**Influence factor, for the population units -family collections-.**

**General description.**

In order to define a way to determinate the growing factor for each collection I decided to introduce the influence factors. A building or a map field itself may have one or more influence factor, each influence factor is a kind of modificator/perk which is applied to all the field from the origin field to a certain amount of neighbor fields (depending on a pre-define range)

For example, a field on which a police station was built will increase the sense of security of the near fields, so if not so far from the police station we have an apartment, the collection (families) in the apartment will be influenced by the police station.

The assumption is that positive influence factors have a positive impact on the growing delta for a field (in terms of family unit), whereas negative influence factors clearly have negative impact.

If the amount of negative variables is higher than the amount of positive variables then the population on the influenced fields tends to decrease.

**Relation with a family\_collection\_t.**

Each family collection has a list of perks which affects the collection. In a new building in constructed, and the new building range of influence include one or more collection, then to all the collections the new perk need to be added (the list of influence factor is updated).

If a construction is removed then it does not have any influence anymore, all the fields nearby the removed construction need to be checked and the perks -if any- removed from the collections.

The influence factors which belong to a collection are used to determine the population increase speed or other factors, like the happiness of the families.

**Relation with the construction\_t**

A construction may have one or more influence factors, each influence factor have a range of effects and define a certain type of perks to the neighborhood collections. A construction not necessarily introduce an influence factor.

**Relation with citymap\_field\_t**

A field may also have some kind of influence on the families surrounding the field, positive or negative. A radioactive field even if empty -grass-, influence negatively the population living near that field.