

2025
Global Release

1<sup>st</sup> Session: Starts Feb 13 2<sup>nd</sup> Session: Starts May 29 3<sup>rd</sup> Session: Starts Sep 11

Intermediate Level Course on HL7 FHIR Creating and exchanging electronic healthcare information

#### **Learn by Doing**

The FHIR Intermediate course is an asynchronous (no live lectures) online instructor-facilitated course completed at your own pace to meet assignment deadlines. It provides opportunities to apply newly gained knowledge with a set of guided exercises for learning by developing and reviewing working software.

#### At the End of the Course, Participants Will be Able to:

- Understand the scope and content of the Argonaut and IPS IG
- Comprehend the general characteristics of a FHIR client
- Understand and modify a FHIR client in C#, Java or JavaScript
- Understand the mechanisms for FHIR servers used as API facades
- Use SMART on FHIR to connect to an EHR
- Use CDS Hooks to provide clinical decision support for an application or system

#### **Web-Based Training**

- HL7 expert teachers are working professionals who help you step-by-step
- All course materials included electronically: reading materials, videos and practical exercises
- Discussion forums promote student engagement
- Integration activities are stewarded by the teaching team
- Self-evaluation quizzes test for comprehension

#### **Prerequisites / Enrollment Priorities**

- Prior experience in HL7 FHIR is required (completing the HL7 FHIR Fundamentals course before taking this course is recommended)
- Familiarity with C#, Java and/or JavaScript is strongly recommended
- Recommended for developers only

#### How to Enroll

• Visit: www.HL7.org/training/fhir-intermediate.cfm

### **Program**

#### MODULE 1 – IMPLEMENTATION GUIDES

- ♦ FHIR Implementation Guides: Argonaut Data Query / Provider Directory & IPS
- ◆ Development and Roadmap
- ♦ Scope, Use Cases, Guided Tour

#### MODULE 2 — FHIR CLIENTS

- ◆ General Guidelines
- ◆ FHIR Clients in Java
- ◆ FHIR Clients in C#
- ◆ FHIR Clients in JavaScript

#### MODULE 3 — FHIR SERVER

- ◆ FHIR Server Types and Patterns
- ◆ Specific FHIR Servers (FHIR Facade)
- ◆ Use Case / Scenarios / Architecture
- ◆ Where to Put the FHIR Facade
- ◆ Facade in C# / Java

#### MODULE 4 — SMART ON FHIR / CDS HOOKS

- ◆ SMART on FHIR Basics
- ♦ CDS Hooks Intro
- Integrating Your App with SMART on FHIR and CDS Hooks

## Full Course (4 Modules)

Non-Member	\$1000
Member	\$725
Student	\$575
Middle Income Country*	\$575
<b>Lower Income Country*</b>	\$450

<sup>\*</sup>For Lower and Middle Income Economies as determined by the World Bank, Visit data, worldbank, org/country to view classifications

<sup>\*</sup>Health Level Seven, HL7, CDA, and FHIR are registered trademarks of Health Level Seven International, registered in the U.S. Trademark Office.

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FHIR: Fast Healthcare Interoperability Resource Creating and exchanging electronic healthcare information

## What

## An intermediate online course covering HL7 FHIR:

- Four modules over six weeks via guided real-world exercises with instructor assistance and feedback via the web, and with an interactive community of participating students and instructors
- A typical week:
  - Study from reading materials
  - Get help from an instructor through the web via an exclusive forum
  - Apply knowledge through a variety of coding exercises (code review, build your own, architectural problems)
  - Get feedback on your progress

# Why

# Learn about developing FHIR clients and specific servers using open source libraries for HL7 FHIR:

- C#, Java and JavaScript
- Integrate leveraging the Argonaut and IPS implementation guides
- Understand the concepts and machinery behind SMART on FHIR and CDS Hooks

## Who?

#### This course is recommended for:

- Developers who are already familiar with FHIR and want to delve deep into the knowledge required to use it for real world projects
- Developers with experience programming with C#, Java and/or JavaScript
- Developers who wish to gain an overall technical experience of SMART on FHIR and CDS Hooks

# About HL7 International

HL7 is an ANSI-accredited, not-for-profit standards developing organization with the mission of empowering global health interoperability. With affiliates in over 30 countries, HL7's global membership envisions a world in which everyone can securely access and use the right data when and where they need it.