Arm Clothing

Southeast: Shadow, Backpack, Shield, Left Arm, Body, Left Arm Clothing, Pants, Clothing, Hair, Helmet, Boots, Weapon, Right Arm, Right Arm Clothing

South: Shadow, Backpack, Body, Pants, Clothing, Hair, Helmet, Boots, Left Arm, Left Arm Clothing, Shield, Weapon, Right Arm, Right Arm Clothing

For organic units, the position of the unit's body in the last death row must match the position of the corpse graphics used by the unit, as otherwise the decomposition animation would look inconsistent.



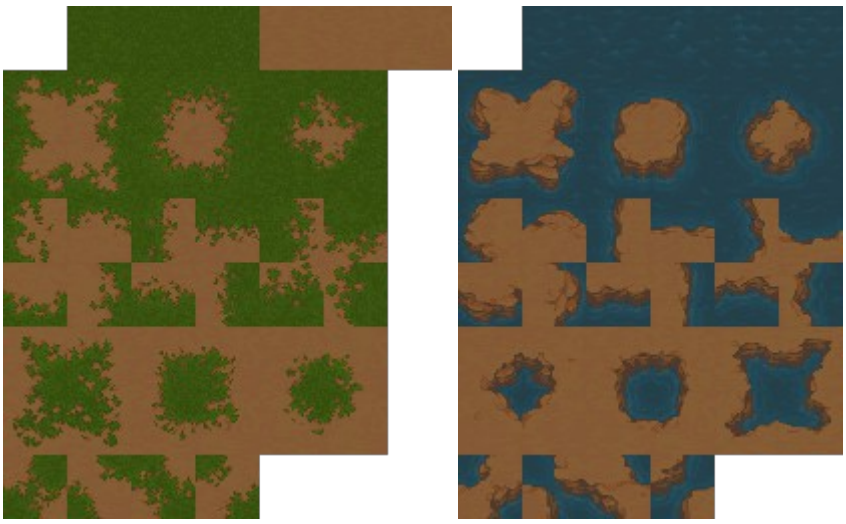
Object-Specific Guidelines

Gameplay-wise, all ships occupy a 64x64 space. Graphically, however, they may overflow that space or be smaller than that by a bit. Transport ships and medium-sized warships (such as triremes and frigates) should have a size very close to the 64x64 space they occupy. Heavy warships (like quinqueremes, ships-of-the-line, ironclads and dreadnoughts) should overflow the 64x64 space somewhat, while still not being so large that they would look weird relative to their gameplay size. Light warships (such as biremes) should have a graphical size a bit under the 64x64 gameplay space they occupy. If a ship is thinner, it should be long enough so that it looks like it occupies more or less the same area as other ships of the same size type. For example, the goblin transport ship is thinner than the dwarven and Teuton transports, but has a similar area than they do, due to the goblin ship being longer. The difference in graphical size of the various ships shouldn't be strictly the same as the size difference of their real-world counterparts: what is important is giving the player the clear impression that ships have sizes appropriate for their roles (i.e. heavy warships being larger). A boat unit should occupy a 32x32 gameplay space, graphically overflowing that space by a bit.

Tiles

The graphics for maps are composed of 32x32 tiles. These represent terrain such as grass, dirt, water, rocks and trees. For areas between different tile types, transition tiles are necessary. Transitions for the four cardinal directions are supported, as are diagonal transitions. Diagonal transitions come in two types, "inner", used when linked to a tile of a different type only

diagonally, and "outer", when otherwise. Tile variations are supported, as are animations (the latter for solid tiles only). For trees and rocks, an additional "destroyed" tile is required.

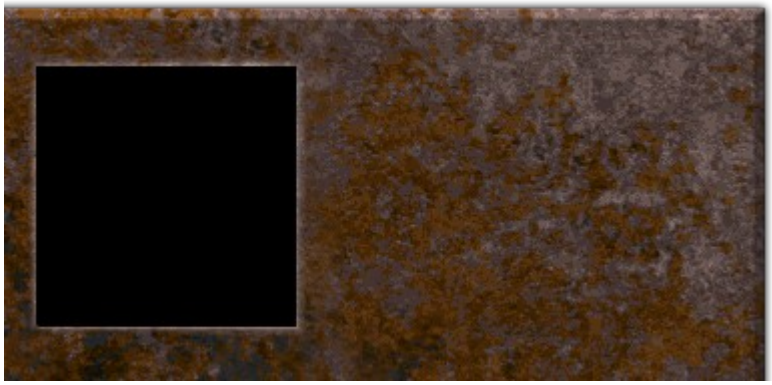


User Interface

The user interface in Wyrmsun is composed of three main elements: the Button Panel, the Information Panel and the Resource Bar. The Button Panel occupies a 243x186 space on the bottom-right of the screen. The image file of the Button Panel itself, however, is 256x200, so that it has enough room for the semi-transparent pixels which make the transition between

the panel and the map area smoother. The Button Panel is at the core of the RTS gameplay, as in it the buttons for the various commands (i.e. attack, train unit) are placed.

