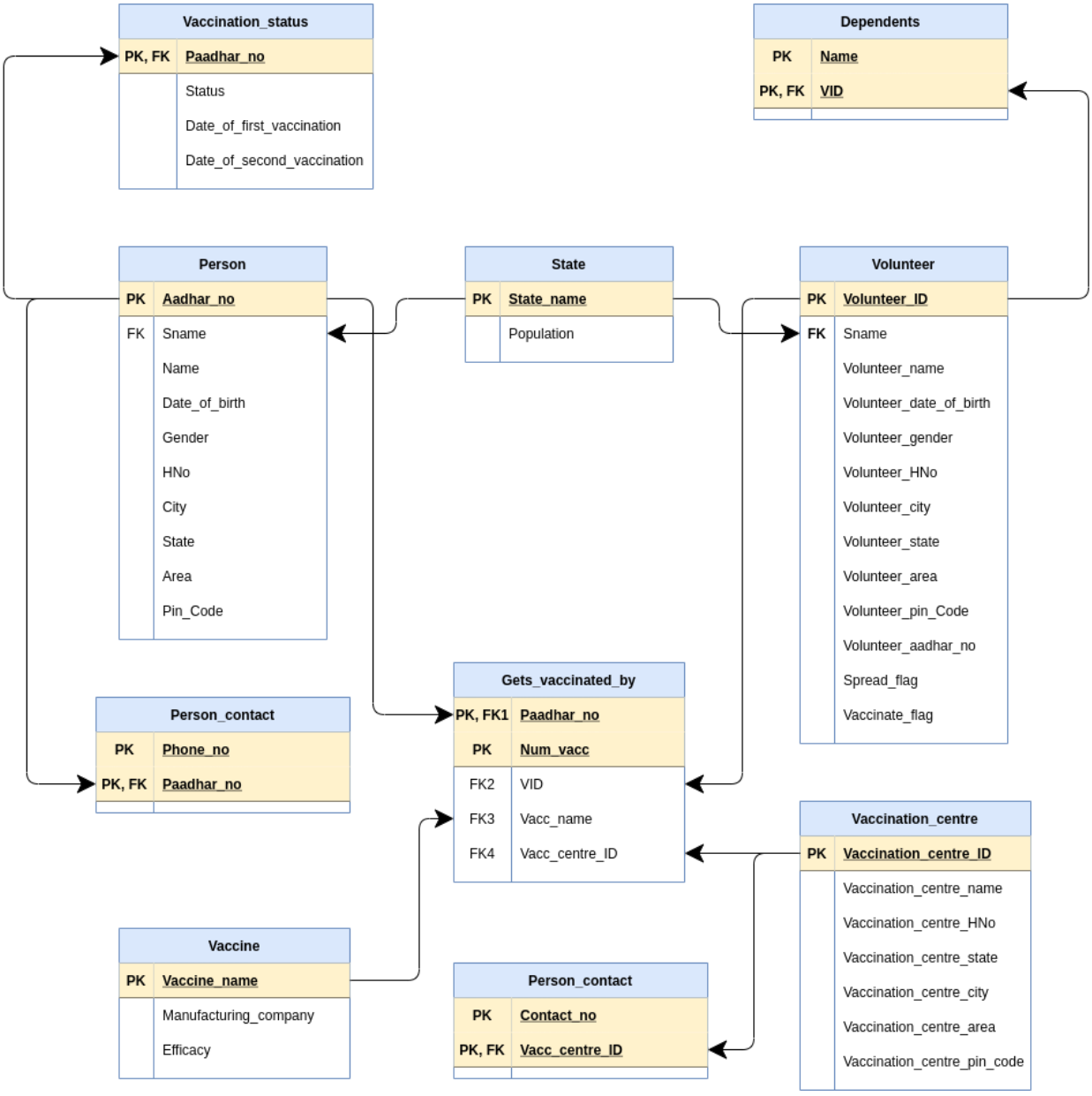
Project Phase - 3

Team: **Datadiggers**, ID: **64**

Relational model:



For a better view of the relational model diagram click on the link below
Link:
https://drive.google.com/file/d/1oUlWZA2Y2zG514kJ0nzpqKemrjzPoEZ6/view?usp=sharing

Note:

- In the diagram above PK means primary key
- FK means foreign key
- **All the attributes in yellow together form the primary key of that relation**.

1 NF (First normal form):

The relational model above is already in 1 NF (first normal form). So the diagram for it is also the same.

To convert a relational model into the first normal form we remove any non-atomic values such as multi-valued attributes and form a new table. But during the formation of the relational data model itself we did that, so the relational model is already in 1 NF (first normal form).

2 NF (Second normal form):

The relational model above is already in 2 NF (first normal form). So the diagram for it is also the same.

To convert the first normal form into second normal form we check for any partially dependent non-prime attributes on all the keys of a relation. But here we don't find any such case since in all relations all non-prime attributes are fully dependent on all the keys of that relation, so the relational model is already in 2 NF (second normal form).

3 NF (Third normal form):

The relational model above is already in 3 NF (third normal form). So the diagram for it is also the same.

To convert the second normal form into third normal form we check for any non-prime attributes transitively dependent on the primary key. But here we don't find any such case since in all relations there is no functional dependency involving two non-prime attributes. All the functional dependencies involve the primary key on the left hand side. So, the relational model is already in 3 NF (third normal form).