FHIR :

1. **Introduction to FHIR**:
   * Understand what FHIR is and its significance in modern healthcare.
   * Learn about the goals and principles of FHIR.
2. **FHIR Resources**:
   * Explore the core data components called "resources" in FHIR, such as Patient, Practitioner, Encounter, Observation, etc.
   * Understand how these resources represent different types of clinical and administrative data.
3. **FHIR Data Types**:
   * Learn about the various data types used in FHIR, including primitive types (e.g., String, Integer, Boolean) and complex types (e.g., Address, HumanName, ContactPoint).
4. **FHIR RESTful API**:
   * Understand how FHIR leverages RESTful principles for data exchange.
   * Learn about the standard HTTP operations (GET, POST, PUT, DELETE) used in FHIR API interactions.
5. **FHIR Search and Query**:
   * Explore FHIR's search capabilities and learn how to construct search queries to retrieve specific data from a FHIR server.
   * Understand FHIR search parameters and modifiers.
6. **FHIR Data Formats**:
   * Learn about the different formats for representing FHIR resources, such as JSON and XML.
   * Understand how to parse and generate FHIR data in these formats.
7. **FHIR Implementation Guides**:
   * Explore FHIR implementation guides that provide detailed instructions and best practices for implementing FHIR in specific use cases or domains (e.g., clinical workflows, interoperability standards).
8. **FHIR Profiles and Extensions**:
   * Understand how FHIR allows for customization and extension through profiles and extensions.
   * Learn how to create and use profiles and extensions to tailor FHIR resources to specific needs.
9. **Security and Privacy in FHIR**:
   * Learn about FHIR security considerations, including authentication, authorization, and encryption.
   * Understand how FHIR addresses privacy concerns and compliance with regulations such as HIPAA.
10. **FHIR Servers and Clients**:
    * Explore tools and frameworks for building FHIR servers and clients.
    * Learn how to interact with FHIR servers programmatically using FHIR client libraries.
11. **FHIR Implementation and Integration**:
    * Gain practical experience by implementing FHIR in a healthcare software project or integrating FHIR with existing systems.
    * Learn about common challenges and best practices for FHIR implementation and integration.
12. **FHIR Versions and Updates**:
    * Stay updated on the latest versions of FHIR and any updates or changes introduced in newer versions.
    * Understand how to migrate existing FHIR implementations to newer versions.

[Open Source Implementations - FHIR - Confluence (hl7.org)](https://confluence.hl7.org/display/FHIR/Open+Source+Implementations) related data

NOTS: FHIR maturity and Stability.  
  
   
   
 to indicate the maturity and Stability of the FHIR artifacts (resources ,datatypes, profiles). Different status and FMM(fhir maturity model) number are used.  
  
 1) Draft (FMM 0 ,1,2) : Draft status indicates that an artifact is still in development and subject to change.

Draft artifacts may undergo revisions based on feedback from implementers, experts, or working group members.   
  
2) STU(standard for trial use) (FMM 3,4,5) : STU status indicates that an artifact was tested by the FHIR community and is ready for implementation of experimental or limited production use.   
  
3) NORMATIVE (N) : Normative status indicates that an artifact has reached a level of stability and maturity for production use.   
4) DEPRECATED : Deprecated status indicates that an artifact is no longer recommended for use. and it will be removed from future versions of the FHIR specification.

Implementers are advised to migrate to alternative solutions recommended by the FHIR community.  
  
5) withdrawn: Withdrawn status indicates that an artifact has been removed from the FHIR specification entirely.

Withdrawn artifacts are no longer supported or maintained by the FHIR community.   
 implementers are advised not to use them.

Basics:

Fhir : stands for fast health care interoperability resources. It is an health care data exchange standard. It is offered by the health level seven (HL7) organization.   
  
why FHIR IS BETTER :  
  
1) Adaptability: easy to understand and implement.  
2) flexibility: 80:20 ( extensions,profiles)

3) open source : free to use   
4) web standard: supports both xml and Json format . supports for restful lapis and mobile web applications.  
5) security : supports more secuty to the data with support of OAuth 2.O.  
  
FHIR structure :  
 FHIR solutions are built from a set of modular components called "Resources".