

Art Document:

Introduction:

This document acts as a reference guide and instruction set for artists and designers as to the usage and understanding of the art style and art that is used in the game. This document will be divided into multiple categories explaining each section in detail with examples.

Introduction: The use of this document outlines the desired art style, specifically a stylized realistic approach, that will bring the world of the game to life. The aim is to create a visually immersive experience where players rebuild civilization from scratch while incorporating elements of advanced technology. The art style should strike a balance between realism and stylization, capturing the essence of a thriving city in a visually appealing manner.

Visual Direction: The art style envisioned for the game is a mix of stylized realism and creative design. We want to create a world that feels believable and authentic, yet visually interesting and engaging. The art should be immersive in a way that players can enjoy the vibrant and dynamic city-building experience, where every structure and character has been carefully made to make the overall gameplay experience enjoyable.

Environment and Structures:

1. Terrain and Landscapes:

- The objective is to depict diverse terrains, such as forests, mountains, and bodies of water, with attention to realistic details and textures. Consider the elevation changes, flora, and geological features that add depth to the environment.
- Utilising a colour palette that captures the natural beauty of different landscapes. For example, lush greens for forests, earthy browns for mountains, and vibrant blues for water bodies. Vary the tones and shades to evoke different moods and atmospheres.
- Showcase the evolving state of the world by incorporating remnants of past civilizations. This could include ruins of old buildings, broken infrastructure, or remnants of advanced technology. Blend these elements seamlessly into the environment to create a cohesive and believable world.

