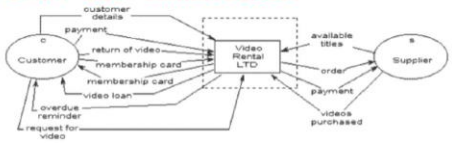
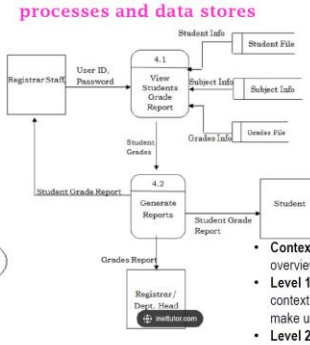
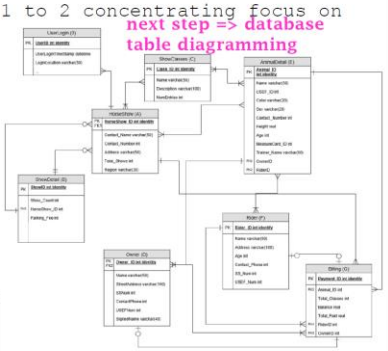
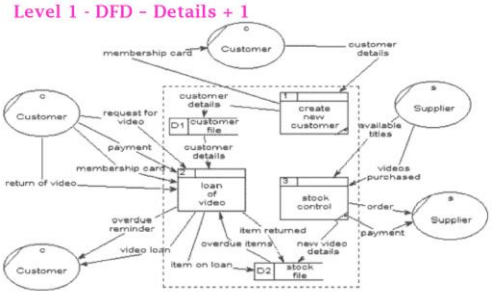
Wk	Focus & Medium	Weekly Topic & Assignment
4 9/19 - 9/24	**Overview** **Python 101 coding** **wk4 Assignment** **Model.4.DFD** **Data Flow Diagram**	Orientation to core Python functionality the course will use for system analysis and design projects. The codebook details core data objects, functions, iterators, conditionals, dataframes, and ETL. In short, everything you need to be successful in class and as an entry-level IT professional. Your objective is to "re-type" the code and bring class your learnings and questions for any code you do not understand. You are not learning code from scratch, but you need to understand and intuit the mechanics of iterators, if.elif.else conditions, and functions to perform work computational work effectively. I am 99.9% confident everyone can complete this work, and I hope everyone will have fun doing so. Good writing is good thinking, and good programming helps make IT work more meaningful and enjoyable. The latest version of the codebook, called the zipper, is in the bh.github. Enjoy the printed codebook handouts but ensure to update and print another copy in the upcoming weeks. The latest copy is always on the class git. Thank you for thoughtfully working through all codebook examples. Think about what the code is doing inside the computer. Write down anything that doesn't make sense for class discussion. The class will design a DFD to perform a system analysis effort. **Model.4: Data Flow Diagraming** <sparx-models> <website> <how.to.doc [VG]> <how.to.video> <wikipedia> Purpose: is the proess of representing simplified data transactions enabling process and stakeholder owners to agree on scope and boundaries of a systems analysis and design re-engineering effort. Key tasks are consolidated in levels 1 to 2 concentrating focus on the 1 to many transactions they likely perform. Level 0 - DFD - Context Diagram  Level 2-DFD - main sub-processes and data stores  next step => database table diagramming  Level 1 - DFD - Details + 1  - **Context diagrams** — context diagram DFDs are diagrams that present an overview of the system and its interaction with the rest of the "world". - **Level 1 data-flow diagrams** — present a more detailed view of the system than context diagrams, by showing the main sub-processes and stores of data that make up the system as a whole. - **Level 2 (and lower) data-flow diagrams** — a major advantage of the data-flow modelling technique is that, through a technique called "levelling", the detailed complexity of real world systems can be managed and modeled in a hierarchy of abstractions. Certain elements of any dataflow diagram can be decomposed ("exploded") into a more detailed model a level lower in the hierarchy. IT.304 Systems analysis, design, and implementation planning, Southern New Hampshire University, b.hogan@snhu.edu <bh.github> **Note:** Wikipedia is an information only reference. It is not an academic reference.