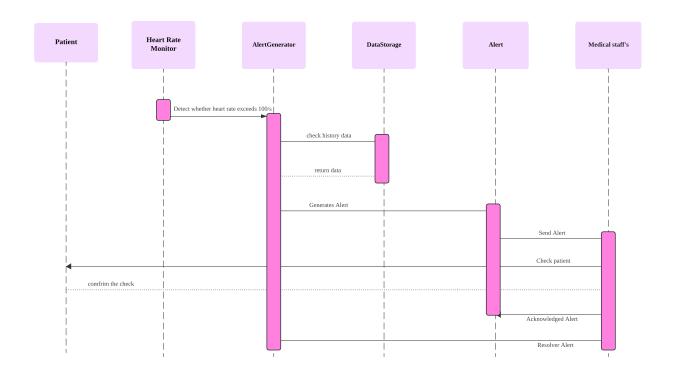
Sequence diagram project



This UML sequence diagram represents the process of generating and managing alerts in a healthcare monitoring system when a patient's heart rate exceeds a set threshold. The sequence begins with the patient's heart rate being monitored. Once the Heart Rate Monitor detects that the rate exceeds 100 beats per minute, it notifies the AlertGenerator. The AlertGenerator then verifies this reading against historical data stored in DataStorage to confirm the trend. After confirmation, the AlertGenerator generates an alert and sends it to the medical staff. Upon receiving the alert, medical staff check the patient and acknowledge the alert. Finally, the alert is resolved either manually by the medical staff after patient stabilization or automatically if conditions improve on their own. This diagram effectively illustrates the interaction between different components within the system, highlighting the flow from detection to resolution of an alert.