DIGITAL MEAL PLAN | CORE | Sessions and Cookies

Definition of Done

A user story is considered **Done** when all of the following criteria are met:

- All acceptance criteria for the user story are fully implemented and verified
- PHP code is properly structured with appropriate error handling
- Session and cookie functionality is tested with multiple scenarios
- Security best practices are implemented for session management
- Code follows PSR-12 coding standards and includes meaningful comments
- The application runs without PHP errors or warnings
- Session data is properly stored and retrieved across page requests
- Cookie attributes are correctly configured and validated

User Story 1: Cookie Management for User Preferences

As a PHP developer, I want to set cookies and store/retrieve information from them, so that I can persist user preferences across sessions in the digital meal plan.

Acceptance Criteria

- Cookies are set using `setcookie()` with appropriate parameters (name, value, expiration, path, domain).
- Cookie values are retrieved using the `$_COOKIE` superglobal array.
- Existing cookie values are updated and changes are verified as reflected.
- Cookies are deleted by setting them with an expiration time in the past.
- Cookie-based user preferences are implemented (e.g., preferred meal types, dietary restrictions).

User Story 2: Session Management for User State

As a PHP developer, I want to start and manage sessions using PHP, so that I can maintain user state across different pages of the digital meal plan.

Acceptance Criteria

- A session is initiated using `session_start()` in a PHP script.
- Data is stored and retrieved using the `$_SESSION` superglobal.
- The location and method of PHP session data storage on the server is demonstrated.

User Story 3: Secure Session Handling

As a PHP developer, I want to implement security measures for PHP sessions, so that I can protect user data and prevent session hijacking.

Acceptance Criteria

- Session IDs are regenerated to prevent fixation attacks using `session_regenerate_id()`.
- Secure cookie flags are implemented to protect session cookies.
- Best practices for securing PHP sessions are explained, including HTTPS enforcement.

User Story 4: Session Configuration and Lifetime

As a PHP developer, I want to configure session behavior and lifetime, so that I can control how long sessions last and how they operate in the digital meal plan.

Acceptance Criteria

- Session settings are configured using `php.ini` or `ini_set()`.
- Session lifetime and garbage collection settings are specified.
- Session behavior is altered through configuration changes and demonstrated.

User Story 5: Session Termination

As a PHP developer, I want to properly terminate sessions, so that I can ensure no residual data is left after session completion in the digital meal plan.

Acceptance Criteria

- A session is destroyed using `session_destroy()` and cleanup is verified.
- Session data is cleared from the server after destruction.
- Techniques to remove residual session data from the browser are implemented.