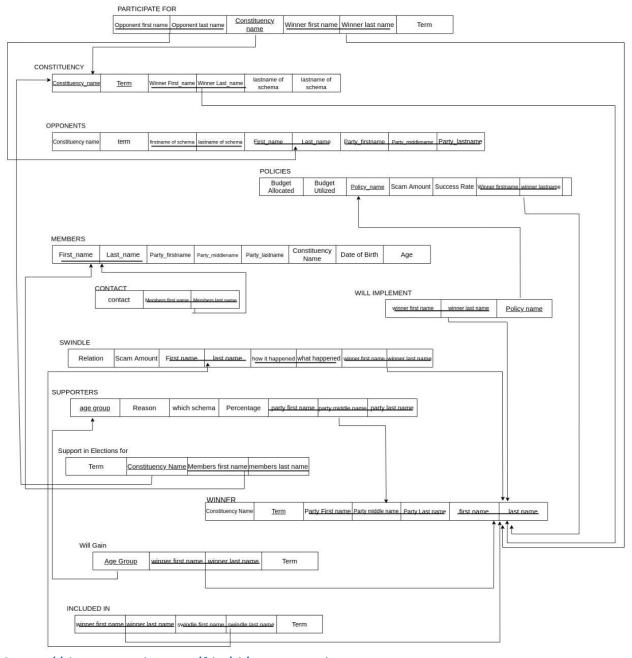
#### **PROJECT PHASE – 3**

## MAPPING ER TO RELATIONAL MODEL

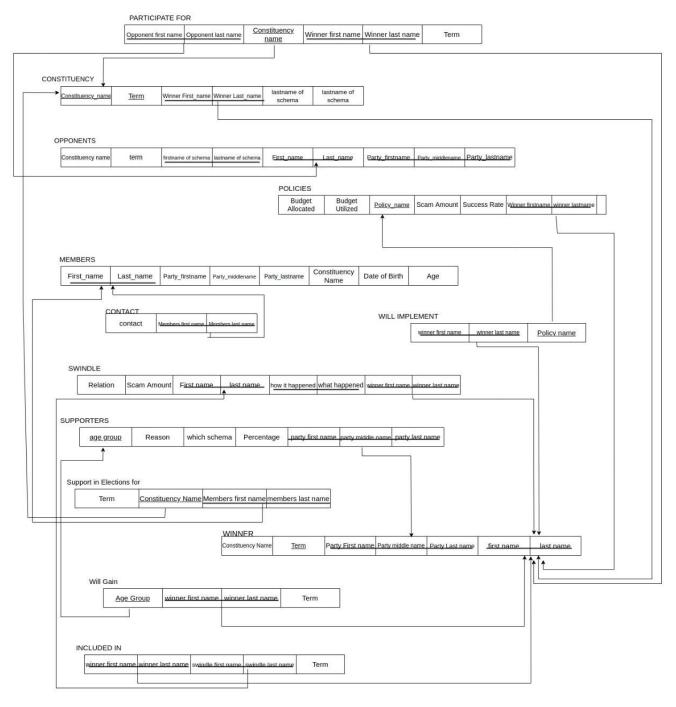


https://drive.google.com/file/d/11C0WvjvkCS9YWBJ-Bw3HlpsdrBC7A3xs/view?usp=share\_link

### **RELATIONAL MODEL AFTER CONVERSION TO 1NF**

In 1NF there should be no multivalued attributes, composite attributes. No change for the 1NF as multivalued attributes are already dealt with by the general rules of converting into relational database. The relational model is already in its first normal form because all the composite attributes and multivalued attributes are changed.

For multi valued attribute 'Contact' we already added a new table named Contact with contact ,member\_firstname ,member\_lastname as its attributes. If the attribute 'Contact' has n different values in tuple, divide into n tuples with respective other attributes.

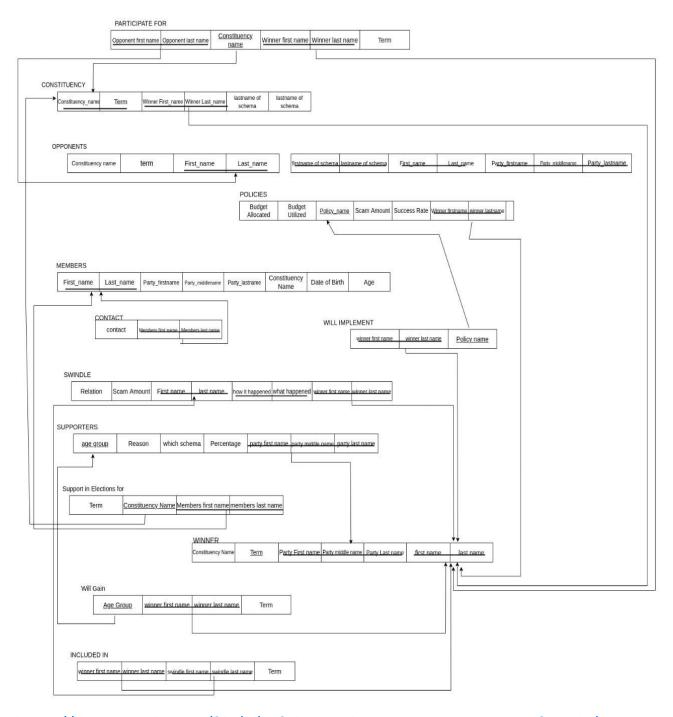


https://drive.google.com/file/d/11C0WvjvkCS9YWBJ-Bw3HlpsdrBC7A3xs/view?usp=share\_link

#### **RELATIONAL MODEL AFTER CONVERSION TO 2NF**

In 2NF every nonprime attribute of a relation should be fully functional dependent on the primary key of the relation.

'Constituency name' can be determined using 'opponent name' and 'term'. It makes the relation partially dependent. Thus, the relation would violate 2NF in Normalization and is considered to be a bad database design. So, we decompose Opponents table to remove partial dependency.

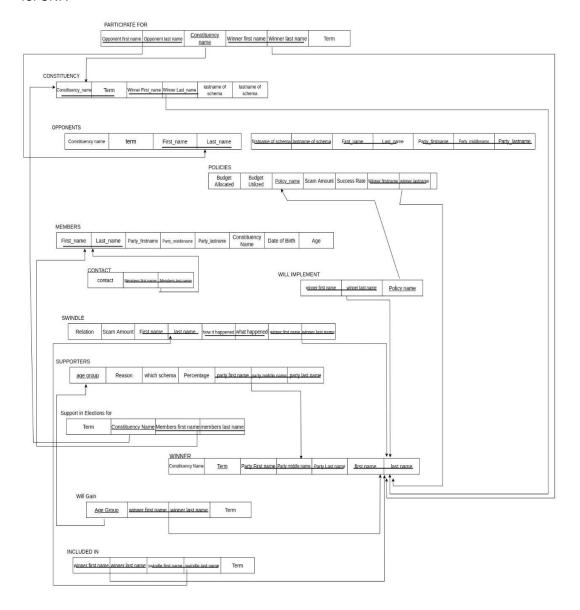


https://drive.google.com/file/d/1SfGbW2d8hq0Au5OtWC90wCDDcPfyMKl0/view?usp=share\_link

# **RELATIONAL MODEL AFTER CONVERSION TO 3NF**

In 3NF there should not be any transitive dependency that exists for a non –prime attribute and should also follow 2NF.

There aren't any transitive dependencies in our 2NF form. The relational model for 2NF is also the one for 3NF.



https://drive.google.com/file/d/1SfGbW2d8hq0Au5OtWC90wCDDcPfyMKl0/view?usp=share link