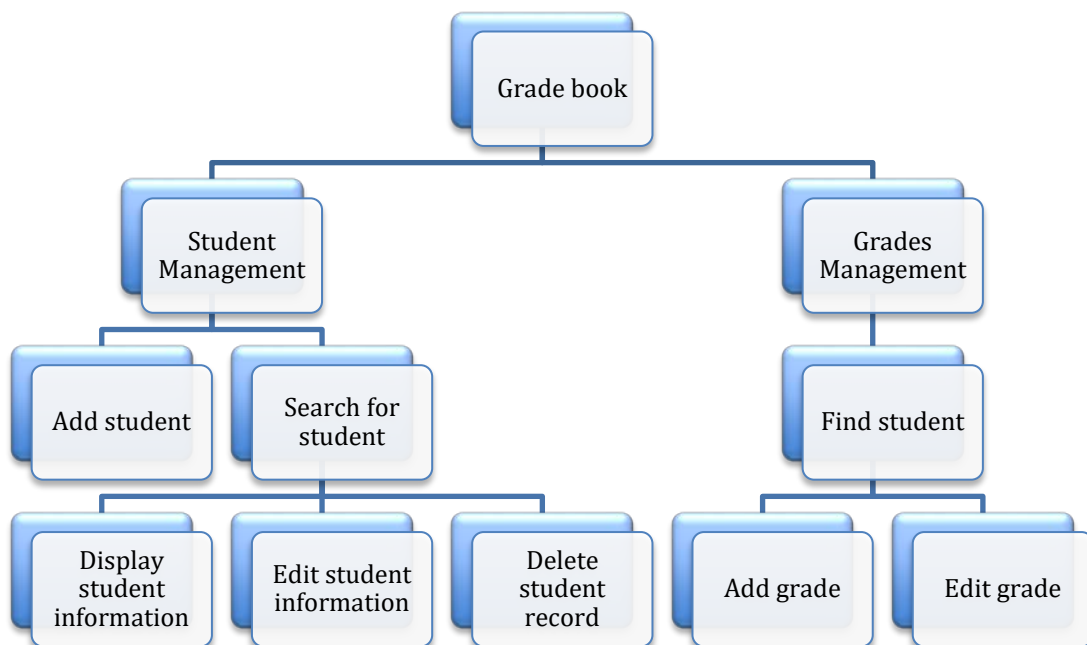
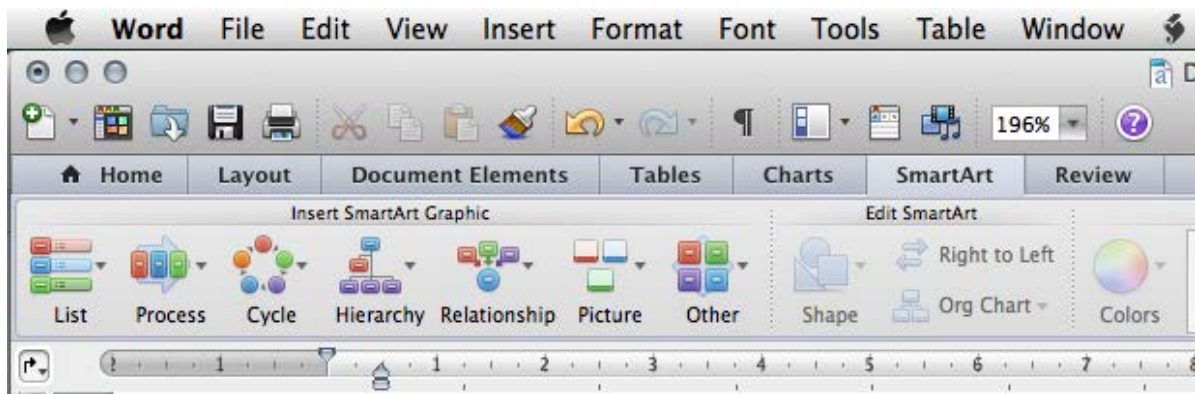


Recommendations: Diagrams to use

1. Decomposition/top-down diagram

You may want to use the SmartArt option in MS Word for this. In the example, the Hierarchy graphic was used.



2. [Systems flow chart](#) (preferred)

3. Simple **use case diagram** (see figure 7.9 in chapter 7.5, “Tools of the Trade” of our textbook)

4. **Defining Diagram** (input/processing/output – refer to online class resources: “Developing Algorithms” and “Notes on algorithms/problem solving”)

5. **Pseudocode** or **flow chart** diagram (especially for searching and sorting algorithms – refer to online class resources “Approved notation for pseudocode IBO” and “Pseudocode in Examinations”)
6. **UML Class diagrams** (detailed information from [Wikipedia](#) and [IBM](#))
7. **File structure** diagram – shows the order in which data items/attributes are stored in a file.

<i>Attribute/Data item</i>	id (integer)	subjectName (String)	finalGrade (float)
<i>Size</i>	32 bits (4 bytes)	2 bytes per character*	16 bits (8 bytes)

- * due to Unicode character encoding. For more information on the sizes of primitive data types, look at [this webpage](#). For more comprehensive cheat sheets, look at [Dzone](#) and [Princeton University](#).