Tutorial-2: Interoperability Types

Case Study-2

Raya Hospital (H1):

ID	Date	Type	Report	Values
00111	11/11/2011	Diagnosis	Hypertension	
00111	11/1/11	Drug	Nadolol	60 mg
0111	1/2/2011	Lab test	RBC	4321 mcl

Ramallah Hospital (H2):

ID	Date	Action	Finding	Values
1-111	11 Apr 2010	Diagnosis	Diabetes type-1	
1-111	11/4/2010	Drug	Metformin	250 mg
111	2 June 2010	Lab test	Hba1c	9%
1111	5/9/2011	Ultrasound	Appendicitis	
1111	9/9/2011	Procedure	Appendectomy	

Write the above data for H1 and H2, as messages or mapped structures, to meet the following interoperability requirements:

1- Structural Interoperability
2- Syntactic interoperability
3- Semantic Interoperability

Assume the sent data will be sent for
- Integration purpose, to an integration system that integrates data from several heterogeneous sources
- Interoperability purpose, where systems at Source-1 and Source-2 need to continually interoperate the data.