**Title – Leonardo.ai Realtime Canvas**

**Concept - AI-Powered Art Generation**

**Theory applied to experiment-** Leonardo.ai uses advanced AI models to assist in creating unique artwork by analyzing patterns and styles from various data inputs. This AI tool enables users to quickly generate creative designs, characters, and landscapes. Through this activity, students will understand how AI can be applied to creative processes, allowing for faster design iterations and exploration of multiple artistic concepts.

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| **Materials required** | **Hardware Requirements:**   |  |  | | --- | --- | | **Components** | **Quantity** | | Computer or laptop with internet access | 1 |   **Software Requirements:**   |  |  | | --- | --- | | **Components** | **Quantity** | | Link- [Leonardo.ai Realtime Canvas](https://app.leonardo.ai/realtime-canvas) | 1 | | Web browser (Google Chrome recommended) | 1 | |
| **Procedure** | **Refer this YouTube link**  [**https://youtu.be/Ad7in0tXs9U**](https://youtu.be/Ad7in0tXs9U) |
| **Procedure to be performed by student** | **1. Open Leonardo.ai Realtime Canvas** • Navigate to [Leonardo.ai Realtime Canvas](https://app.leonardo.ai/realtime-canvas).    **2. Create an Account** • If you don’t have an account, sign up using an email ID. • Log in to access the tool.    **3. Start a New Canvas** • Click on the "Create New Canvas" button to open a blank workspace where you will create your artwork.    **4. Select Your Tool** • Choose from the various available tools: brushes, shapes, or pre-designed elements. • Explore and select the “AI Model” tool to generate AI-based designs.    **Use Case 1: Generate an Image by Drawing** • Start by selecting the “Brush” tool to create a basic sketch or outline of your idea (e.g., a landscape or character). • After drawing the outline, use the AI to automatically enhance your sketch by filling in textures, colors, and styles based on your inputs. • Experiment with different brush sizes and colors to create dynamic illustrations. • Click "Generate" to see how AI transforms your simple drawing into a detailed, stylized image.    **Use Case 2: Create Motion or Animation Elements** • Explore the “Motion” tool (if available) to add dynamic movement to your design. • Choose from preset motion templates (e.g., flying objects, waving hands) and apply them to your characters or elements in the canvas. • Observe how AI adds realistic movements or gestures to static designs, giving life to the artwork. • Export the final result as an animated GIF or video.    **Use Case 3: Generate a Custom Character or Object** • Use the “AI Model” tool to create a custom character or object from scratch. • Enter a text prompt like "Generate a superhero character with blue armor and glowing eyes." • Select a style (e.g., comic, realistic, or abstract) to guide the AI's design. • Allow the AI to generate a unique character or object based on your prompt, and customize it further by adjusting the design using the brush or shape tools.    **5. Customize the Generated Art** • Use the brush tool to add personal touches or adjust any areas of the design. • Experiment with resizing, rotating, and blending elements using the provided features.  **6. Experiment with Variations** • Regenerate the image by tweaking your prompt or style to explore different artistic possibilities. • Observe how AI responds to different inputs and themes.  **7. Save and Export** • Once satisfied with your creation, click “Save” to download your artwork. • Share your design with the class or save it for future projects. |
| **Observation /analysis** | Students will note how the AI interprets their prompts, drawings, and how different styles or themes affect the final output. They should pay attention to the AI's capability in adding creative elements that align with the given instructions. |
| **Conclusion** | Students will conclude how Leonardo.ai can assist in the creative process by generating ideas faster than traditional methods, offering diverse design options with minimal input. |
| **Experiment takeaways** | • Students learn how AI enhances creativity through automation. • They observe the interaction between AI and human input in creating art. • Students understand how AI tools can be used to prototype and generate creative designs efficiently. |
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