Building realistic examples

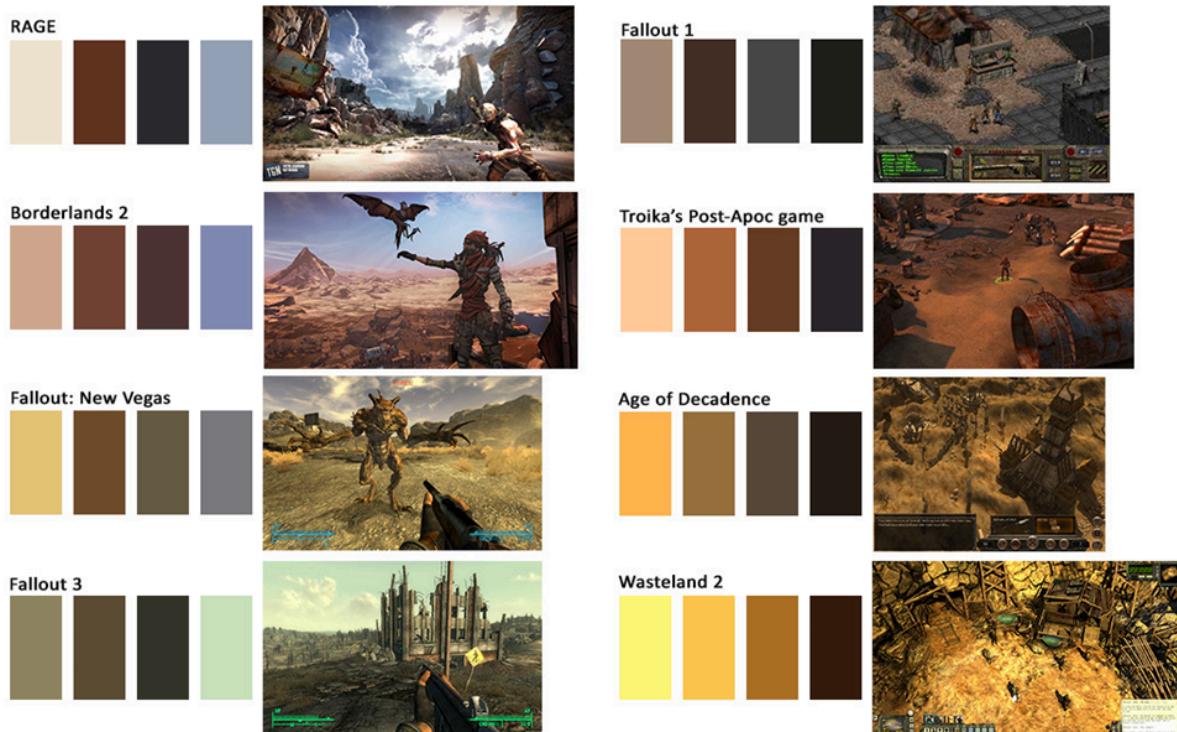


City examples morning and terrains

2. Colour Palette:

- Utilising a colour palette that enhances the realism of the world while maintaining a visually appealing aesthetic. Earthy tones such as browns, greens, and greys should dominate the palette, reflecting the natural elements of the city and the post-apocalyptic environment.
- Introduce vibrant colours sparingly to highlight important elements or areas of interest within the city. For example, a bright red sign or a neon blue light in a futuristic building can add visual interest without overpowering the overall realism of the art style.

Palette examples to follow



Examples for stylized isometric buildings with shadows



3. Buildings and Infrastructure:

- Design isometric structures that reflect historical architectural styles, while incorporating elements of advanced technology and innovation. Research architectural references from different eras and regions to create a diverse range of building designs.
- Pay attention to accurate proportions, textures, and materials to create a sense of authenticity. Buildings should appear weathered and worn, reflecting the passage of time and the environment's impact on the structures.
- Utilise lighting and shadowing techniques to enhance depth and realism in the structures. Consider how light interacts with different materials, such as brick, wood, or metal. Shadows should be realistically cast based on the position of the sun or artificial light sources.







4. Isometric Design and Shadows:

- All buildings and structures should be designed in an isometric perspective, providing a three-dimensional appearance while maintaining a top-down view. This design choice will allow players to easily navigate and interact with the city.
- Incorporating realistic shadows that are cast by the buildings and structures, adding depth and enhancing the visual realism. Shadows should be consistent with the position of the sun or artificial light sources within the game world.



Model Upgrading, concept art and spritesheet:



To effectively convey the progression of buildings in our game, we will utilise a model spritesheet system. This system will showcase the different stages of construction and development for each building, allowing players to visually track the progress of their city.

1. Introduction

The model sprite sheet will consist of a series of images representing the building at various stages of completion. Each image will depict the building evolving from its initial state to its final form. As players construct or upgrade buildings, the spritesheet will dynamically update, visually reflecting the changes in real-time.

This will provide players with a clear visual representation of the building's progress. As they invest resources and time into construction or upgrades, they will witness tangible changes in the appearance of the structure. This system not only enhances the immersion and satisfaction of building development but also helps players strategize and plan their city layout effectively.

The spritesheet images will be designed to align with our desired stylized realistic art style, capturing the details and architectural features of the buildings. Shadows and lighting will be carefully considered to ensure the spritesheet animations maintain visual consistency and realism with the overall game environment.

Through the model spritesheet system, players will have a visual indicator of the evolving nature of their city, creating a rewarding and engaging experience as they witness the growth and transformation of their constructions.

Please note that the specific details of the model spritesheet implementation, including the number of stages, image dimensions, and technical considerations, will be further discussed and finalised in collaboration with the art and development teams.

2. Process

To create a model sprite sheet for displaying building progress in our city builder game, follow these steps:

- 1. Determine the Building Progress Stages:** Identify the different stages of construction or development that a building can go through. This could include initial state, foundation, framework, partial completion, and final form. Determine the number of stages based on the complexity and visual changes of each building.
- 2. Create Concept Art:** Work with the concept artists to create detailed concept art for each stage of the building's progress. Ensure that the concept art aligns with the desired stylized realistic art style and captures the key visual changes at each stage.
- 3. Design the Sprite Sheet Layout:** Determine the dimensions and layout of the spritesheet. Consider factors such as the number of stages, sprite size, and any technical limitations or requirements. Allocate space for each stage's sprite image within the spritesheet.

