**Hypothesis:** Natural scenes will elicit longer fixation durations in gaze behavior when viewing natural landscapes versus urban environments

**Experiment Design Steps:**

* **Setup:**
  + Objective: Examine gaze behavior differences between natural landscapes and urban environments among four participants.
  + **Stimulus:**
    - Natural Landscapes: High-resolution images of forests, lakes, mountains, etc.
    - Urban Environments: Images of cityscapes, streets, buildings.
  + **Participants:**
    - Four university students aged 20-25 with normal vision.
    - No history of eye-related conditions.
* **Experiment Procedure:**
  + Preparation:
    - Seat participants comfortably and ensure an appropriate distance from the eye tracker.
    - Explain the experiment's purpose and procedure clearly.
* **Calibration:**
  + Use Tobii 4C/5 software to calibrate the eye tracker for each participant.
* **Experiment Setup:**
  + Present a black screen with a central white dot for 5 seconds to establish a central gaze point.
  + Display natural landscapes and urban environments alternately for 10 seconds each.
  + Precede each image presentation with the 5-second black screen to recalibrate gaze centrality.
  + Show a total of five images per category, alternating between natural landscapes and urban environments.
* **Data Collection:**
  + Track participants' gaze behavior using the Tobii eye tracker during image viewing.
  + Record gaze data for each image separately to analyze individual gaze patterns.
  + Ensure the eye tracker captures gaze behavior for every presented image.
* **Data Analysis:**
  + Extract relevant metrics (e.g., fixation duration, saccade count) from gaze data for both stimuli types.
  + Conduct statistical analysis using Python to compare gaze behavior between natural landscapes and urban environments.
* **Conclusion:**
  + Analyze and interpret findings to identify variations in gaze behavior between the two stimulus categories.

## **Participants Instructions:**

* **Purpose:**
  + You will be part of an eye-tracking study examining gaze behavior when viewing natural landscapes and urban environments.
* **Procedure:**
  + Sit comfortably in front of the eye tracker.
  + Focus on a central white dot on a black screen for 5 seconds when prompted.
  + View a series of images containing natural landscapes and urban environments for 10 seconds each.
  + Concentrate on each image and gaze naturally without feeling pressured.
* **Notes:**
  + Ensure you have a clear view of the images displayed.
  + There's no right or wrong way to gaze; gaze naturally as you would normally.

**Tips:**

As you have to press the spacebar to start recording the data, design your experiment and data-collecting process in a way that it’s easy to synchronize the gaze data with stimuli i.e., for example, don’t display a video. Limit the exposure to seconds, rather than minutes or longer.