NMEA project

This project is provided by:

Daniel Fuchs, Sapir Ankri,
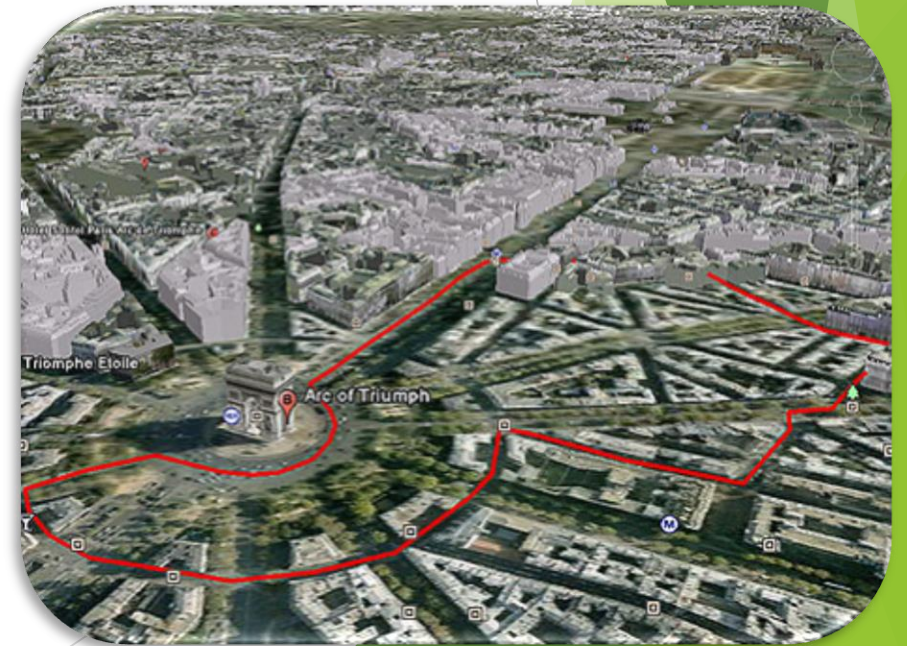
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Software Requirements Specification

Software that accepts NMEA files.

The software saves all data and gives the user an option to filter by file name, dates, times or location

And view them using google earth or excel (CSV or KML accordingly)

