At what point can the data in a field be considered atomic? Is it possible to carry atomicity too far and how do you know this has happened? Provide an example not found in the text.

A data field needs to contain the smallest amount of complete information that it can to be consider atomic. Like breaking down a full name into a first name and last name fields. Or a date into month, day, and year fields. This would allow you to search records based on any of those fields. If you need all records from 2000 regardless of the month or day, you can search the atomized year.

A couple things I read stated that the definition of atomic depends on your needs. So, if you needed search or filter by street names, then separating “123 West Road St.” into “123” and West Road St.” would be atomic. If you do not need that feature, then as the video in the course material said, it would be easier to use the address as “123 West Road St.” instead and that is then atomic.

How you can tell if you have over atomized a data field is if you cannot reliably filter or search for relevant data using that field anymore, or if it takes more setup than it should to be able to put the data back together. Basically, if you cannot use the fields after atomizing than you have gone too far.