A close up of a map

Description generated with very high confidence

This sequence diagram shows the use case of the user successfully connecting to the muon detector through a USB port. When the user is on the Main Menu screen (MainActivity), they will choose to open the Recorder screen. This results in an instance of RecorderScreen being created, which also creates a Processor. MainActivity is no longer needed.

Upon creation, RecorderScreen will ask the Processor to try to connect to the detector using the UsbDeviceInterface. The Processor will initialize the UsbDeviceInterface, and the UsbDeviceInterface will form the connection with the muon detector. After this connection is formed successfully, initializeConnection and tryConnection will return to the RecorderScreen. Finally, the RecorderScreen will display a message using updateScreen to show that the device is connected.