**Project 1 - Part 2: Analyzing Live Streaming Data Using ThingsBoard**

In the module24Project Realtime database on Firebase, a new field titled alarms was created and the corresponding field was initialized to zero.

A screenshot of a computer

Description automatically generated

On the ThingsBoard home page, a new rule chain titled “CreateAndClearAlarms” was created by following the steps shown in Mini-Lesson 24.5.

A screenshot of a computer screen

Description automatically generated

Another rule chain named “TempToFirebase” was created.

A screenshot of a computer

Description automatically generated

The TempToFirebase rule chain was opened. A “rest API call” node named “TempToFirebase” was added and the default link was replaced with the given link. The TempToFirebase node was added to the Rule Engine and the Input and TempToFirebase nodes were connected.

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

Another rule chain named “AlarmToFirebase” was created.

A screenshot of a computer

Description automatically generated

The AlarmToFirebase rule chain was opened. A “rest API call” node named “AlarmToFirebase” was added and the default link was replaced with the given link. The AlarmToFirebase node was added to the Rule Engine and the Input and AlarmToFirebase nodes were connected.

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

The CreateAndClearAlarms rule chain, created in Step 2, was opened. A “rule chain” node titled “AlarmToFirebase” was added and AlarmToFirebase was selected as the rule chain.

A screenshot of a computer

Description automatically generated

The CreateAlarm and AlarmToFirebase nodes were connected and “Created” was added as the link label.

A screenshot of a computer screen

Description automatically generated

Another “rule chain” node was added to the CreateAndClearAlarms rule chain. This node was titled “TempToFirebase” and TempToFirebase was selected as the rule chain.

A screenshot of a computer

Description automatically generated

The MaxTemp and TempToFirebase nodes were connected and “True” was added as the link label.

A screenshot of a computer screen

Description automatically generated

In ThingsBoard, the Root Rule Chain was opened. A “rule chain” node named “CreateAndClearAlarm” was added and CreateAndClearAlarm was selected as the rule chain.

A screenshot of a computer

Description automatically generated

The SaveTimeseries and CreateAndClearAlarm nodes were connected and “Success” was added as the link label.

A screenshot of a computer screen

Description automatically generated

In Firebase, the alarm and temperature fields were opened.

Two screenshots were provided. The first screenshot showed that the alarm field was being populated with live streaming data from the CreateAndClearAlarm rule chain. The second screenshot showed that the temperature field was being populated with temperature and humidity data.

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated