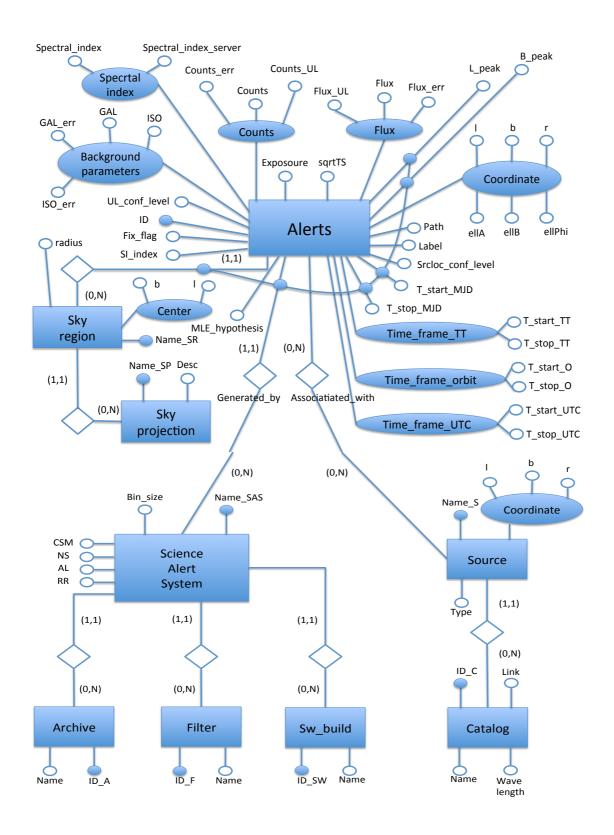
# Tesina di Nicolò Parmiggiani

Sviluppo App AGILE e quey da App AGILE a database MySQL tramite get a pagina php.

### Modello E/R



#### **Modello Relazionale**

Sky\_projection (Name\_SP, Desc)

Sky\_region (Name\_SR, B, L, Radius, Name\_SP) **FK:** Name\_SP **REFERENCES** Sky\_projection

Alerts (<u>L\_peak, B\_peak, T\_start\_MJD, T\_stop\_MJD, Name\_SR, Name\_SAS</u>, SI\_index, Fix\_flag, Srcloc\_conf\_level, UL\_conf\_level, GAL, GAL\_err, ISO, ISO\_err, Label, sqrtTS, Counts, Counts\_err, Counts\_UL, Flux, Flux\_err, Flux\_UL, Spectral\_index, Spectral\_index\_err, l, b, r, ell\_A, ell\_B, ell\_phi, Path, MLE\_hypothesis, T\_start\_TT, T\_stop\_TT, T\_start\_O, T\_stop\_O, T\_start\_UTC, T\_stop\_UTC, Exposoure, ID)

FK: Name\_SR REFERENCES Sky\_region

FK: Name\_SAS REFERENDES ScienceAlertSystem

AK: ID

Catalog (ID\_C, Name, Link, Wave\_length)

Source (Name\_S, Type, L, B, r, ID\_C) **FK:** ID\_C **REFERENCES** Catalog

Alerts\_Source (Name\_SR, L\_peak, B\_peak, T\_start\_MJD, T\_stop\_MJD, Name\_S)

FK: L\_peak, B\_peak, T\_start\_MJD, T\_stop\_MJD, Name\_SR, Name\_SAS REFERENCES Alerts

FK: Name\_S REFERENCES Source

Archive (ID\_A, Name)

Filter (<u>ID\_F</u>, Name)

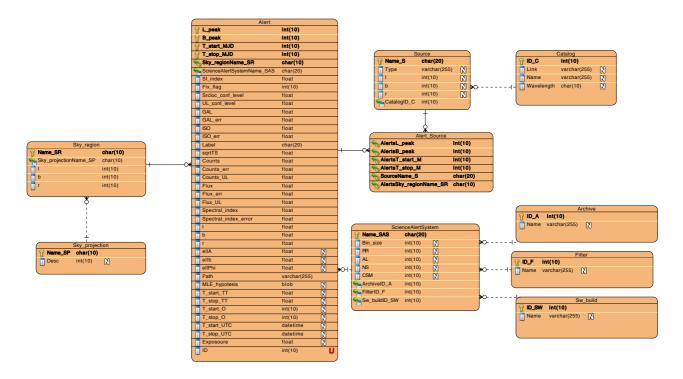
SW build (ID SW, Name)

ScienceAlertSystem (Name\_SAS, Bin\_size, RR, AL, NS, CSM, ID\_A, ID\_F, ID\_SW)

**FK:** ID\_A **REFERENCES** Archive **FK:** ID\_F **REFERENCES** Filter

FK: ID\_SW REFERENCES SW\_build

## Modello relazionali in Visual Paradigm



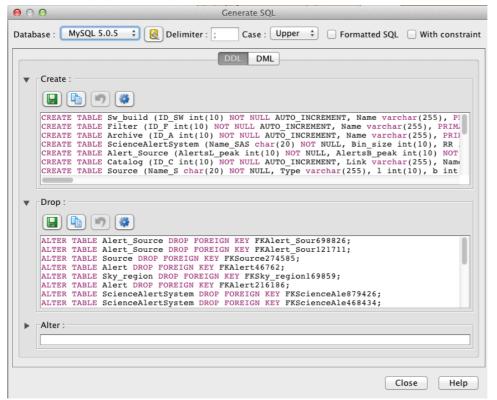


Figure 1: Generazione codice SQL con VP

#### **SQL**

CREATE TABLE Sw\_build (ID\_SW int(10) NOT NULL AUTO\_INCREMENT, Name varchar(255), PRIMARY KEY (ID\_SW));

CREATE TABLE Filter (ID\_F int(10) NOT NULL AUTO\_INCREMENT, Name varchar(255), PRIMARY KEY (ID\_F));

CREATE TABLE Archive (ID\_A int(10) NOT NULL AUTO\_INCREMENT, Name varchar(255), PRIMARY KEY (ID\_A));

CREATE TABLE ScienceAlertSystem (Name\_SAS char(20) NOT NULL, Bin\_size int(10), RR int(10), AL int(10), NS int(10), CSM int(10), ArchiveID\_A int(10) NOT NULL, FilterID\_F int(10) NOT NULL, Sw\_buildID\_SW int(10) NOT NULL, PRIMARY KEY (Name\_SAS));

CREATE TABLE Alert\_Source (AlertsL\_peak int(10) NOT NULL, AlertsB\_peak int(10) NOT NULL, AlertsT\_start\_M int(10) NOT NULL, AlertsT\_stop\_M int(10) NOT NULL, SourceName\_S char(20) NOT NULL, AlertsSky\_regionName\_SR char(10) NOT NULL, PRIMARY KEY (AlertsL\_peak, AlertsB\_peak, AlertsT\_start\_M, AlertsT\_stop\_M, SourceName\_S, AlertsSky\_regionName\_SR));

CREATE TABLE Catalog (ID\_C int(10) NOT NULL AUTO\_INCREMENT, Link varchar(255), Name varchar(255), Wavelength char(10), PRIMARY KEY (ID\_C));

CREATE TABLE Source (Name\_S char(20) NOT NULL, Type varchar(255), l int(10), b int(10), r int(10), CatalogID\_C int(10) NOT NULL, PRIMARY KEY (Name\_S));

CREATE TABLE Sky\_region (Name\_SR char(10) NOT NULL, Sky\_projectionName\_SP char(10) NOT NULL, l int(10) NOT NULL, b int(10) NOT NULL, r int(10) NOT NULL, PRIMARY KEY (Name\_SR));

CREATE TABLE Sky\_projection (Name\_SP char(10) NOT NULL, `Desc` int(10), PRIMARY KEY (Name\_SP));

CREATE TABLE Alert (L\_peak int(10) NOT NULL, B\_peak int(10) NOT NULL, T\_start\_MJD int(10) NOT NULL, T\_stop\_MJD int(10) NOT NULL, Sky\_regionName\_SR char(10) NOT NULL, ScienceAlertSystemName\_SAS char(20) NOT NULL, SI\_index float NOT NULL, Fix\_flag int(10) NOT NULL, Srcloc\_conf\_level float NOT NULL, UL\_conf\_level float NOT NULL, GAL float NOT NULL, GAL\_err float NOT NULL, ISO float NOT NULL, ISO\_err float NOT NULL, Label char(20) NOT NULL, sqrtTS float NOT NULL, Counts float NOT NULL, Counts\_err float NOT NULL, Counts\_UL float NOT NULL, Flux float NOT NULL, Flux\_err float NOT NULL, Flux\_UL float NOT NULL, Spectral\_index float NOT NULL, Spectral\_index\_error float NOT NULL, I float NOT NULL, b float NOT NULL, r float NOT NULL, ellA float, ellb float, ellPhi float, Path varchar(255) NOT NULL, MLE\_hypotesis blob, T\_start\_TT float, T\_stop\_TT float, T\_start\_O int(10), T\_stop\_O int(10), T\_start\_UTC datetime NULL, T\_stop\_UTC datetime NULL, Exposoure float, ID int(10) NOT NULL UNIQUE, PRIMARY KEY (L\_peak, B\_peak, T\_start\_MJD, T\_stop\_MJD, Sky\_regionName\_SR));

ALTER TABLE Alert\_Source ADD INDEX FKAlert\_Sour698826 (AlertsL\_peak, AlertsB\_peak, AlertsT\_start\_M, AlertsT\_stop\_M, AlertsSky\_regionName\_SR), ADD CONSTRAINT FKAlert\_Sour698826 FOREIGN KEY (AlertsL\_peak, AlertsB\_peak, AlertsT\_start\_M,

AlertsT\_stop\_M, AlertsSky\_regionName\_SR) REFERENCES Alert (L\_peak, B\_peak, T\_start\_MJD, T\_stop\_MJD, Sky\_regionName\_SR);

ALTER TABLE Alert\_Source ADD INDEX FKAlert\_Sour121711 (SourceName\_S), ADD CONSTRAINT FKAlert\_Sour121711 FOREIGN KEY (SourceName\_S) REFERENCES Source (Name\_S);

ALTER TABLE Source ADD INDEX FKSource274585 (CatalogID\_C), ADD CONSTRAINT FKSource274585 FOREIGN KEY (CatalogID\_C) REFERENCES Catalog (ID\_C);

ALTER TABLE Alert ADD INDEX FKAlert46762 (ScienceAlertSystemName\_SAS), ADD CONSTRAINT FKAlert46762 FOREIGN KEY (ScienceAlertSystemName\_SAS) REFERENCES ScienceAlertSystem (Name\_SAS);

ALTER TABLE Sky\_region ADD INDEX FKSky\_region169859 (Sky\_projectionName\_SP), ADD CONSTRAINT FKSky\_region169859 FOREIGN KEY (Sky\_projectionName\_SP) REFERENCES Sky\_projection (Name\_SP);

ALTER TABLE Alert ADD INDEX FKAlert216186 (Sky\_regionName\_SR), ADD CONSTRAINT FKAlert216186 FOREIGN KEY (Sky\_regionName\_SR) REFERENCES Sky\_region (Name\_SR); ALTER TABLE ScienceAlertSystem ADD INDEX FKScienceAle879426 (Sw\_buildID\_SW), ADD CONSTRAINT FKScienceAle879426 FOREIGN KEY (Sw\_buildID\_SW) REFERENCES Sw\_build (ID\_SW);

ALTER TABLE ScienceAlertSystem ADD INDEX FKScienceAle468434 (FilterID\_F), ADD CONSTRAINT FKScienceAle468434 FOREIGN KEY (FilterID\_F) REFERENCES Filter (ID\_F); ALTER TABLE ScienceAlertSystem ADD INDEX FKScienceAle930428 (ArchiveID\_A), ADD CONSTRAINT FKScienceAle930428 FOREIGN KEY (ArchiveID\_A) REFERENCES Archive (ID\_A);

## phpMyAdmin

