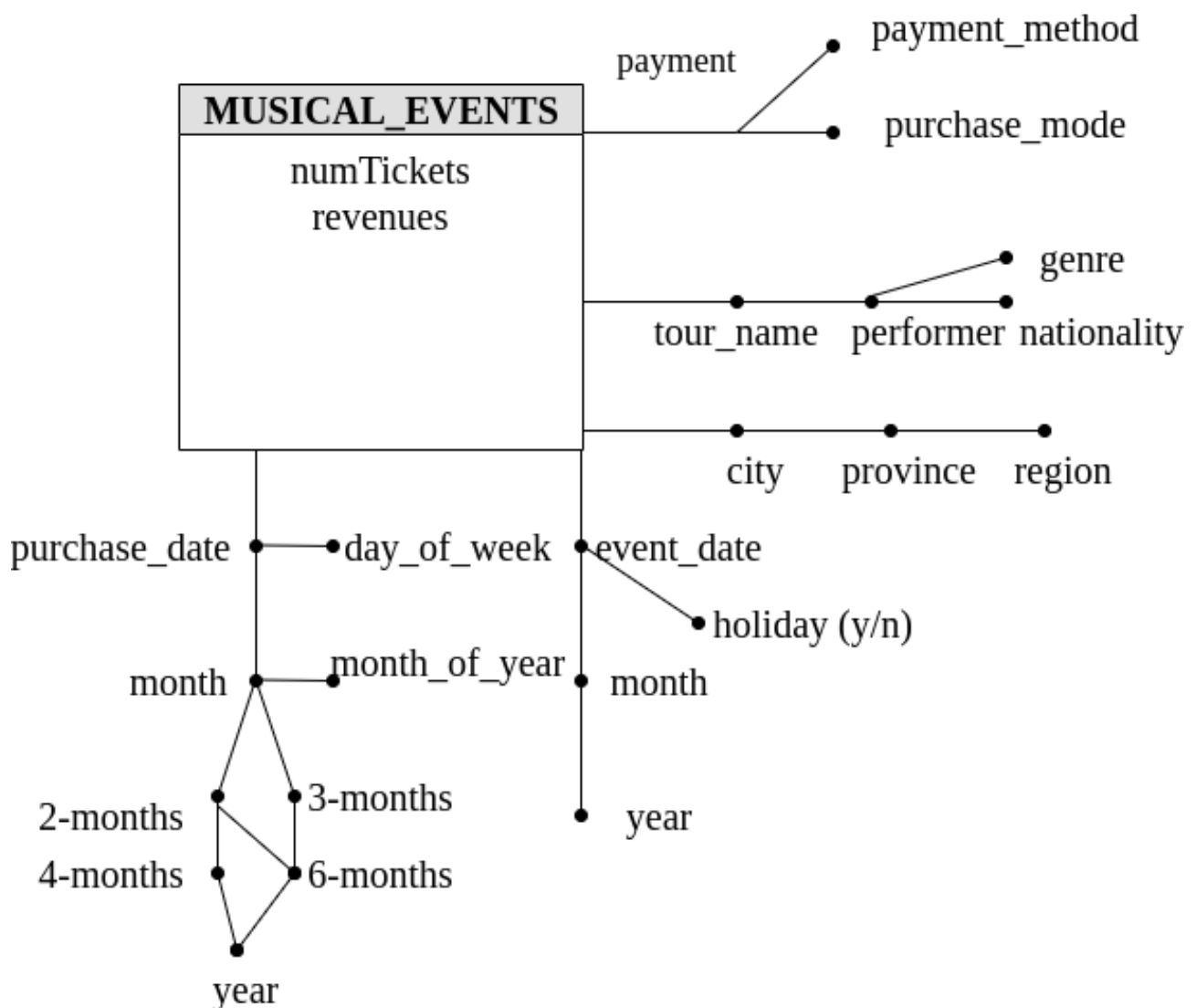


Data Warehousing

Politecnico di Torino

Tickets

Conceptual design



Logical design

Primary keys are underlined.

MUSICALEVENTS (MEId, ELId, PDId, EDId, TId, PIId, numTickets, revenue)

EVENTLOCATION (ELId, city, province, region)

PURCHASEDATE (PDId, pdate, pmonth, monthofyear, 2m, 3m, 4m, 6m, pyear)

EVENTDATE (EDId, edate, emonth, eyear, holiday)

TOUR (TId, tname, performer, nationality, rock, pop, ..., jazz)

PAYMENT (PIId, purchasemode, paymentmethod)

Queries

Query A

Separately for each purchase mode and for each purchase month, analyze: the average daily revenue, the cumulative revenue from the beginning of the year, the percentage of tickets related to the considered purchase mode over the total number of tickets of the month

```
SELECT
    purchasemode, pmonth,
    sum(revenue)/count(distinct pdate),
    sum(sum(revenue)) over (partition by purchasemode, pyear
                            order by pmonth
                            rows unbounded preceding)
    100*sum(numtickets)/sum(sum(numtickets)) over (partition by pmonth)
FROM
    musical_events me, purchasedate pd, payment p
WHERE
    me.pdid = pd.pdid and me.pid = p.pid
GROUP BY
    purchasemode, pmonth, pyear;
```

Query B

Considering the events that took place in 2017, separately for each singer/band nationality and for each city, analyze: the average revenue for a ticket, the percentage of revenue over the total revenue for the corresponding region

```
SELECT
    nationality, city,
    sum(revenue)/sum(numtickets),
    100*sum(revenue)/sum(sum(revenue)) over (partition by nationality,
region)
FROM
    musical_events me, eventdate ed, eventlocation el, tour t
WHERE
    me.edid = ed.edid and me.elid = el.elid and me.tid = t.tid
    and eyear=2017
GROUP BY
    nationality, city, region;
```