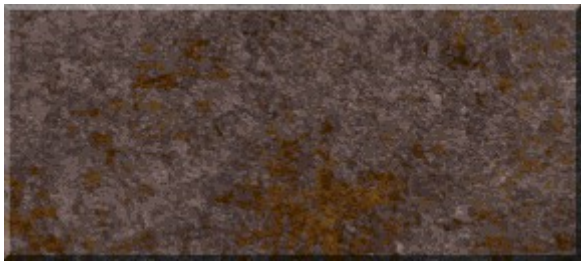
The Information Panel occupies a 380x186 space on the bottom-left of the screen (the image file being 391x200 to allow for the semi-transparent pixels). The left part of the Information Panel contains the minimap, which occupies a 130x130 space starting from the pixel at 16, 43 in the image file. The right part of the Information Panel is where information such as the name and stats of a selected unit is drawn by the engine.

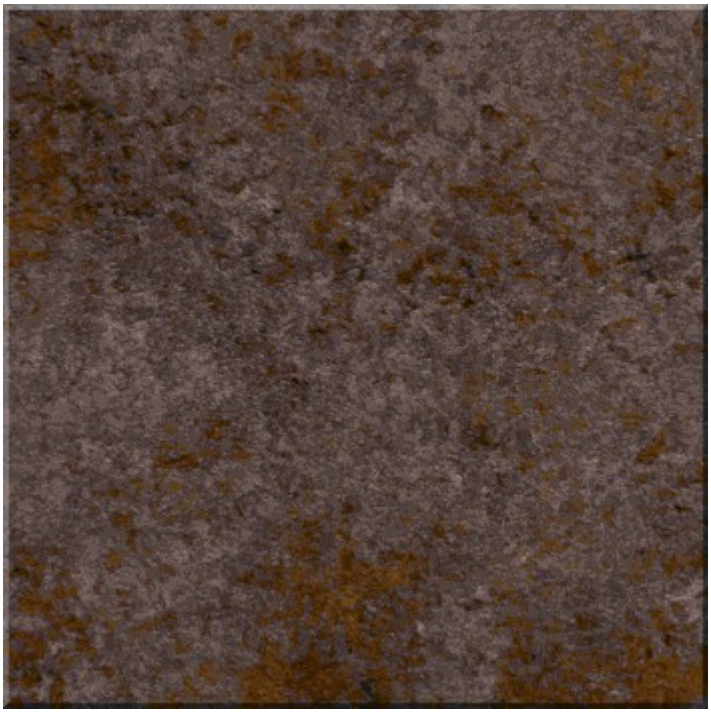


The Resource Bar is 2694x16 (the image file being 269x24 due to the semi-transparent pixels), being attached to the top of the screen. This is where the quantity the player has of a resource is displayed, as well as the menu button.

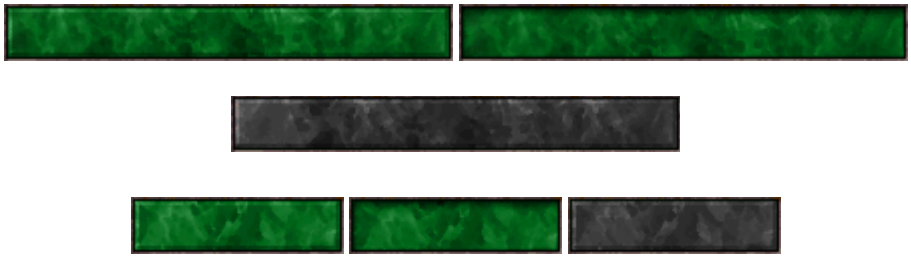
Additionally to these three elements, a "Bottom Filler" graphic is also needed to cover the area between the Information Panel and the Button Panel, and is attached to the bottom of the screen. The Bottom Filler is 1688x177 in size, with its image file being 1688x181 due to the semi-transparent pixels. The greater the resolution width chosen, the more of the bottom filler ends up being displayed in the screen.

Panel graphics are also needed to display the in-game menu, dialogues and the like. They come in five sizes: 256x288, 288x256, 384x256, 288x128 and 352x352.

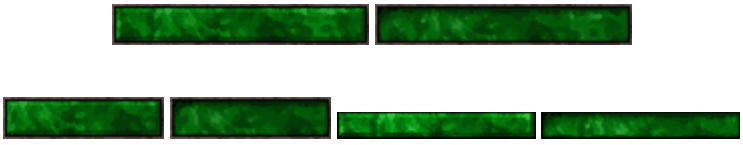




Various buttons are also required. Remember that these should fit well with the chosen appearance for the previous interface elements, since they will be displayed on top of them. Buttons come in five varieties: Large, Small, Thin Medium, Thin Small and Thinest. Large buttons are 224x28 in size, and require grayed (for when the button is disabled) and pressed variations. Small buttons require the same sorts of variations as Large ones, but are 106x28.



Thin Medium (128x20), Thin Small (80x20) and Thinest (99x13) buttons have only a pressed variation.



Arrow buttons are used for several different situations, most frequently sliders and drop-downs. Vertical arrow buttons are 19x20, while horizontal ones are 20x19. Like buttons, they also have a pressed variation.

Besides horizontal arrow buttons, sliders also need graphics for the slider space itself (172x19), and the slider knob (17x17).

Drop-downs use 300x18 graphics for their contents:

And finally, there is the radio button (19x19), which comes in four variations: selected, selected-pressed, unselected and unselected-pressed.