Do the following

- Read through the Wikipedia entries on <u>user-centered</u> and <u>human-centered</u> design
- Browse the pages at http://www.designkit.org/human-centered-design, and make sure that you read about the MoneyThink case study.
- Read Human-Centered Design Considered Harmful by Donald Norman
- Answer the Assignment 2 questions on Blackboard (and also copied below).

Submit one PDF file on Blackboard with your answers for each question (and repeat the text of question as a preface for each question). Also, make sure your name is at the top of the PDF file.

You can answer these questions "open book".

1. (5 points) In his article entitled "Human Centered Design Considered Harmful", Don Norman writes

"The individual is a moving target. Design for the individual of today, and the design will be wrong tomorrow. Indeed, the more successful the product, the more that it will no longer be appropriate."

In 50 words or less, describe an application that we have discussed in class in which a user for whom you are designing a database may not have sufficient foreknowledge of functionality that they will want the database to support in the future.

We read a paper on the Oberlin Dorm Energy monitoring project previously, and we discussed a database necessary to support it. One limitation of Oberlin dorm monitoring was that floor level was the finest granularity monitored, but that room level, plug level, and device level were all possibilities that could have (should have?) been considered at database design time, which might have been beyond the experience of the Oberlin administration (but we hope not the tech team). One possible answer to Question 1 would address the possibility of increased granularity.

Other possible answers could address the Hans Rosling visualization DB (e.g., the recursive definition of regions into sub-regions, as a generalization of continents, countries, and provinces). A simple vehicle database was discussed too, and we discussed possibilities of co-ownership, etc. Its possible that students discussed a "college application" example that was used as an example in the videos.

Most serious answers will get full credit on this question, regardless of data source discussed

2. (5 points) In 150 words or less, identify how the philosophy and practice of user-centered design, as reflected in the Wikipedia article of that name, can help with the activity-centered design advocated by Norman. Give one quote (bracketed by "") from each of the two articles (i.e., the Wikipedia article on User-Centered Design and Norman's paper). The two quotes are included in your word count.

Most serious answers with a quote from each of the two sources will get full credit. -1.5 for one missing quote. -3 for two missing quotes.

Good answers might discuss scenarios and use cases in user-centered design as a way that user-centered design (or closely aligned human centered design) could illuminate activity and task definitions that are the focus in activity-centered design.

Answers might reflect on activity-centered design implicit placement of designers as users, who rationally examine the nature of activities. The identification of "evolution of design" in the activity-centered design paper also implies attention to users as well.

The MoneyThink case study (not an expected reference for this question) suggests that users can also be a source of what the activities are to begin with!

The distinctions between user-centered (and human centered) and activity-centered design are vague, but boil down, I think, to an understanding that users don't know it all and can't anticipate it all – we need design methodology that goes outside the routine of experience and knowledge of users sometimes.

As an aside (not relevant for grading), there are analogs to experimental and rationalist approaches in cognitive psychology. Experimental approaches look at what people do (their behavior) to infer models of human thought, and rationalist approaches first ask what would rational agents do in the same circumstances, and take the models that result as a first approximation of models for human thought.