El desesperado

\*Note: Sub-titles are not captured in Xplore and should not be used

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*Abstract*—The objective of this project is to practice all the topics covered in the class. We made an artistic representation of the painting “el desesperado” by *Gustave Coubert,* adapted to the new age we are living in (covid 19), our intention is to use this painting to represent how this pandemic and lockdown has affected all of us.

Keywords—// poner palabras clave :v

# Introducción

La obra ***“el desesperado”*** realizada en 1845 por el francés *Gustave Coubert*, la cual tiene como objetivo mostrar al espectador la desesperación e impaciencia por un futuro incierto (1). Es por ello por lo que decidimos utilizar esta obra para hacer una representación sobre la situación actual sobre el Covid-19 y como esta nos ha afectado de muchas formas, desde la parte económica, nuestro estado de animo al grado de algunos por llegar a la desesperación, sin saber que nos aguarda para el futuro.

# Desarrollo

## Visión artistica

La idea principal del proyecto es representar como ha afectado al ser humano la pandemia por la que estamos pasando, esto lo hacemos con la interpretación de la obra ***“el desesperado”*** de *Gustave Coubert* (1), la cual resalta la angustia y la locura. Sus ojos desorbitados y sus manos crispadas plasman perfectamente el sentimiento que se ha acumulado a lo largo del encierro en nuestros hogares por más de un año.

## Detalles técnicos

El programa fue desarrollado ***Processing***, el cual es un entorno de desarrollo integrado de código libre basado en java, su uso e implementación es bastante sencilla, ideal para la producción de proyectos con enfoque artístico. (2)

Processing cuenta con la opción de la utilización de ***Peak3D (P3D),*** el cual admite gráficos en 2 y 3 dimensiones.

Al permitir varios tipos de elementos, el proyecto se realizó aprovechando esta opción, por lo que utilizamos 2 dimensiones en el caso de la pintura realizada originalmente en óleo. Fue difícil conseguir una imagen completa de la obra, por lo que recreamos algunas partes de la pintura original para la elaboración del proyecto, respetando el estilo o técnica con la que se realizó, mediante programas de dibujo (autodesk).

Imagen que contiene hombre, bolsa, puesto, vistiendo

Descripción generada automáticamente

Fig. No.1: Imagen original “el desesperado”

Imagen que contiene hombre, bolsa, sostener, vistiendo

Descripción generada automáticamente

Fig. No.2: Imagen recreada y adaptada para el proyecto

Para el escenario se utilizaron elementos en 3 dimensiones, los cuales fueron desarrollados en ***Blender*** desde cero. Éste es un software especializado en la generación de modelos, animaciones y renderizado en tres dimensiones y fue la principal herramienta para realizar todos los modelos usados dentro del proyecto.

Se utilizó un proceso llamado *baking*, con el cuál se le dotó de luces y sombras a las texturas de los distintos modelos. Para poder usar este método, los modelos deben de tener coordenadas UV correctas para sus texturas, además de construir la escena dentro de ***Blender*** (figura 3) con distintas fuentes de luz para que iluminen los objetos; es importante tomar en cuenta cómo es que la luz puede rebotar de un objeto y afectar la iluminación, este rebote se puede notar en la pared derecha donde la luz de la ventana rebota en la colcha de color azul y esto ilumina tenuemente la pared; también se puede notar cerca de la laptop ya que su pantalla ilumina tenuemente la pared. Con todo esto, es posible generar las texturas como la que se puede observar en la figura 4.

Después, se exportaron todos los modelos en formato .obj, cada objeto tiene su propia textura y material para poder ser representado de manera correcta dentro de ***Processing***. El resultado de todo este arduo proceso se puede observar en la figura 5 donde se pueden observar los modelos 3D dentro de ***Processing*** con su iluminación y sombras realistas.

Como un toque un poco estilístico, también se agregó la luz entrando por la ventana, este efecto se realizó con 4 planos y una textura semitransparente.

A parte de todo lo anterior mencionado, fue necesario tomar en cuenta que cada objeto no debería tener más de un tipo de material, ya que si sucede esto ***Processing*** sufre de grandes problemas de rendimiento.

