CLA CS-101 (A1)
Introduction to Computers
Spring 1995

MAC Lab Homeworks

General Remarks:

- ◇ Read the problem specification very carefully so as to know exactly what is required and what to hand in. If you have questions, ask!
- ◇ The technical quality of the work as well as the way you present it is very important. Pay attention to details. This will pay off with better grades.
- ◇ Please hand in your solution on the deadline. Late homeworks will be penalized as described in the course outline.
- ◇ All solutions should be handed in with a cover sheet that specifies your full name, and your `login` name.

Homework # A
(MacPaint and msWord)
Due on Tuesday 03/28/95

1 Using **MacPaint** prepare a flyer for a birthday party that you are organizing for your best friend. Your flyer should include the following features:

1 Free hand drawing using the paint brush and/or pencil,
2 Texture using the spray can,
3 Text in different fonts to give "when" and "where" information about the party.

Make sure your flyer uses an entire printed page and makes good use of space.

2 Using **msWord** prepare your own Resumé. A resumé is a 1-page document that describes an individual's education, work experience, extra-curricular activities, honors and awards, ... *etc.* For an example look at AM (page 155). The visual impact of a Resumé is usually very important. Make sure to use appropriate fonts and styles so as your resumé will stand out. Notice that it is a challenging task to do this and at the same time pack your resumé with all the information you may want to reveal to a potential employer!

Note: Except for your name, you can include any information in your resumé, even if inaccurate or incorrect.

Homework # B
(Excel)
Due on Thursday 04/06/95

- A computer-illiterate friend of yours has just graduated from BU and wants you to help him/her apply to graduate schools. As a part of the application process, your friend is expected to submit a report of his/her performance over the 4 years he/she spent at BU. The report should include a list of all the classes taken in each semester. For each class, the following is needed: the name and number of the class, the grade (on a 4-point scale) received in that class, and the total credit units for that class. From this information, it is required to compute the grade points for each class. This can be done easily by multipying the grade by the total units. Also, for each semester, it is required that the semester GPA of your friend be computed. The semester GPA can be computed by adding up the grade points for all the classes taken in that semester and then dividing the total by the total number of credit units for that semester. Similarily, it is required that the year GPA be computed. Finally, an overall GPA must be also given.

  Using Microsoft Excel, generate the above GPA report. You must submit the spreadsheet, the formulas, and a properly labeled chart plotting the semester GPA for all semesters. Using the page setup, toggle the "print row/col headings" so that Excel default row/col headings do not print. Printing grid lines is your choice but most spreadsheets look better without grid lines.

Homework # C
(FileMaker Pro)
Due on Thursday 04/20/95

- Produce 4 reports (1 label and 3 column layouts) on a database of your choice. Your reports should illustrate some of the features of FileMaker Pro (sorting, selection, formatting, ...) Feel free to use a database of your own choice. For example you might want to have a database similar to the following:

  ◇ A database of movies kept in a video rental store. For each movie, you might include fields like: title, number of copies owned by the store, number of copies available in the store (not currently rented), movie type (e.g. cartoon, comedy, musical, ...), the rating (e.g. G, PG-13, R, ...), length of the movie in minutes, producer, director, price for a weekday rental, price for a weekend rental, number of times the copy has been rented before, ... *etc.*

  No matter which database you choose (Movies in video-rental store, or books in Mugar library, or courses offered by CLA, or checking accounts in a Bank, or records of students enrolled in a small college, ...) **Your database must contain at least 20 records and 8 fields.**

  Please include with your 4 reports:
  1 A 1-page showing in standard layout all the fields for one record of your database.
  2 A 1-page explanation (using msWord) of how each report is different, what it contains; for example ... "Report One contains the names, runs-batted-in, and at-bats for all players sorted in descending order by runs-batted-in."

Homework # D
(HyperCard)
Due on Thursday 04/27/95

This is an optional Homework
use it to <u>substitute</u> for your lowest-grade homework

- Produce a short (minimum 5 - maximum 10 cards) children's story. You may create your own original story or use a well known children's story. The reader must be able to take "side trips" through the story for alternate adventures, alternate endings, extra information about a character, etc. If you have any questions about this requirement please ask. It is difficult to break out of the sequential "mind set" imposed by papers and books but this is a must for this assignment. All text of the story must be written in fields and should be appropriate for a young child. Balance your picture/text use of space. If in doubt, go for more pictures and less text per card. You may use clip art but use caution here. Make sure the reader can understand your butons. It should be obvious what is a button and what might happen when it is "clicked". Turn in your disk as well as a cover page and a print out of your stack (two cards to a page).

Have Fun!