Gradient Descent Visualization

Learning Insights:

Here's a learning blurb that summarizes the key points of the visualization: "Imagine you're trying to find the lowest point on a hill, but the hill is curved and has multiple dips. If the hill is convex, meaning it curves upwards from left to right, you can be sure that the lowest point is the global minimum, and you'll reach it if you follow the gradient (or slope) of the hill. But if the hill is not convex, the lowest point might be just one of many local minima, and you might get stuck at that point instead of reaching the global minimum. The visualization shows this in action, with a convex curve representing the hill and arrows illustrating how the gradient descent algorithm moves towards the global minimum. The key takeaway is that convex loss functions guarantee convergence to the global minimum, making gradient descent a powerful tool for finding the best solution in optimization problems. So, remember: convex is key to finding the lowest point!"