Unit 3: Bringing Form to Life
Media Arts 8
15 Class Meetings
Created: August 2022

Essential Questions

- What are common methods used to create assets for a Two-Dimensional(2-D) video game?

Enduring Understandings with Unit Goals

EU 1: Stylistic choices in game design will attract different audiences to your project.

- Create assets in one of three styles: Pixel, Sprite, Vector Rigged
- Compare and contrast Pixel, Sprite, Vector Rigged

EU 2: Photoshop is used to create assets for 2-D Video Games.

- Utilize different workflows to create different asset styles
- Use Photoshop to create simple versions of the three examples
- Create the Main character from the previous unit in the three different styles.
- Prepare the assets so that they can be imported into game development software.

Standards

- MA:Cr1.1.8 Generate ideas, goals, and solutions for original media artworks through application of focused creative processes, such as divergent thinking and experimenting.

- MA:Cr2.1.8 Structure and critique ideas, plans, prototypes, and production processes for media arts productions, considering intent, resources, and the presentation context.

- MA:Cr3.1.8b. Refine and modify media artworks, improving technical quality and intentionally accentuating selected expressive and stylistic elements, to reflect an understanding of purpose, audience, and place.

- MA:Pr5.1.8c. Demonstrate adaptability using tools, techniques and content in standard and experimental ways to communicate intent in the production of media artworks.

- MA:Re8.1.8 Evaluate media art works and production processes with developed criteria, considering context and artistic goals.

- MA:Cn10.1.8a. Access, evaluate, and use internal and external resources to inform the creation of media artworks, such as cultural and societal knowledge, research, and exemplary works.

- MA:Cn11.1.8b. Analyze and responsibly interact with media arts tools, environments, legal, and technological contexts, considering ethics, media literacy, social media, and virtual worlds.

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ISAAC Vision of the Graduate Competencies

Competency 1: Write effectively for a variety of purposes.

Competency 2: Speak to diverse audiences in an accountable manner.

Competency 3: Develop the behaviors needed to interact and contribute with others on a team.

Competency 4: Analyze and solve problems independently and collaboratively.

Competency 5: Be responsible, creative, and empathetic members of the community.
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Unit Content Overview

1. Character Rendering Styles
   o Introduction to the different styles of character designs used in 2-Dimensional character designs.
   o Compare and contrast the styles, how they are made and implemented.
2. Character Asset Rendering (Photoshop, Krita, Illustrator)
   o Simplify the details of a given work of art to create a pixel-based asset in a rendering program.
   o Create an original sprite in a rendering program using a written description of a character
   o Transform the sprite created previously into a vector artwork using vector-based brushes in the rendering program
   o Use concept art from the previous unit to recreate the main character in the three styles introduced in the unit.
3. Character Asset Exporting
   o Prepare the created character asset for exporting by completing the Character Sprite Sheet
   o Submit a complete character sprite sheet ready to be imported into Game Development Software engine.

Key Terms – Pixel, Sprite, Vector, Rendering, Export, Sprite Sheet

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Daily Learning Objectives with *Do Now Activities*

Students will be able to…

- Compare and contrast the three styles of 2-D asset creation.
  - Do Now: What does it mean from something to be two-dimensional?
- Apply photoshop to recreate a character into a less detailed, small pixel model**
  - Do Now: What is a pixel?
  - Do Now: What time period of games does this style bring to your mind?
- Create a character sprite from a written description using photoshop**
  - Do Now: What is a sprite?
  - Do Now: What time period of games does this style bring to your mind?
- Implement new tools in photoshop to create a vector-based character design**
  - Do Now: What is unique about a vector-based image?
  - Do Now: What time period of games does this style bring to your mind?
- Reflect on the unique challenges the three demo assets posed and devise strategies to overcome those challenges.
  - Do Now: What was the most difficult moment you faced in the asset creation process?
- Implement your new strategies by creating a pixel, sprite, and vector style asset of the main character you devised in the previous unit**
  - Do Now: What strategy will you implement today to make the most progress?
  - Do Now: Which of the three styles did you decide to use in your final design?
- Create a "sprite sheet" of your chosen asset in preparation for exporting the file from photoshop****
  - Do Now: Set a Smart Goal for what you would like to accomplish by the end of class today****
- Export the files in the format necessary for the style of sprite created and back up the files by submitting it and using cloud-based storage services.
  - Do Now: What would you do to recover your work if it was lost from the computer that you are working on?

Instructional Strategies/Differentiated Instruction

- Whole group instruction
- Small group instruction
- Strategic grouping
- Guided notes
- Instructional videos
- Paragraph frames and sentence starters
- Teacher/student modeling
- Written feedback – teacher and peer
- Think-write-pair-share and small-group discussions
- Accountable talk
- Homework
- Anchor charts
- Conferencing
- Text and video chunking with guiding questions
- Assignment modification
- Speech to text
- Sentence starters
- Key vocabulary - translation, reinforcing the contextual definition with visuals
- Provide correct pronunciation by repeating student response
- Word wall
- Do-nows as vocabulary review
- Culturally responsive teaching
- Explicit modeling
- Non-verbal Assessments

EL DIFFERENTIATED INSTRUCTION:

- Word walls with visuals
- TWPS (Think, Write, Pair, Share)
- Pre-reading strategies
- Culturally responsive teaching
- Explicit Modeling
- Key Vocabulary
- Graphic Organizers
- Strategic Grouping
- Non-verbal Assessments

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Assessments

FORMATIVE ASSESSMENTS:

- Google Form Surveys
- TWPS
- Accountable Talk Discussions
- Oral Questioning
- Exit Slips
- Do Nows
- Thumbs
- Submission of practice sprites.

SUMMATIVE ASSESSMENTS:

- Unit Task Scoring Guide
- Rubric #3 Teamwork

Unit Task

Unit Task Name: A Hero is Born!

Description: Students will implement one of three strategies to create a working model of the main character they designed in the previous unit. (EU1) They will use Photoshop to create these assets digitally. (EU2) When complete they will have a sprite sheet that can be imported to game development software and animated with actions within that software.

Evaluation: Scoring Guide and Rubric #3 Teamwork.

Unit Resources

- Chromebooks
- Computer Lab
- Wacom Pen Tablets
- Google Classroom
- Google Chrome
- Google Docs, Google Slides
- Teacher computer
- Classroom monitor (TV)
- Photoshop
- Adobe tutorials