4. **Create Individual Sprites:** Using the concept art as a reference, create individual sprite images for each stage of the building's progress. Pay attention to details such as proportions, textures, and lighting/shadowing to maintain visual consistency and realism.
5. **Arrange Sprites in the Spritesheet:** Arrange the individual sprite images in the sprite sheet according to the predetermined layout. Ensure that each stage's sprite is properly aligned and spaced within the sheet.
6. **Optimise and Export:** Optimise the spritesheet by reducing file size and optimising compression while maintaining image quality. Export the spritesheet in a suitable format (e.g., PNG) for integration into the game engine.
7. **Implement Spritesheet Animation:** Work with the development team to implement the spritesheet animation system within the game engine. Set up the necessary logic and code to control the display of the spritesheet based on the building's construction progress.
8. **Test and Iterate:** Test the spritesheet animation system in-game to ensure that the building progress is accurately represented. Iterate as necessary to fine-tune the timing, transitions, and visual effects of the spritesheet animation.

3. Creating concept art:

1. **Start with a rough sketch:** Begin by sketching out rough shapes and forms of your building or character. Keep the isometric perspective in mind, and make sure the proportions are correct. Don't worry about details at this stage.
2. **Refine the sketch:** Once you have a basic sketch, refine it by adding more detail and cleaning up the lines. Make sure the design is clear and easy to read from a distance.
3. **Add colour:** Once you have a solid design, add colour to your concept art. Use a colour palette that fits the overall mood and style of your game. Consider using different colour tones for different parts of the building or character to add depth and visual interest.
4. **Add shading and highlights:** To make your isometric concept art look more realistic, add shading and highlights to show where light is hitting the surfaces. This can be done using gradients, shadows, and highlights. Especially at night time.
5. **Add texture:** To give your concept art more depth and detail, consider adding textures to the surfaces of your buildings or characters. This can be done using brushes, patterns, or photos.

6. **Iterate and refine:** Finally, iterate on your concept art and refine it until you are happy with the final result. Get feedback from others on the team or from players to ensure that your designs are clear and effective.
7. **Utilise references:** When creating concept art for isometric buildings and characters, it's essential to use references to enhance the accuracy and realism of your designs. Look for references that align with the architectural style, setting, or character traits you're aiming for.
8. **Architectural references:** Study real-world architectural styles, historical buildings, or reference materials related to your game's setting. Analyse the proportions, details, and materials used in these references to inform the design of your isometric buildings. This will add authenticity and believability to your concept art.
9. **Character references:** Gather visual references for different aspects of your characters, such as clothing, accessories, and body proportions. Look for references that capture the desired traits, occupations, or personalities of your characters. This will help you create more realistic and visually engaging designs.

Remember to keep the style consistent throughout the process.

1. Characters and NPCs:

- Create realistic character designs that capture the diversity and individuality of the people in our city. Consider the post-apocalyptic setting and how it has influenced their appearances and clothing choices.
- Pay attention to details such as clothing, hairstyles, and facial features, reflecting the different roles and professions of the characters. Characters should have a lived-in look, with worn and patched clothing, makeshift accessories, and subtle signs of their occupation.
- Ensure that the characters are visually appealing and relatable, striking a balance between realism and stylization. Use shading and texturing techniques to add depth and dimension to their appearances, while keeping their proportions and anatomy within realistic bounds.

Gathering References

A. Visual References

- Collect a diverse range of visual references, including images, photographs, and concept art, that capture the desired style and realism for the characters.
- Look for references related to facial features, body types, clothing, accessories, and any specific traits or attributes you want to incorporate into your characters.
- Explore various sources such as art books, online platforms, and real-life references to build a comprehensive reference library.

B. Concept Creation: Characters and NPCs

a. Sketching and Ideation

- Start by sketching rough ideas and variations of the characters and NPCs, exploring different shapes, silhouettes, and features.
- Consider their roles, personalities, and backgrounds within the game's narrative to inform their design. Reflect on how their appearance and traits align with their respective roles and storylines.

b. Refining Concepts

- Choose the most promising concept(s) for characters and NPCs and refine them further. Pay attention to details, proportions, and defining features that enhance their realism and uniqueness.
- Incorporate feedback from team members or stakeholders to iteratively refine the concepts until they meet the desired level of realism and align with the game's aesthetics.

