**HFACTIVITY**  
Based on the provided controller class for the HF Activity microservice, here's the detailed information about each API endpoint and its usage:

1. Add Activity

- Endpoint: POST `/api/activities/{userId}`

- Description: Adds a new activity for the specified user.

- Request Body: JSON object representing the activity.

- Request Parameters:

- `{userId}`: The ID of the user for whom the activity is being added.

- Response: Returns the newly created activity.

- HTTP Status Codes:

- 201 Created: Activity successfully added.

- 404 Not Found: If the specified user does not exist.

2. Get Activities by Date

- Endpoint: GET `/api/activities/{userId}/{date}`

- Description: Retrieves activities for the specified user on the given date.

- Request Parameters:

- `{userId}`: The ID of the user whose activities are being retrieved.

- `{date}`: The date for which activities are being retrieved (in the format YYYY-MM-DD).

- Response: Returns a list of activities for the specified user on the given date.

3. Get Activities by Date Range

- Endpoint: GET `/api/activities/{userId}/{startDate}/{endDate}`

- Description: Retrieves activities for the specified user within the given date range.

- Request Parameters:

- `{userId}`: The ID of the user whose activities are being retrieved.

- `{startDate}`: The start date of the range (inclusive, format: YYYY-MM-DD).

- `{endDate}`: The end date of the range (inclusive, format: YYYY-MM-DD).

- Response: Returns a list of activities for the specified user within the given date range.

4. Get Current Station

- Endpoint: GET `/api/activities/station/{userId}`

- Description: Retrieves the current station of the user based on their total steps.

- Request Parameters:

- `{userId}`: The ID of the user whose current station is being retrieved.

- Response: Returns the current station number of the user.

5. Update Activity

- Endpoint: PUT `/api/activities/{userId}/{activityId}`

- Description: Updates an existing activity for the specified user.

- Request Body: JSON object representing the updated activity.

- Request Parameters:

- `{userId}`: The ID of the user whose activity is being updated.

- `{activityId}`: The ID of the activity being updated.

- Response: Returns the updated activity.

- HTTP Status Codes:

- 200 OK: Activity successfully updated.

- 404 Not Found: If the specified user or activity does not exist.

6. Get Progress

- Endpoint: GET `/api/activities/progress/{userId}`

- Description: Calculates the progress of the user in reaching the next station.

- Request Parameters:

- `{userId}`: The ID of the user whose progress is being calculated.

- Response: Returns the progress percentage as a Long value.

7. Delete Activity

- Endpoint: DELETE `/api/activities/{userId}/{activityId}`

- Description: Deletes an existing activity for the specified user.

- Request Parameters:

- `{userId}`: The ID of the user whose activity is being deleted.

- `{activityId}`: The ID of the activity being deleted.

- Response: No content.

- HTTP Status Codes:

- 204 No Content: Activity successfully deleted.

- 404 Not Found: If the specified user or activity does not exist.

8. Get Total Steps

- Endpoint: GET `/api/activities/{userId}/total-steps`

- Description: Retrieves the total steps of the user.

- Request Parameters:

- `{userId}`: The ID of the user whose total steps are being retrieved.

- Response: Returns the total steps of the user as a Long value.

These are the API endpoints provided by the HF Activity microservice along with their descriptions, request parameters, response format, and HTTP status codes.