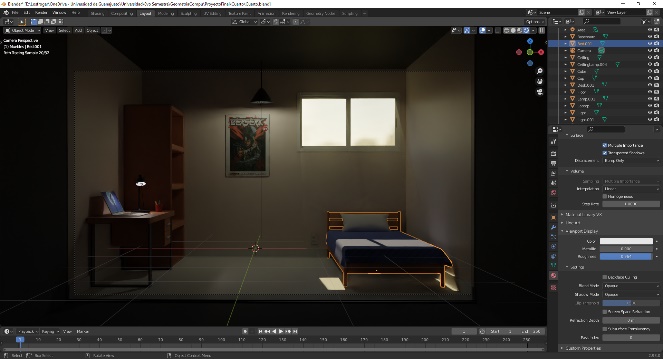


Fig. No.3: Escena 3D dentro de Blender.

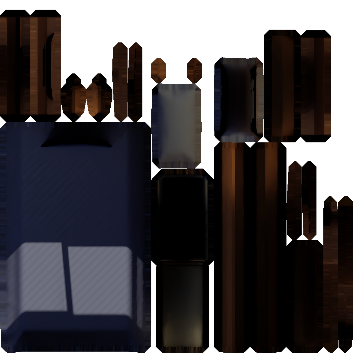


Fig. No.4: Textura de la cama, después del proceso de *bake*.

Recámara con muebles de madera

Descripción generada automáticamente con confianza media

Fig. No.5: Modelos 3D importados en Processing.

## Detalles código

Para el desarrollo de este, se utilizó el tipo de renderizado ***P3D***, el cual nos permite trabajar con elementos en 3 dimensiones.

Diagrama

Descripción generada automáticamente

Fig. No.4: Ejemplo espacio de trabajo en 3 dimensiones

El efecto visual que se obtiene combinando elementos en diferentes dimensiones es muy interesante al ojo humano.

# Prepare Your Paper Before Styling

Before you begin to format your paper, first write and save the content as a separate text file. Complete all content and organizational editing before formatting. Please note sections A-D below for more information on proofreading, spelling and grammar.

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## Units

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*a**b* 

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## Some Common Mistakes

* The word “data” is plural, not singular.
* The subscript for the permeability of vacuum **0, and other common scientific constants, is zero with subscript formatting, not a lowercase letter “o”.
* In American English, commas, semicolons, periods, question and exclamation marks are located within quotation marks only when a complete thought or name is cited, such as a title or full quotation. When quotation marks are used, instead of a bold or italic typeface, to highlight a word or phrase, punctuation should appear outside of the quotation marks. A parenthetical phrase or statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical sentence is punctuated within the parentheses.)
* A graph within a graph is an “inset”, not an “insert”. The word alternatively is preferred to the word “alternately” (unless you really mean something that alternates).
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* In your paper title, if the words “that uses” can accurately replace the word “using”, capitalize the “u”; if not, keep using lower-cased.
* Be aware of the different meanings of the homophones “affect” and “effect”, “complement” and “compliment”, “discreet” and “discrete”, “principal” and “principle”.
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* The prefix “non” is not a word; it should be joined to the word it modifies, usually without a hyphen.
* There is no period after the “et” in the Latin abbreviation “et al.”.
* The abbreviation “i.e.” means “that is”, and the abbreviation “e.g.” means “for example”.

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1. Table Type Styles

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The preferred spelling of the word “acknowledgment” in America is without an “e” after the “g”. Avoid the stilted expression “one of us (R. B. G.) thanks ...”. Instead, try “R. B. G. thanks...”. Put sponsor acknowledgments in the unnumbered footnote on the first page.

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For papers published in translation journals, please give the English citation first, followed by the original foreign-language citation [6].

1. *El desesperado - Gustave Courbet*. (s. f.). HA! Recuperado 14 de junio de 2021, de https://historia-arte.com/obras/el-desesperado-autorretrato-de-courbet
2. *Processing.org*. (s. f.). Processing. Recuperado 15 de junio de 2021, de https://processing.org/

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