**Learning Outcomes – Voting System**

1. DAO (Data Access Objects)

* Encapsulation of Data Access Logic

The DAO pattern encapsulates the code that interacts directly with the database, providing a clear separation between the database interaction layer and the rest of the application.

* Abstraction

other parts of the application don't need to know how the data is being retrieved or stored—they just use the methods provided by the DAO.

* CRUD Operations

DAOs typically provide methods to perform the basic CRUD (Create, Read, Update, Delete) operations. These methods interact with the database using SQL queries or an ORM framework.

1. ORM Framework

An **Object-Relational Mapping (ORM)** framework is a tool used to convert data between incompatible type systems in object-oriented programming languages. In the context of Java, an ORM framework facilitates the interaction between Java objects and a relational database by automatically handling the conversion of object state to database tables and vice versa.