

# Capstone Project: Instant Health Alert System - Final-Project Submission

## Building an External Hive Table for Patients Vital Info

Introduction:

This document provides an explanation of the Hive script used to build an external table for storing patients vitals data.

### 1. Create and Use Database

The code starts by creating a new database named `health` and setting it as the active database. This ensures that the subsequent table creation occurs within the `health` database, keeping all health-related data organized.

```
hive;  
create database health;  
use health;
```

```
Logging initialized using configuration in file:/etc/hive/conf.dist/hive-log4j2.properties Async: false  
hive> create database health;  
OK  
Time taken: 0.48 seconds  
hive> use health;  
OK  
Time taken: 0.02 seconds  
hive> |
```

### 2.Create External Table `patients\_vital\_info`

This section creates an external Hive table named `patients\_vital\_info`. External tables are used when data is stored outside of Hive's own data warehouse;

```
CREATE EXTERNAL TABLE health.patients_vital_info (
  customerId int,
  heartBeat int,
  bp int,
  message_time timestamp)
STORED AS PARQUET
LOCATION '/user/hadoop/health-alert/patients-vital-info/'
TBLPROPERTIES ('parquet.compress'='SNAPPY');
```

```
hive> CREATE EXTERNAL TABLE health.patients_vital_info (
>   customerId int,
>   heartBeat int,
>   bp int,
>   message_time timestamp)
> STORED AS PARQUET
> LOCATION '/user/hadoop/health-alert/patients-vital-info/'
> TBLPROPERTIES ('parquet.compress'='SNAPPY');
```

OK  
Time taken: 0.055 seconds

### 3. Viewing the data

```
Select * from health.patients_vital_info;
```

```
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
3      70      173      2024-11-11 07:39:50.001
4      71      153      2024-11-11 07:39:50.001
5      71      177      2024-11-11 07:39:50.001
1      77      199      2024-11-11 07:39:50.001
2      70      179      2024-11-11 07:39:50.001
3      72      165      2024-11-11 07:39:50.001
4      71      175      2024-11-11 07:39:50.001
5      69      172      2024-11-11 07:39:50.001
1      72      212      2024-11-11 07:39:50.001
2      72      155      2024-11-11 07:39:50.001
3      71      151      2024-11-11 07:42:00.001
4      66      154      2024-11-11 07:42:00.001
5      72      153      2024-11-11 07:42:00.001
1      73      169      2024-11-11 07:42:00.001
2      69      158      2024-11-11 07:42:00.001
3      69      161      2024-11-11 07:42:00.001
4      70      154      2024-11-11 07:42:00.001
5      71      180      2024-11-11 07:42:00.001
1      75      169      2024-11-11 07:42:00.001
2      71      164      2024-11-11 07:42:00.001
3      66      164      2024-11-11 07:39:30.002
4      66      171      2024-11-11 07:39:30.002
5      73      172      2024-11-11 07:39:30.002
1      73      175      2024-11-11 07:39:30.002
2      73      176      2024-11-11 07:39:30.002
3      70      166      2024-11-11 07:39:30.002
4      68      152      2024-11-11 07:39:30.002
5      73      173      2024-11-11 07:39:30.002
1      77      203      2024-11-11 07:39:30.002
2      67      165      2024-11-11 07:39:30.002
4      69      167      2024-11-11 07:34:40.001
5      69      177      2024-11-11 07:34:40.001
1      72      180      2024-11-11 07:34:40.001
2      69      163      2024-11-11 07:34:40.001
3      66      160      2024-11-11 07:34:40.001
4      69      153      2024-11-11 07:34:40.001
```