

## Activity Tracker

Activity tracker is a web service build using grpc and protobuf. This application deals with creating new user and adding/updating new activities with user. The activities which can be added are Read, Play, Sleep and Eat.

Activity tracker service consist of 2 service:-

**1)Activity Service**

**2)User Service**

**1)Activity Service:** This service is build using protobuf file(activity\_service.proto). This service is contains 6 endpoints or functions. Following are the endpoints available:-

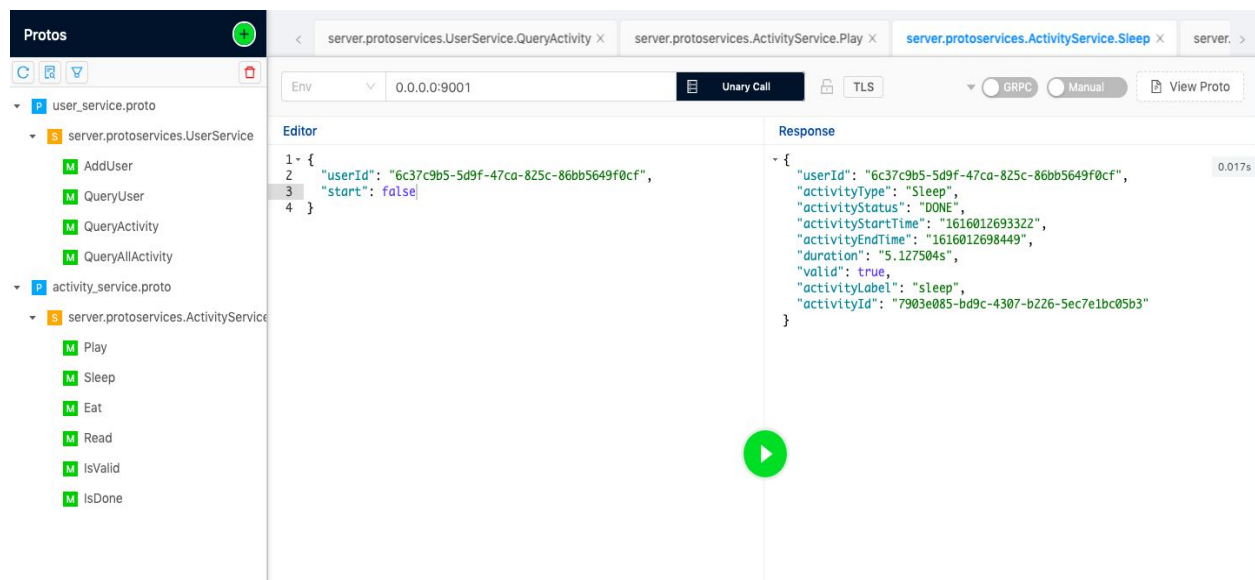
- Play : This end point starts and stop play activity of user.
- Sleep : This end point starts and stop sleep activity of user.
- Eat : This end point starts and stop eat activity of user.
- Read : This end point starts and stop read activity of user.
- IsValid : This end point check that activity is valid or not and returns boolean value. True means activity is valid and false means activity is invalid.
- IsDone : This end point check the activity is completed or currently running. Done means completed and Active means activity is still going on.

**2)User Service:** This service is build using protobuf(user\_service.proto). This service contains 4 end point:-

- AddUser : This will add new user to application.
- QueryUser: This will query user details and returns user details.
- QueryActivity: This will query user's activity details using user Id and activity Id.
- QueryAllActivity: This will query all the activities of user using user Id.

## How to use the application?

- 1)As activity tracker service is a web service so to access the end point you need to install Bloom RPC application.
- 2)After installing bloom Rpc application you need to click on + sign in protos section and browse to both the proto files.
- 3)Once you and loaded both the proto files you are good to go.After loading the proto file bloom rpc will look like following:-



- 4)To run the service open the terminal,go to the path of application and simply type following:  
*go run main.go*
- 5)As we are not using any database so data is not persistent once the application is shut down so before calling and end point we need to create a new user by using AddUser end point.
- 6)Once user is created you can use the user Id and use other end points.