**APPLICATION PERFORMANCE MATRICS**

**When monitoring the performance of a web image resizer application hosted on IBM Cloud, the following performance metrics can be tracked:**

**1. Response Time:** Measure the time it takes for the application to respond to user requests for image resizing. This includes the time taken for image processing, resizing algorithms, and any other operations involved in the resizing process.

**2. Image Processing Time:** Monitor the time it takes to process and resize individual images. This metric helps identify the efficiency of the image processing algorithms and the overall performance of the resizing functionality.

**3. Throughput:** Track the number of image resize requests the application can handle within a given time period. This metric provides insights into the application's capacity to handle concurrent image resizing tasks and scalability.

**4. Network Latency:** Measure the time it takes for data to travel between the user's device and the application hosted on IBM Cloud. Network latency can impact the overall response time and user experience, so it's essential to monitor and optimize this metric.

**5. Error Rates**: Monitor the occurrence of errors during the image resizing process, such as failed or incomplete resize operations. High error rates may indicate issues with the image processing or infrastructure components.

**6. CPU and Memory Usage:** Monitor the CPU and memory utilization of the application servers in the IBM Cloud environment. High resource utilization can impact the application's performance and responsiveness.

**7. Storage Usage:** Track the storage consumption of the resized images. This metric helps ensure efficient use of storage resources and helps identify any potential storage-related bottlenecks.

**8. CDN Performance:** If a content delivery network (CDN) is used to deliver the resized images, monitor the CDN's performance metrics. This includes metrics like cache hit rate, data transfer rates, and edge server response times.

**9. Application Availability and Uptime:** Track the availability and uptime of the web image resizer application. This metric helps assess the reliability of the application and ensures it is accessible to users.

**10. User Experience Metrics:** Monitor user-centric metrics such as page load time, user engagement, and conversion rates. These metrics provide insights into the overall user experience of the image resizer application.