Use cases

- **Use Case**: Putting information

- **Actors**: User

- **Purpose**: Filling DB with data

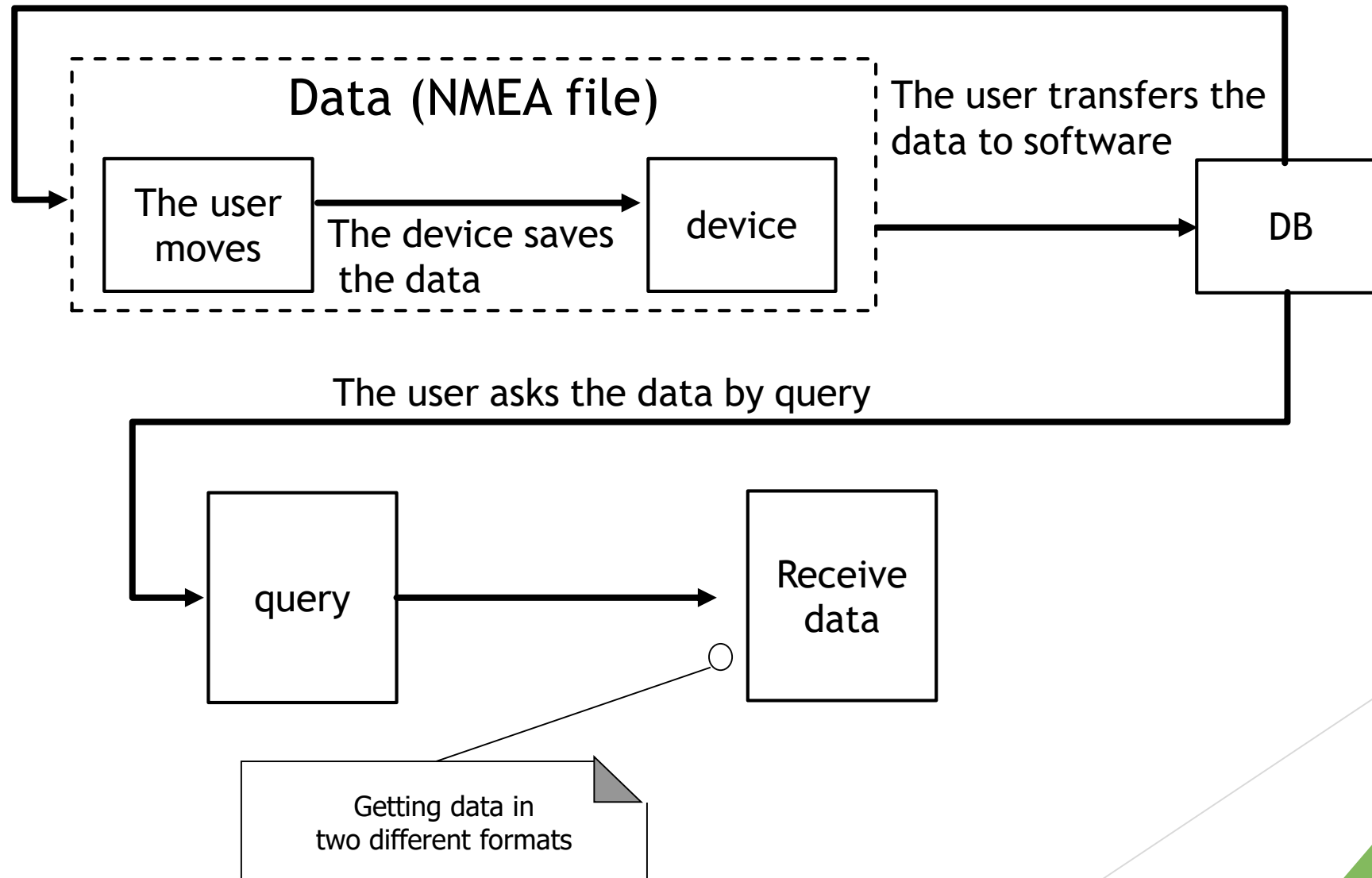- **Description:** The user enters NMEA files into the system, the system stores the data in DB.

Use cases

- **Use Case**: query
- **Actors**: User
- **Purpose**: Data filtering
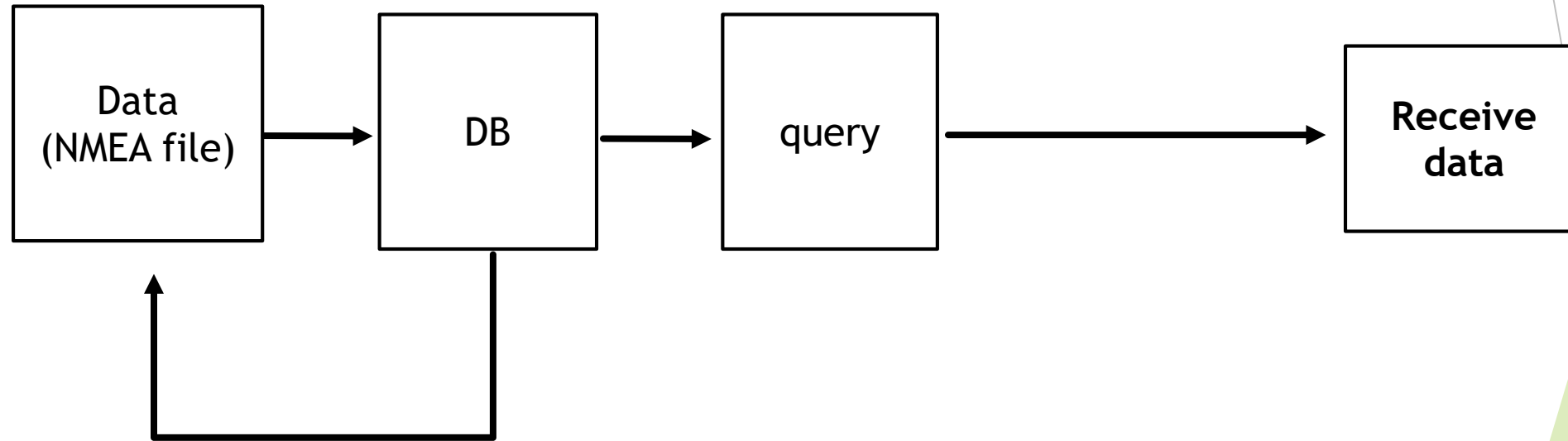- **Description:** The user chooses what data will be filtered

