

# Enable FHIR service for GameBus

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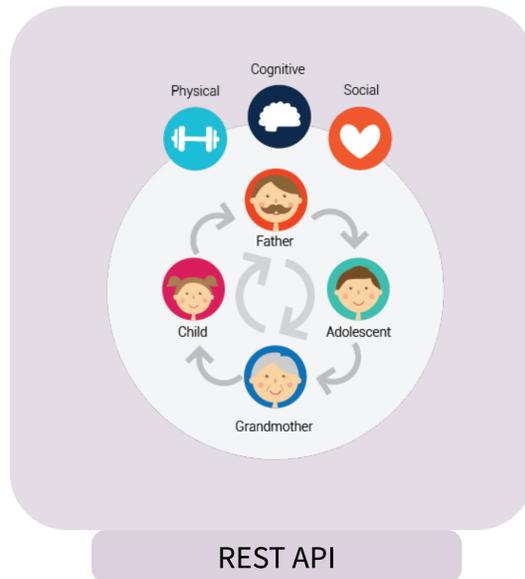


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dockerhub: nlesc/gamebus-fhir-layer

GameBus



## What is GameBus?

GameBus is a digital platform for people playing together healthy social, cognitive and physical activities in a personalized gaming experience. GameBus app is available on Google Play and App Store.

Just like the way many healthcare platforms store and share data, GameBus applies its in-house schema to format and store the data of players' activities and offers REST API to share these data.

## What is the challenge of healthcare data exchange?

This way, however, brings lots of burden of data transformation when exchanging healthcare data between platforms that are not using the same schema. It's like that a translator is always required to help two people exchange ideas when they don't know each other's language.

## Why is FHIR able to tackle this challenge?

An ideal solution of this challenge is to enable different platforms speak the same language. Here, the "language" for exchanging healthcare info is FHIR.

FHIR (Fast Healthcare Interoperability Resources) is a standard for exchanging healthcare information electronically.

It describes healthcare data formats and elements and API.

FHIR has been more and more widely used in industry and academia, becoming the de-facto standard.

## How do we take advantage of FHIR for GameBus?

To enable FHIR service for GameBus without changing or replacing GameBus schema, we developed the open source FHIR layer for it.

This FHIR layer consists of two important components:

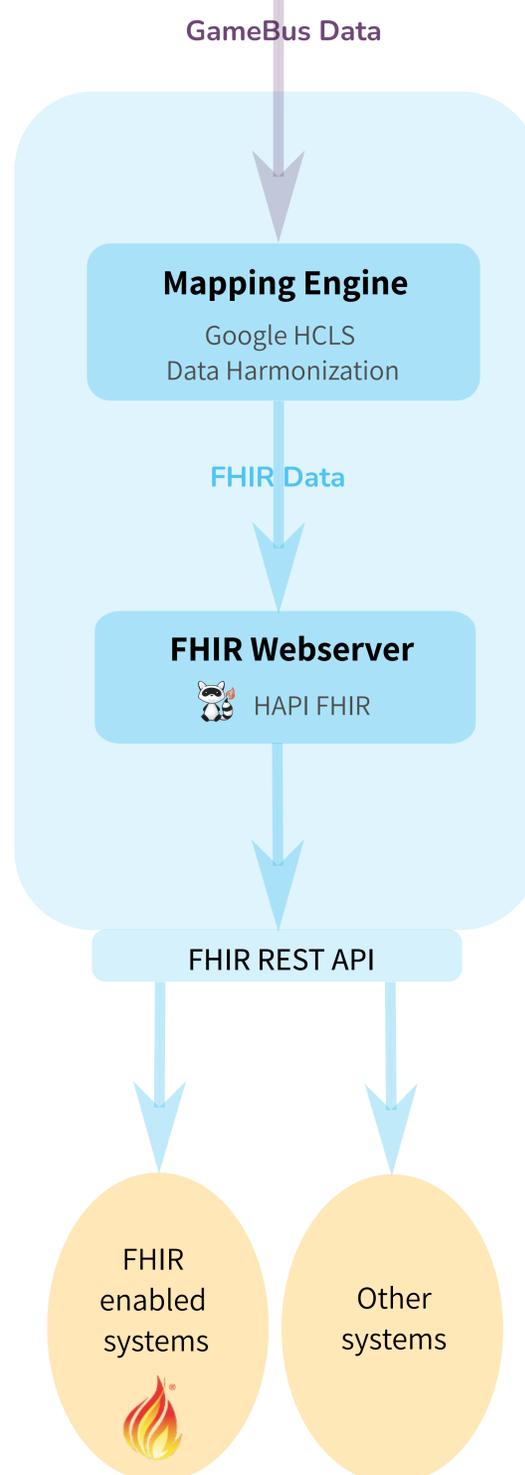
### 1. Mapping engine

Open source "Google HCLS Data Harmonization" is used as the mapping engine because of its feature of general use, which supports transformation between any two schemas by configuring mapping rules with ease.

### 2. FHIR webserver

Open source HAPI FHIR framework is integrated into this layer as FHIR web server. It takes FHIR compliant data from mapping engine and responds users' request through FHIR REST API with these data.

FHIR Layer



## How could you benefit from our FHIR layer?

Source code of our FHIR layer is available in open source on Github. Docker image is also available, making it easy to be deployed as microservice.

Our FHIR layer also provides an open source tech stack to enable FHIR service on other healthcare systems while not changing any code of the system. So if you need to make your system FHIR enabled, this tech stack is definitely worth a try!

User