

Basic symbols and component meanings

```
sequenceDiagram
    participant User
    participant Website
    participant Database
    User->>Website: 1. Enter name
    activate Website
    Website->>Database: 2. Retrieve category options
    activate Database
    Database-->>Website: 3. Category Options
    deactivate Database
    Website->>User: 4. Display category options
    deactivate Website
    activate User
    User->>Website: 5. Select an option
    deactivate User
    activate Website
    Website->>Database: 6. Save user selection
    activate Database
    Database->>Website: 7. Generate recommendation
    deactivate Database
    Website->>User: 8. Display recommendation
    deactivate Website
    activate User
    User->>UserDevice: 9. Save recommendation
    deactivate User
    UserDevice((User Device))
    deactivate User
    User--xUser: End
```

The diagram illustrates the sequence of interactions in a recommendation system. It involves three main participants: User, Website, and Database, and a final destination: User Device.

- 1. Enter name:** The User sends a message to the Website.
- 2. Retrieve category options:** The Website sends a message to the Database.
- 3. Category Options:** The Database returns data to the Website.
- 4. Display category options:** The Website sends data to the User.
- 5. Select an option:** The User sends a message to the Website.
- 6. Save user selection:** The Website sends a message to the Database.
- 7. Generate recommendation:** The Database sends data to the Website.
- 8. Display recommendation:** The Website sends data to the User.
- 9. Save recommendation:** The User sends a message to the User Device.

A loop is indicated around steps 4 and 5, suggesting a cycle where the user can view options and make selections repeatedly. The process ends with a final message from the User to the User Device and a termination symbol (X) on the User's lifeline.

