Research Answers – Sticky Notes (Part 1)

1) HTTP state, auth, sessions

HTTP is stateless; continuity is added with cookies and server-side sessions. On login, the server issues a signed session ID stored in a cookie. Each request includes the cookie, allowing the server to load session data (user id, expiry, CSRF token). Django provides request.user and request.session via middleware. Security practices: HTTPS-only, HttpOnly, SameSite, CSRF tokens, short lifetimes, rotating session identifiers after privilege changes.

2) Migrations to MariaDB

Install a MariaDB server and create a database & user. In your venv install mysqlclient (or mariadb). Configure DATABASES with ENGINE='django.db.backends.mysql', and set NAME, USER, PASSWORD, HOST, PORT, OPTIONS (charset utf8mb4). Run makemigrations and migrate. For existing data, dumpdata/loaddata or database-native export/import. Ensure backups, CI for migrations, correct time zone and character set, and connection pooling as needed.