Use cases

- **Use Case**: getting information

- **Actors**: User

- **Purpose**: Getting data format that the user can view him

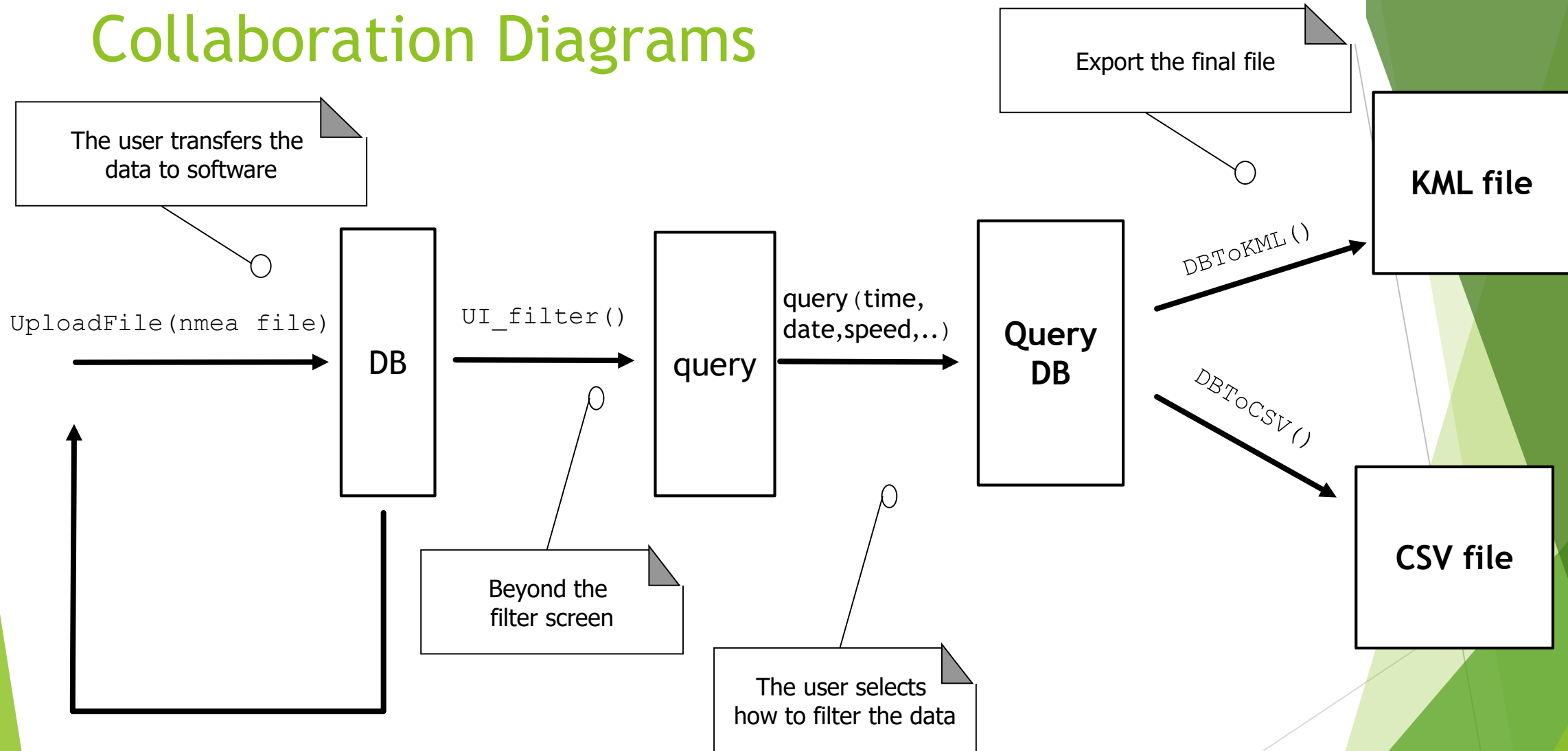- **Description:** In accordance with query, the user receives the data from the DB
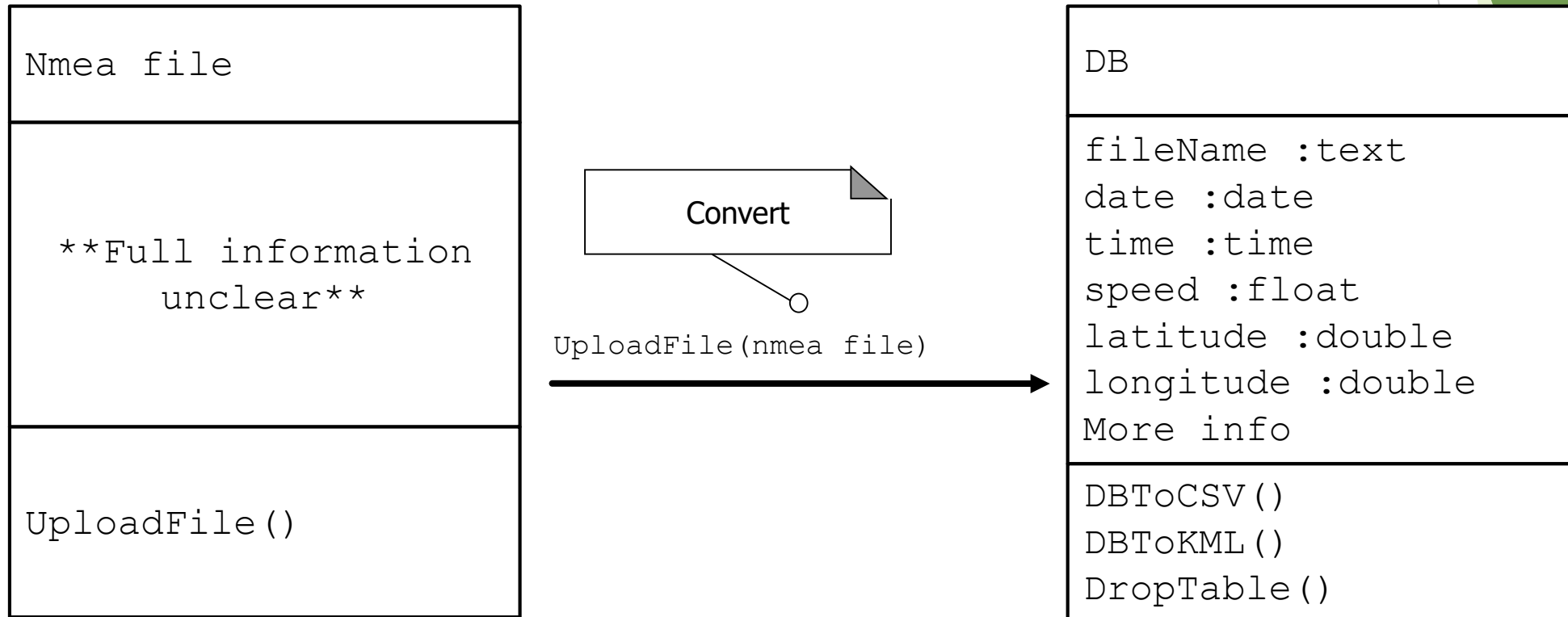
Conceptual Model

Advanced associations

Collaboration Diagrams

Design Class Diagrams

Nmea file
Full information unclear
UploadFile()

Convert

UploadFile(nmea file)

DB
fileName :text date :date time :time speed :float latitude :double longitude :double More info
DBToCSV() DBToKML() DropTable()

A detailed diagram of the DB

fileName	text	`fileName` text
date	date	`date` date
time	time	`time` time
speed	float	`speed` float
latitude	double	`latitude` double
latitude_direction	text	`latitude_direction` text
longitude	double	`longitude` double
longitude_direction	text	`longitude_direction` text
fix	text	`fix` text
horizontal_dilution	text	`horizontal_dilution` text
altitude	text	`altitude` text
direct_of_altitude	text	`direct_of_altitude` text
altitude_location	text	`altitude_location` text

Sources

- http://www.gpsinformation.org/dale/nmea.htm
- https://github.com/joabakk/Dynamic-NMEA-polar-diagram
- https://github.com/elcio/mysql2csv
- https://www.youtube.com/watch?v=B5XTGyfFmtc