

# Insulin Temperature Warning System

## Team Members

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For people who suffer from diabetes, they need insulin to control their sugar levels. To ensure that the insulin does not get damaged, it must be kept in a cold place to be able to use later. The issue is that if the insulin lowers to a certain temperature and freezes, it is no longer usable. The same is if the temperature rises to a certain point, the life shelf of the insulin lowered and if it raises more, it is no longer usable. This issue is very present when there are problems with the power grid, where the loss of power leads to these rises in temperature. To combat this, our project uses two units. The main unit will be used to monitor the temperature in where the insulin is being kept. If there are any issues regarding the temperature of the insulin, the main unit will log it using the temperature of the storage unit. The user may be able to use a Bluetooth device with an application in order to see if there have been any drops or rises in temperature which could lead to insulin being unusable. The sub-unit will be placed in the container where the insulin will be placed at. This will monitor the temperature of the container where the insulin is being kept in and return to the main unit an error if the temperature has risen or fallen from safe temperatures.

