SAINT LUCIA CONNECTED DIGITAL SKILLS YOUTH INTERNSHIP
Digital Skills Training

Workshop Title: Exploring Generative AI: Creativity, Responsibility, and Ethics

Pre-requisites:

1. A basic knowledge of search engines and search strategies.
2. The willingness to take on a new challenge.
3. The ability to work with a team.

Description:

This 12-hour workshop is designed to empower young people aged 14 to 16 with the knowledge and skills to effectively, responsibly, and ethically utilize generative AI. Through this engagement participants will discover the exciting world of generative AI and its applications in technology, research, art, music, and text generation. Participants will engage in thought-provoking discussions on the ethical implications of generative AI, including data biases and privacy considerations. They will collaborate with peers and create their own generative AI projects. This workshop is aimed at inspiring critical thinking, creativity, and responsible decision-making in the age of artificial intelligence.

Learning Outcomes:

In this workshop participants will:

1. Discuss real-world applications of generative AI. (1.1, 1.2)
2. Identify the ethical considerations associated with generative AI and its impact on society. (1.5)
3. Discuss the potential biases and issues related to data usage in generative AI.
4. Utilize generative AI tools to create art, music, or text.
5. Evaluate generative AI outputs in terms of quality and authenticity.
6. Use strategies to reduce bias and promote fairness in generative AI applications.
7. Create a product that addresses a basic issue in their communities with the support of generative AI

Workshop Details

Session	Learning Outcomes	Suggested Activities
Introducing AI	Discuss real-world applications of generative AI. (1.1, 1.2) Identify the ethical considerations associated with generative AI and its impact on society. (1.5)	**Introduction to Generative AI (30 minutes)** 1. Start by providing a brief introduction about Generative AI, explaining how it can generate new, creative outputs in various forms such as text, images, music, and videos. 2. Highlight the transformative potential of Generative AI in different industries and real-world applications such as content creation, question answering, image generation, drug discovery, and more. 3. Discuss the ethical concerns, such as accuracy, bias, and the risk of deep fakes. **Exploring Generative AI Tools (30 minutes)** 1. In this part of the activity, participants will explore and test various Generative AI tools. They can use tools like Google's Generative AI Studio or Model Garden, GPT-4 (like this model), or DALL·E 2 for generating text, images, or even music. 2. Encourage them to interact with the tools by giving prompts and questions and observing the generated responses. Remind them that AI is a tool, and the user still retains control. **Researching Generative AI (45 minutes)** 1. After testing the AI tools, let the participants conduct a quick research about the uses and impact of Generative AI in a chosen field, e.g., healthcare, media, or customer service]. 2. Encourage them to find real-world examples and use cases of Generative AI 3. Have them share their findings **Discussion and Reflection (30 minutes)** 1. Conclude the activity with a group discussion. Each participant can share what they've learned from their research, their experience with the AI tools, and their thoughts on how Generative AI might impact their lives and future careers.

Session	Learning Outcomes	Suggested Activities
		2. Discuss the potential benefits and challenges, and the importance of ethical considerations in AI Resources ● What is generative AI? ● Generate text, images, code, and more with Google Cloud AI ● Top 70+ Generative AI Applications / Use Cases in 2023 ● Our children are growing up with AI. Here's what you need to know
AI Biases and Issues	Discuss the potential biases and issues related to data usage in generative AI. Evaluate generative AI outputs in terms of quality and authenticity.	**Group Discussion (30 mins)** 1. Divide students into small groups. Provide them with a question, topic or prompt to use to generate answers from an AI model. 2. Ask them to share their experiences using the AI model, focusing on biases they may have noticed and any potential ethical issues they perceive with the answers generated. **Bias Awareness Activity (20 mins)** 1. Have students take the Unconscious Bias Quiz. 2. After they finish, discuss the results as a class. 3. Discuss how unconscious biases can permeate not just our decisions but also the AI systems. Resources ● Unconscious Bias Quiz – Free Training Games & Activities ● Video: Can we protect AI from our biases? **Creation of Guidelines or Policy (30 mins)**

