Announcement
Evgeny Shvarov · Aug 11, 2020

 Open Exchange

Proposed Topics for InterSystems IRIS FHIR Contest

Hi Developers!

InterSystems FHIR contest has been started and in this post, I want to introduce several topics you may find interesting and use to build FHIR applications with InterSystems IRIS for Health.

Amongst them are:

- a frontend mobile or web app for FHIR server FHIR REST API or SQL;
- Backend apps to perform complex queries and maintain rules;
- work with different HL7 data standards.

See the details below.

Mobile or Web application

Mobile and web frontend applications are perhaps the most typical use cases to work with a FHIR server. If you use InterSystems IRIS for Health e.g. with the template we provide for the contest you get a FHIR server which exposes REST API ready to service the API calls to any FHIR resources according to FHIR R4 documentation. The related task. Tagging @ Patrick Jamieson to provide more information.

Also, you can consume FHIR data using SQL working with HSFHIRI0001R   schema for full FHIR resources and HSFHIRI0001S   schema to have SQL queries for certain entities of resources.

E.g. you can visualize the blood pressure change of a patient with the time, the related task request.

Another idea of the application is to maintain electronic immunization history, the request, tagging @ Yuri Marx to provide more info.

Examples of complex queries

The medical information is very complex and thus implementations and examples of queries for FHIR data to support different real-life scenarios seem very helpful and demanded.

E.g. the example of a query which looks for patients that have diabetes medications but no diabetes diagnosis. Tagging @ Qi Li to provide more information.

Backend app upon rules
You could build a backend application which analyzes the FHIR data and send alerts or perform different business operations. For example, consider the rule where the patient meets criteria (new lab result and new diagnosis) and send notifications. E.g. COVID-19 positive results. Related task requests: One, two. Tag @ Rasha Sadiq and @ Qi Li for more details.

Data transformation apps

As you know there are numerous legacy and comprehensive data formats for health data and all of them even the

oldest are still in use or could be met. Thus the application which can deal with them and transfer it into FHIR R4 format and back could be always in demand.

InterSystems IRIS for Health supports the majority of health standards and its data transformations so use it and introduce apps that can work with it handily and robustly.

The related task request, tagging @ Udo Leimberger for more details.

CDA to FHIR data transformation

iPhone can export health data to CDA, see the details. Transform this data into FHIR format using IRIS for Health and submit to the FHIR server.

Here is an example of how you can transform CDA to FHIR data using IRIS for HEalth. Tagging @ Guillaume Rongier for more details.

#Contest #FHIR #HL7 #InterSystems IRIS for Health #IRIS contest #Open Exchange
Check the related application on InterSystems Open Exchange

Source URL:https://community.intersystems.com/post/proposed-topics-intersystems-iris-fhir-contest