C. 3D Modeling

a. Software Selection

- Choose a 3D modelling software that suits your needs and skill level, such as Blender, Maya, 3ds Max, or ZBrush.

b. Blocking Out: Create a basic 3D mesh or "blockout" using simple geometric shapes to establish the overall form and proportions of the character or NPC.

c. Sculpting

- Refine the shape of the character or NPC by adding anatomical details, clothing, and accessories using sculpting tools. Focus on achieving realistic muscle definition, wrinkles, and fabric folds.

d. Retopology

- Create a clean and optimised topology by manually or automatically retopologizing the sculpted model. Ensure proper edge flow and efficient use of polygons.

e. UV Mapping

- Unwrap the model's UVs to ensure efficient use of texture space for later texturing. Consider the character's anatomy and clothing seams for optimal UV layout.

f. Texturing

- Paint or apply textures to the model, simulating realistic materials, skin tones, clothing patterns, and accessories. Utilise tools like Substance Painter or Photoshop to create high-quality textures.

g. Rigging and Skinning

- Set up a skeleton (rig) and skin the character or NPC's mesh to enable realistic movement and animation. Pay attention to proper joint placement and weight painting for smooth deformations.

D. 2D Rendering.

a. Lighting Setup

- Set up virtual lights to illuminate the character or NPC and create desired moods and atmospheres. Experiment with different lighting techniques, such as key lights, fill lights, and rim lights, to enhance their realism.

b. Material and Shader Assignments

- Assign appropriate materials and shaders to the character or NPC's 3D model, enhancing its appearance and realism. Utilise

physically-based rendering (PBR) materials for accurate material representation.

c. Rendering

- Utilise the rendering capabilities of your 3D software to produce high-quality images of the character or NPC from different angles and poses. Experiment with camera angles, focal lengths, and composition techniques.

d. Post-processing

- Apply post-processing techniques such as colour correction, depth of field, and effects to enhance the rendered images. Use image editing software like Photoshop or GIMP for additional adjustments if needed.

E. Sprite Sheet Creation

a. Image Export

- Export the rendered images of the character or NPC from different angles and poses. Ensure high-resolution and appropriate file formats (such as Transparent PNG or TIFF) for further editing.

b. Sprite Sheet Layout

- Organise the exported images into a sprite sheet, arranging them efficiently for animation purposes. Consider the game engine's sprite sheet requirements and guidelines for optimal performance.

