

## **\*\*Django Overview\*\***

Django is a Python-based web framework that follows the MVT (Model-View-Template) architecture.

## **\*\*QuerySet Operations\*\***

- \* Q objects can be used for complex queries, combining conditions with AND and OR operators.
- \* Middleware operates between requests and responses, handling tasks like session management and authentication.
- \* Sessions allow for storing and retrieving data on the server-side, based on per-site visitors.
- \* Signals are used for decoupled applications to receive notifications when actions occur elsewhere in the framework.
- \* Contexts are dictionaries passed to templates, containing variable names and values for dynamic content.

## **\*\*Advanced Concepts\*\***

- \* Generic views provide class-based views for common operations, such as displaying all records in a database.
- \* Mixins are used to combine behaviors and attributes from multiple parent classes, providing flexibility and code reuse.
- \* Caching strategies in Django include Memcached, Redis, and File System Caching, optimizing performance by storing processed results for faster access.