Group 4

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Workout Tracker App

Internal Logical File (ILF): User-identifiable group of related data maintained within the application.

- User token and session

External Interface File (EIF): User-identifiable group of related data referenced by the application but maintained within another application.

- Exercises (Fetched by API)

External Input (EI): Unique elementary process that processes data coming from outside the application boundary.

- Compose Exercises into workouts

External Output (EO): Unique elementary process that sends data outside the application boundary. Calculations, derivation of data, or maintenance also takes place

Login client

Fetch data from database

External Inquiry (EQ): Unique elementary process that sends data outside the application boundary. Calculations, derivation of data, or maintenance do not take place.

Send data to front end

Information Domain Value	Count	Simple Weight	Average Weight	Complex Weight	Total Weight
ILF	1	3	4	6	4
EIF	1	4	5	7	5
EI	1	3	4	6	4
EO	2	7	10	15	10
EQ	1	5	7	10	7
	5				29

1. **ILF (User Data)**:
   - Weighted as **Average (4)** because it consists of a small number of data elements Authentication can be tricky but there are libraries to help.
2. **EIF (Exercises)**:
   - Weighted as **Average (5)** working with external APIs is standard but can force complex design decisions.
3. **EI (Add New User to Database)**:
   - Weighted as **Simple (3)** Fetching data and combining it are core database functions.
4. **EO (List Workouts with Parameters)**:
   - 1st weighted as **Complex (15)** utilizing internal api and database to verify credentials
   - 2nd weighted **Simple (7)** basic api/database data fetching
5. **EQ (List Previous Workouts)**:
   - Weighted as **Average (7)** compiling data to be sent and rendered in a manageable way takes some design