

Minutes for Client Meeting at Union Hospital December 12, 2002 at 4:45pm

Description of Problem:

- Background: In 1995 a Lotus spreadsheet application was written which uses macros to determine the amount of radiation to be given to cancer patients. The standard unit of measurement for radiation is the Monitor unit. Empirical data was taken at different field widths, depths, and radiation intensity. This information is currently stored in the form of Lotus spreadsheets which are accessed by the main spreadsheet application to calculate the Monitor Units to be used. For each macro, there is a simple user interface which takes patient information from the therapist and fills in the spreadsheet accordingly.
- Current Problems: The Union hospital has recently updated their computer system. The version of Lotus which they were using will not run on their new system. A newer version of Lotus runs on the system, but does not properly run the spreadsheet application. Problems it produces are as follows:
 - The macros do not load correctly on the toolbar, however they can be selected to show up. (minor)
 - Of the macros that do not work (2 of the 5), the problem lies in reading values from the spreadsheets. The inputted values appear on the spreadsheet, but not the corresponding values from the look-up spreadsheets. It is believed that the problem is due to inconsistencies between the scripting languages of the two versions of Lotus (either the language itself or the file format of new spreadsheets). (major)

Description of Project:

- The project, as proposed by the Client, is to find the inconsistencies of the macros from the 2 versions of Lotus, and to adapt the old spreadsheet application to run on the newer version. Other changes that were suggested include:
 - Currently, it is not possible to see the MU value until after the data window is closed. It would be preferred that this value were instantly available.
 - Should an error be made in entering data, it cannot be changed until after the entry window is closed, abandoning up to three complete calculations. The Client would like to be able to 'go back' and edit only the incorrect value, instead of needing to reenter every field.
 - At present, there is a different data spreadsheet for each level of intensity. It would be nice if there were a single '3D spreadsheet' which contained all the data (perhaps multiple sheets in a single spreadsheet file?).

Additional Considerations:

- The primary users of this application are radiology therapists, who may or may not be computer literate. The interface should be such that it resembles the current interface (which the therapists are already familiar with) and any changes are easy to adapt to.
- A new technology, Intensity Modulated Radiation Therapy (IMRT), will most likely be available within the next few years. At that time the hospital will update its systems.
- Due to the sensitivity of the data in the spreadsheets, the Client is very leery towards moving the data to a different file format. It would also be preferred if the application itself were also kept a Lotus application.