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## **Essential Questions**

• How can digital tools be used to communicate ideas?

## **Enduring Understandings with Unit Goals**

EU 1: Games will typically feature a logo and design language for menus in the game.

- Design a logo that can develop interest in the game prior to playing
- Implement interactable menus and Heads Up Display (HUD) or User Interface (UI) elements that reference the logo with their colors/design.

EU 2: Games consist of multiple stages with interactable objects.

- Design multiple stages to play through with variance in challenge.
- Create objectives or puzzles that allow for an immersive gameplay experience

## 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.

## **Unit Content Overview**

- 1. Designing a Logo
  - A logo should be representative of the game, either stylistically aligned with the genre of game or with major elements present in the game itself.
  - Logos can be designed in multiple programs including Photoshop. Krita, Illustrator, etc.
- 2. Designing User Interface (UI)
  - Interfaces will typically also be stylized like a logo with elements of the genre present.
  - UI elements can also be developed in Photoshop. Krita, Illustrator.
  - Adobe XD allows for testing and deployment of UI prior to being pushed to Game development software.
- 3. Gameplay
  - Games will often feature multiple stages and challenges
  - Games can implement criteria that must be completed prior to reaching the goal
  - Further stages can reuse assets from earlier stages while altering colors and tile placement to indicate new environments.
  - Collectibles or consumables in a game can contribute to increased player power and in turn increased player satisfaction with experiencing game content.
- 4. Quality Assurance (QA)
  - o Games are typically tested by QA staff in a development studio to find bugs.
  - QA can be simulated in the classroom through use of Peer Review.

Key Terms – Logo, HUD, UI, Balance, Unity, Proportion, Principles of Design, Collectable, Consumable, Stylize, QA

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## Daily Learning Objectives with Do Now Activities

#### Students will be able to...

- Synthesize the different aspects of the principles of design to implement them in drafting a logo to represent their finished game development. \*\*
  - Do Now: Describe a memorable logo that caught your attention before you knew anything about the product.
  - Do Now: What are key components you have included in your logo that are representative of your game?
- Utilize different tools in Photoshop to add life and personality to your logo.
  - Do Now: When drafting your logo what are some colors you had in mind for it?
- Implement the use of a Menu template in Adobe XD to grasp how to use the program and customize the user experience. \*\*
  - Do Now: Give an example of a positive experience you had using UI within a game
  - Do Now: Give an example of a negative experience you had using UI within a game
- Repurpose design elements in their logo to a main menu splash screen for their game.
  - Do Now: Did you use a premade font in your logo, or did you design your lettering by hand? Why?
- Further iterate on design elements from their main menu to create User Interface (UI) and Heads Up Display (HUD) elements for their game development. \*\*
  - Do Now: Define something that would be considered part of a HUD in a game.
  - Do Now: Why would a game not require a HUD?
- Use existing Asset databases to kind freely available sprites for use as collectible/consumable items within their game.
  - Do Now: What is the major benefit to using a pre-existing asset vs designing one?
- Revisit their stage from the last unit to add in collectibles/consumables that can be tracked on the HUD they designed and picked up by players.
  - Do Now: What is something that players could pick up in your game?
- Create a special effect that empowers the player when a consumable is collected.
  - Do Now: What is a useful ability you could give a player of your game that they shouldn't always have?
- Develop two new stages that scale in difficulty for their game utilizing prior knowledge and assets. \*\*\*
  - Do Now: What is an example of a challenge you could give players that is countered with the empowerment provided by the consumable you implemented?
  - Do Now: What is a method you can use to create the illusion of new environments while using the assets you have already developed?
  - Do Now: Is the first level you developed the easiest level?
- Evauate their game from beginning to end ensuring that challenge is present but not insurmountable.
  - Do Now: What have you don't to keep your game challenging while not making it too frustrating to play?

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- Import the UI and HUD components created in this unit and implement them into the game development project.
  - Do Now: If your game released today would a player have everything necessary to navigate through the game?
- Utilize internet databases and searches to implement music and sound effects to their project. \*\*
  - Do Now: What problems would we run into if we used the newest top radio hit as music in our game?
  - Do Now: What is a process that a developer can use to properly obtain rights to music for their game?
- Perform Quality Assurance (QA) Testing to ensure menus function properly and the game behaves correctly with all the design elements present.
  - Do Now: is there any part of your UI that you are particularly proud of? Anything you would like to improve?
- Perform QA testing for peers to ensure that the game is functioning correctly and provide actionable feedback. \*\*
  - Do Now: What part of your game do you expect your QA peers to struggle with?
  - Do Now: Have you had difficulty in completing any tasks in a project you tested thus far?
- Apply feedback given by peers in order to package a final product for submission.
  - Do Now: You gave it your all, how does it feel to have developed your first video game?

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## **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

#### **SUMMATIVE ASSESSMENTS:**

- Unit Task Scoring Guide
- Rubric #3 Teamwork

## **Unit Task**

#### Unit Task Name: It's Game Time!

**Description:** Students will use Game Development software to package their completed game. The completed game will feature their original logo designed to generate interest in the game. The UI will also mirror aspects of the logo/genre to create a more polished experience. (EU1) Beyond these menus players will find three unique stages of varying challenge designed by the students. (EU2) These stages will feature work that is the culmination of the work completed in previous units combined into a finished product.

**Evaluation**: Unit Task Scoring Guide 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 XD
- Game Development Software
- Game Development Tutorials