c. Animation Considerations

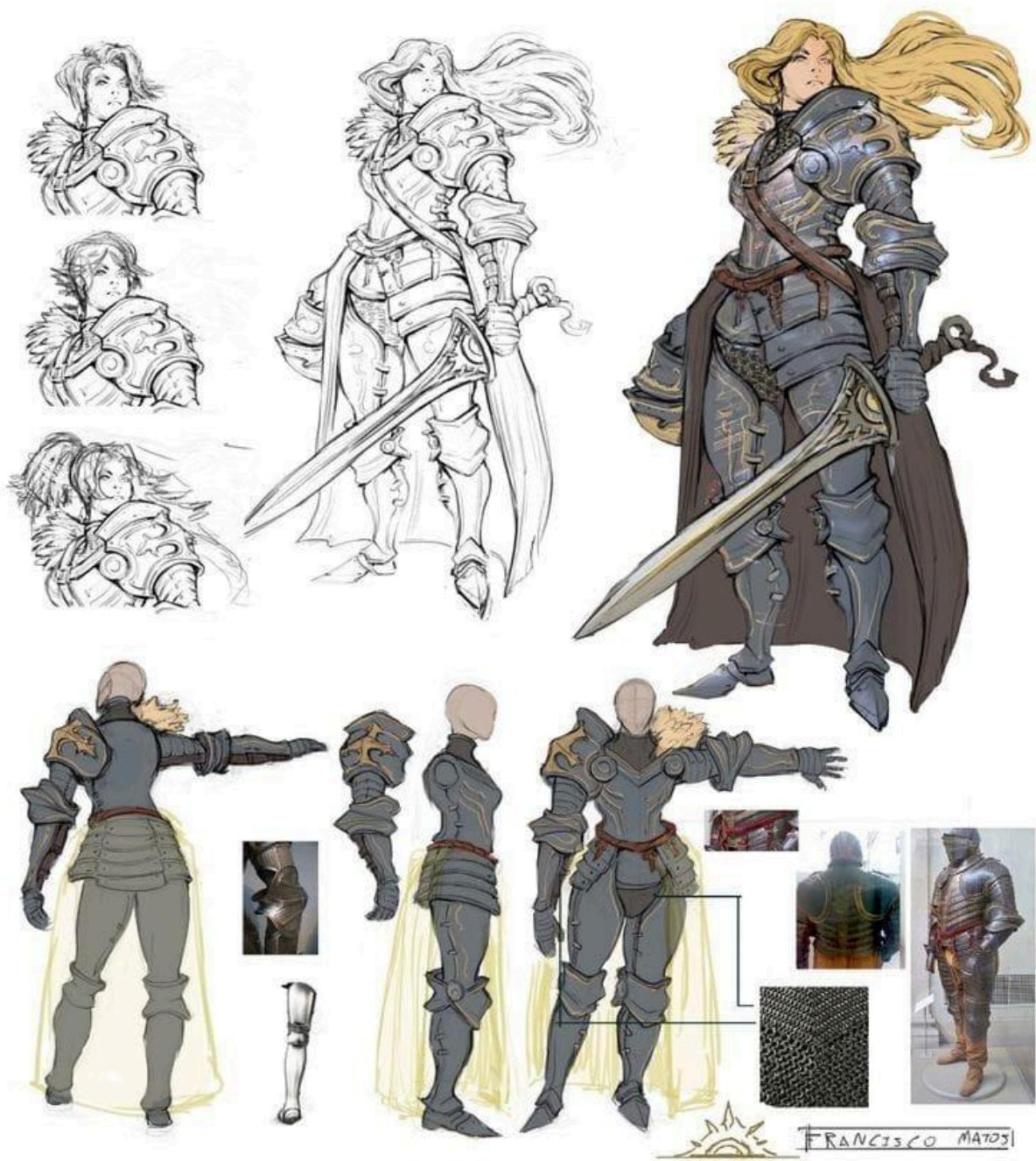
- If needed, create additional frames or variations to support character or NPC animation, such as walking cycles, idle animations, or specific actions. Plan and create animations that showcase realism and fluidity of movement.

d. Finalise Sprite Sheet

- Optimise the sprite sheet by reducing unnecessary colours, removing artefacts, and ensuring it meets the technical requirements of the game engine or platform. Implement

- compression techniques to optimise file size without compromising quality.