Session	Learning Outcomes	Suggested Activities
		1. Ask the student groups to design a hypothetical guideline or policy that would help mitigate the issues of bias and ethical dilemmas they've identified in generative AI. 2. These policies should also promote responsible use of AI in their school setting. **Conclusion and Reflection (10 mins)** 1. End the activity with a brief recap and allow students to reflect on their learning. 2. Reinforce that understanding the biases in AI models and knowing how to responsibly use these tools are important skills in the age of digital learning.
Creativity with AI	Utilize generative AI tools to create art, music, or text.	**Exploring AI Tools (60 minutes)** Split students into groups into three groups, each focusing on a different creative output: art, music, and text. **Art Group**: This group will explore image generators like DALL·E and Adobe's Firefly. They'll experiment with creating art by feeding the tool different text prompts and exploring the generated results. **Music Group:** This group will investigate tools like Jukebox and AIVA [6][4], learning how to create music from AI. They can experiment with genre, artist, and lyric inputs to create various musical pieces. **Text Group**: This group will explore text generation tools like ChatGPT, Frase IO, and Copy.ai, and see how AI can assist in writing. They can create their own prompts to generate different types of writing such as stories, poems, or reports.

Session	Learning Outcomes	Suggested Activities
		Resources: Adobe AI Jukebox Best AI Text to Music Generation Tools Top 35 Generative AI Tools by Category (Text, Image…) [2023] **Collaborative Project (120 minutes)** Once each group has had a chance to familiarize themselves with their tools, they will then collaborate on a project where they must integrate all three forms of content: text, music, and art. For instance, they can create a multimedia storybook, a music video, or an interactive game. During this part, encourage students to explore, create, and iterate on their content. They should be encouraged to collaborate, exchange ideas, and use the unique outputs of each tool to enhance their projects. Resources: How Generative AI Is Changing Creative Work **Presentation and Reflection (30 minutes)** Each group will present their projects. Encourage them to explain their creative process, how they utilized the AI tools, the challenges they faced, and how they overcame them. This part of the activity aims to foster critical thinking and communication skills. Close the session with a reflection on the potentials and limitations of generative AI, and how it could influence their creative endeavors in the future. Discuss also the ethical aspects raised in the introduction, asking the participants about their experience related to bias, transparency, and ownership.

Session	Learning Outcomes	Suggested Activities
	Create a product that addresses a basic issue in their communities with the support of generative AI	**Review: Generative AI (30 mins)** 1. Start with a brief review of generative AI, its applications, and benefits. 2. Have students share what they have learnt about how AI tools can augment human creativity and enable the creation of initial drafts for content, images, code, and artwork. **Understanding Community Issues (1 hour)** 1. Guide the teams to identify basic issues in their communities that they would like to address - crime, unemployment, environmental issues, online safety, healthcare etc. 2. Have the teams discuss these issues, their impacts, and potential solutions. **Exploring Generative AI Tools (1 hour)** 1. Review various AI tools and their capabilities, such as GPT-3 for text generation, DALL-E for image generation, and MakerSuite for development. Allow students to share other AI tools that they have come across during previous sessions. 2. Showcase examples of how these tools have been used in creative work and how they can address community issues. **Ideation and Prototyping (2 hours)** 1. Instruct the teams to brainstorm and come up with a concept for a product that addresses their chosen community issue, using the generative AI tools introduced earlier.

Session	Learning Outcomes	Suggested Activities
		2. Support the teams in creating a basic prototype of their product using these AI tools. **Product Presentation and Feedback (1 hour)** 1. Have each team present their product, the community issue it addresses, and how generative AI was used in its creation. 2. Facilitate a feedback session, where each team receives input from their peers and from the facilitators. **Reflective Discussion and Ethical Implications (30 mins)** 1. Conclude the session with a group discussion on the experiences of using generative AI in addressing community issues. 2. Talk about the ethical implications of AI, such as the risks of bias and the importance of responsible use. Resources: ● Adobe AI ● Jukebox ● Best AI Text to Music Generation Tools ● Top 35 Generative AI Tools by Category (Text, Image…) [2023] ● How Generative AI Is Changing Creative Work ● Google AI, Generative AI ● Beyond ChatGPT: 14 Mind-Blowing AI Tools Everyone Should Be Trying Out Now