Data Driven Decision Making 2021

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# Course Schedule:

## Initial Assignment – Data Request (week 0 & 1):

* Explanation of assignment – This exercise will take a LIVE data request coming to the enterprise reporting group and we will ask you to work with the ERG team AND the end user to deliver a data request to an end customer
* Goal of the Assignment – the goal for this assignment is to (re)-familiarize yourself with one of the main “end products” of all the data gathering and transformation that the BI team does. At the end of the day, the hope is that you get and appreciation for the challenges of taking a request from an end user, understand what they need (vs. what they asked for), and delivering a solution that helps them solve for their problem.
* Work Product – the output of the assignment will be two things:

1. Requirements Document: This does not need to be fancy, but it helps to ensure that you and the end user are on the same page. (See attached “reporting spec.docx”)
2. Report output: A Microstrategy based report/VI document (whatever the end requester needs)

* Tools and Resources: use the ERG team (Ashley Doherty and Bassem Samuel) as a resource as you interact with the end user and use MSTR to build the output. You also may need to look at the data dictionary of the EDW located at this link (internal link):
  + <http://chbshare.chboston.org/ISD/bip/Lists/Subject%20Areas/Boxed%20Style.aspx>

## Understanding Databases – Map data to a db schema (week 2-3):

* Explanation of assignment – This exercise will take you into the world of database design (at a high-conceptual level) and how you’d take data from a source and ETL it into a database target. Based on the i2b2 documentation and your connection to the i2b2 database, propose how you would at a conceptual level get the attached data (“sample data.xlxs”) into the i2b2 data model.
* Goal of the Assignment – the goal for this assignment is to start to familiarize you with the idea of taking a transactional application and using it as the basis for a reporting infrastructure.
* Work Product – the output of the assignment will be a conceptual set of diagrams and accompanying SQL\* which would take the data and put it into the relevant tables of i2b2.
* Tools and Resources: use the CRIT team (Mohamd Daniar and Nandan Patibandla) as a resource.. You also may need to look at the broader i2b2 documentation:
  + <http://www.i2b2.org>

## Putting it all Together – understanding the EDW schema of “Person” in Consumption Layer (week 3-4)

* Explanation of assignment – This exercise will try to connect the two halves of what you’ve learned about to date. Knowing a little about database design and knowing what people want out of the system, the goal is to comment on the design of the consumption layer of the person area in our EDW and critique it.
* Goal of the Assignment – this assignment is meant to try to consolidate your knowledge. As with any EDW, there are design choices we’ve made in how we’ve built out logical areas (like Person, visit, results) which have consequences. Using whatever tools we have (ER diagrams, SQL to look at data, MSTR reports), describe and comment on the current design
* Work Product – I don’t have an exact format here, but I’d like for you to show the EDW’s design in a given logical area, talk about the implications (good and bad) of that design and how that ultimately results in consequences for MSTR end user reporting
* Tools and Resources: I expect you to have to lean on the data integration (Chirag Mehta) team a bit for some of the db design elements.