Theme: “FutureHacks Five: Coding into the Future with AI”

Description: This hackathon is focused on using AI to address real-world problems and make a positive impact on society. Participants will be encouraged to explore how AI can be used to improve various aspects of our world, such as healthcare, education, the environment, and social justice.

Challenge Ideas(Junior Track):

1. Sorting Trash: Develop a simple program that sorts trash into different categories, such as paper, plastic, and glass. Participants can use simple if/else statements to check the properties of the object, such as its color or shape, and determine its category.
2. Traffic Light Simulation: Create a program that simulates a traffic light and controls the flow of traffic. Participants can use simple loops and conditions to change the state of the traffic light and determine when cars should stop or go.
3. Plant Care: Build a program that helps users take care of their plants by reminding them to water them, providing information about their care requirements, and tracking their growth. Participants can use simple functions and data structures to store and retrieve information about the plants.
4. Recycling Quiz: Develop a simple quiz that tests users' knowledge about recycling and encourages them to adopt sustainable habits. Participants can use simple if/else statements to check the user's answers and provide feedback.
5. Healthy Eating: Create a program that helps users make healthy food choices by providing information about nutrition, suggesting recipes, and tracking their eating habits. Participants can use simple functions and data structures to store and retrieve information about the food.
6. Cleaning Robot: Build a program that controls a virtual cleaning robot and helps users keep their environment clean. Participants can use simple loops and conditions to move the robot and detect obstacles in its path.

Challenge Ideas(Senior Track):

1. Virtual Assistant: Develop a simple virtual assistant using AI that can perform basic tasks like setting reminders, checking the weather, or answering general knowledge questions.
2. Image Classification: Create an AI-powered system that can classify images into different categories, such as animals, plants, or vehicles.
3. Sentiment Analysis: Build an AI-powered tool that can analyze the sentiment of text, such as tweets or reviews, and determine whether it is positive, negative, or neutral.
4. Voice Recognition: Develop an AI-powered system that can recognize and transcribe speech from an audio file or microphone input.
5. Emotion Detection: Create an AI-powered tool that can detect emotions from facial expressions in images or videos, such as happiness, sadness, or anger.
6. Spam Detection: Build an AI-powered system that can detect spam emails based on their content or metadata, such as sender, subject, or attachments.
7. Object Detection: Develop an AI-powered tool that can detect and localize objects in images or videos, such as cars, pedestrians, or buildings.