

You have been tasked to design a database for an IoT asset tracking and sensor monitoring hardware company. The company has multiple different device types on offer, each with varying capabilities.

Design a database schema for a hierarchical grouping of IOT devices.

- Devices have Firmware.
- Firmware is versioned – and a Device has a certain version of Firmware.
- A Group can form part of another Group.
- A Device can be linked to a Group.

Deliverables:

1. Create the scripts to create the database structure and populate it with a few records in each table.
2. Create a web application that can manage Groups and Firmware for devices.

Tech Stack:

- We prefer MSSQL and .NET (C#, HTML, JS, CSS) however we will accept it in another stack provided the solution is well documented.