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## Workout Tracker App - Backend Function Points Analysis

Internal Logical File (ILF):

None for backend development.

External Interface File (EIF):

None for the backend, all of this will be handled in the front end.

External Input (EI):

- Add New User: Processes incoming data for new users, including `user\_name` and initial settings, and stores this information in the database.

- Log Workout: Accepts workout entries from users, including details such as `user\_id`, `exercise\_id`, `duration`, and `date/time`, and stores this information in the database.

External Output (EO):

- Workout Statistics: Sends generated statistical data to users, including total workouts completed and other statistics about their workouts.

External Inquiry (EQ):

- Fetch Workout History: Allows users to view their previous workouts based on queries, without modifying any data.

Information Domain Value	Count	Simple Weight	Average Weight	Complex Weight	Total Weight
ILF	0	3	4	6	0
EIF	0	4	5	7	0
EI	2	3	4	6	7
EO	1	7	10	15	7
EQ	1	5	7	10	5
	4				19

## External Input (EI)

- **Add New User - Simple (3)**

This is a straightforward operation where minimal data (user\_name and initial settings) is entered and stored in the database. The logic required to process this input is not complex.

- **Log Workout - Average (4)**

Slightly more complex than adding a new user, this operation processes multiple fields (user\_id, exercise\_id, duration, date/time) and stores them in the database. It requires validation and processing of more data.

## External Output (EO)

- **Workout Statistics - Simple (7)**

Generating workout statistics is relatively straightforward. It does not require complex calculations or combining multiple sources of data. It retrieves and sends pre-processed results from the database.

## External Inquiry (EQ)

- **Fetch Workout History - Simple (5)**

Fetching previous workout records is a basic query without modification of data. The system only retrieves and displays the requested historical data.