Glass Armor. Tutorial

— by Anastasia-berry —





DARK AVENGER

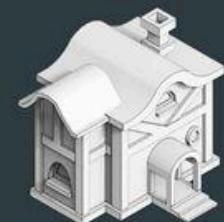
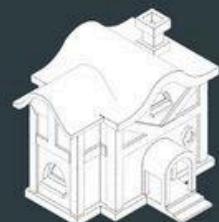
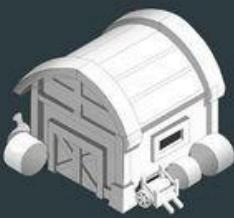
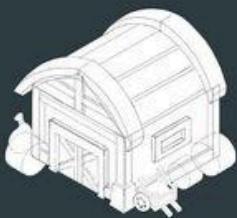
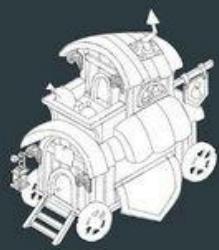
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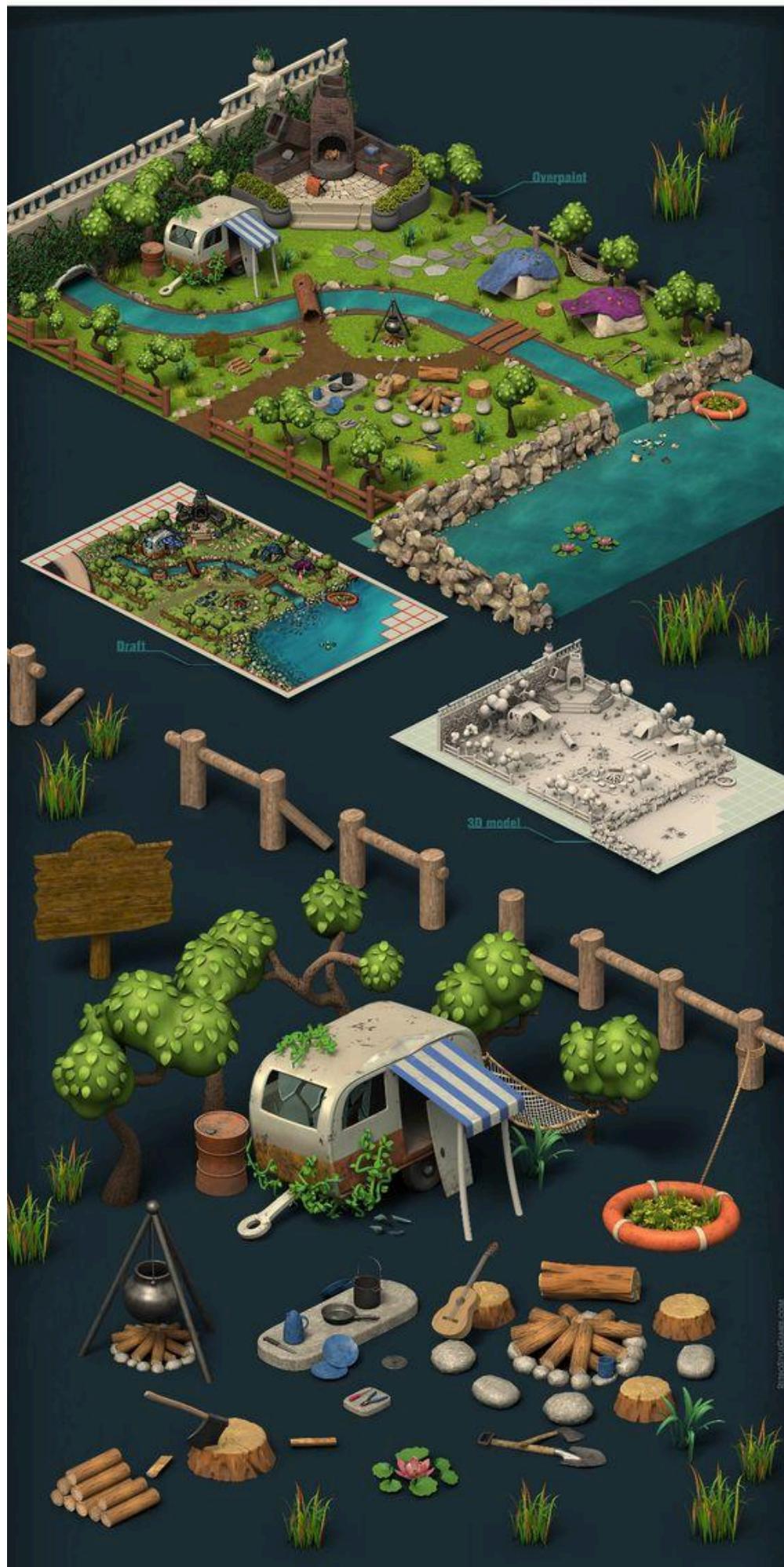
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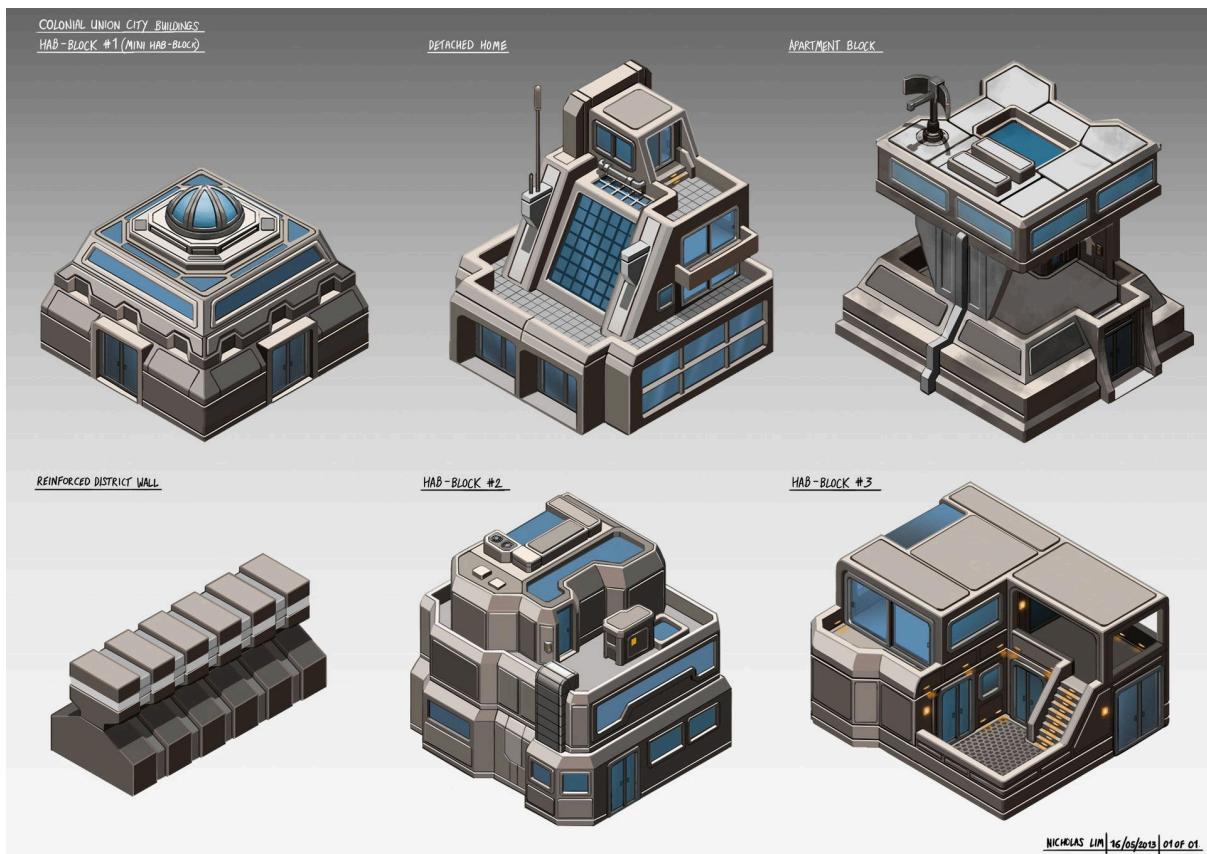


ISOMETRIC HOUSES



THANKS FOR WATCHING!





NICHOLAS LIM | 16/05/2013 | 01 OF 01

Requirements

Building Requirements:

1. Buildings should have shadows
2. Must have 3 models One normal (Day with shadows), One Night with lights, One construction model.
3. Image should be 1007 X 680
4. Max resolution 1920 X 1080
5. Must be rendered in 2D and Created in isometric perspective.
6. Format should be in Transparent PNGs

Character Requirements:

1. Please create 3D characters.
2. Render them in high quality 2D
3. All Characters must be placed in a spritesheet after render
4. Please create a reference sheet as for future reference
5. Animations must be created as required.

For Optimising Art:

[Art optimization tips for mobile game developers part 1 \(unity.com\)](#)

Sprite sheets:

[How to create a sprite sheet \(codeandweb.com\)](#)