Data Analysis Project
P1: Schema Integration
(Group 11)

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University of Basel
Databases (CS244) course
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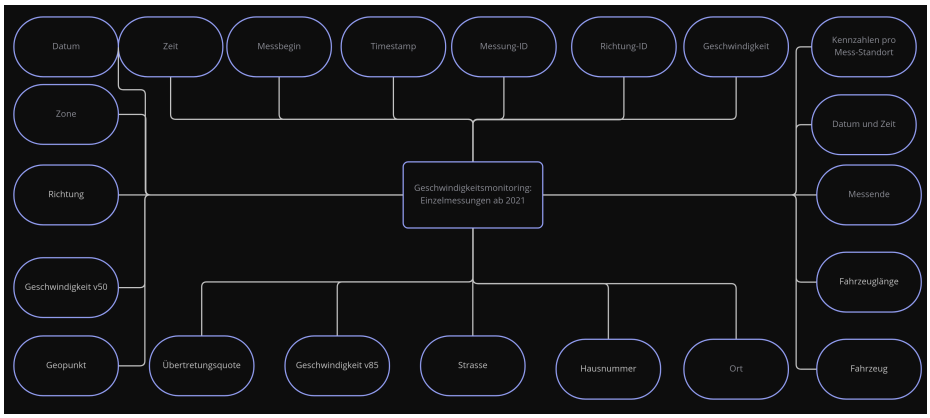
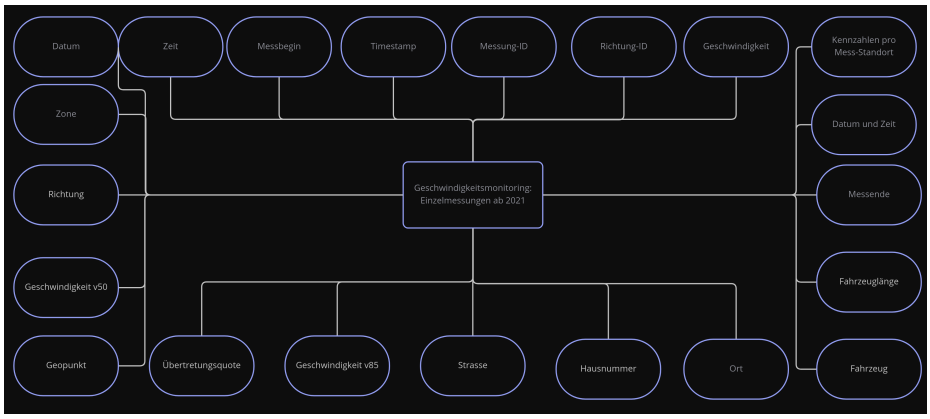
1 Entity Relation Diagram per Data Source

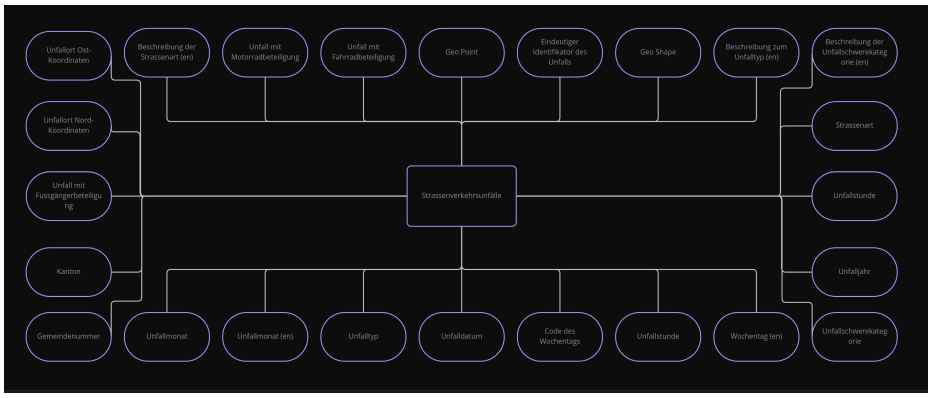
1.1 Geschwindigkeitsmonitoring: Einzelmessungen ab 2021



1.2 Geschwindigkeitsmonitoring: Einzelmessungen bis 2020

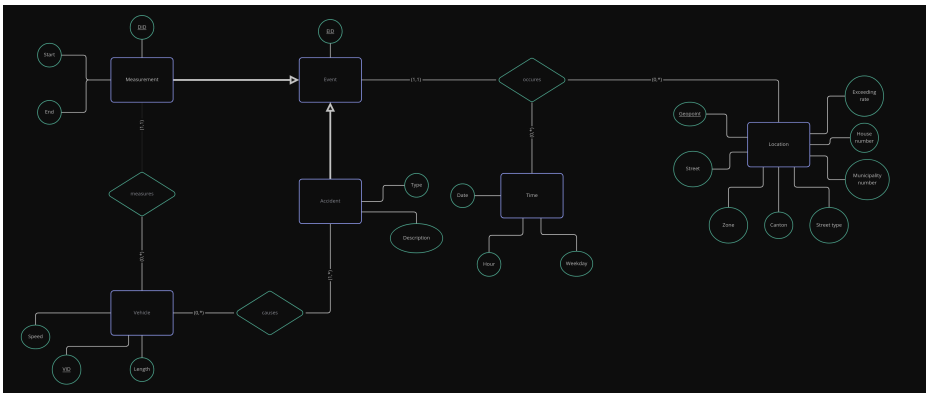


1.3 Strassenverkehrsunfälle



2 Integrated ER-Diagram

We have only chosen to display the meaningful attributes which we will consider in our analysis. The other attributes in the respective ER diagramms are not lost. We will include them in the database. Only for the sake of simplicity of this document have we not shown all of them. The same goes for the Relational Schema



3 Relational Schema

3.1 Logical relational schema

Entities

Measurement(DID, EID, Start, End)
Event(EID)
Time(Date,Time,Weekday)
Location(Geopoint, Street, Zone, Canton, Street type, Municipality number, House number, Exceeding rate)
Accident(EID, Type, Description)
Vehicle(VID, Speed, Length)

Relations

occures(EID, Geopoint)
causes(VID,EID)
measures(DID, VID)

Merged

Measurement(DID, EID,VID, Start, End)
Event(EID, Geopoint)
Time(Date,Time,Weekday)
Location(Geopoint, Street, Zone, Canton, Street type, Municipality number, House number, Exceeding rate)
Accident(EID, Type, Description)
Vehicle(VID, Speed, Length)