## MAPS August summary 2002

In August I began designing and coding the caretaker gui in Visual Basic. I began this process with Stefan's help by creating the boxes for the file structure so the user can grab the pictures and sounds and preview them. This included making a picture display in a box on the screen, and having a button the user could press to play the sound. The challenge in this part of the process was getting the picture to be sized correctly to the box for viewing. I also created a button that played the picture and sound together.

The next step for me was to create a control array along the bottom of the screen that displayed five nodes. We had also added the buttons 'Add picture to script' and 'Add sound to script'. These would be the buttons that would add the pictures and sounds to the script in making in the control array below. The challenge in this part of the design was deciding how to have the program know when to insert a new picture and/or sound in the next empty box, rather than the current one. This challenge would revisit us in the weeks to come. For the time I implemented the code so that a person would have to insert a picture first, and the box would advance forward every time the media type you were trying to insert was already present in the current node.

Another thing to think about at this time was determining how to display what the current node was, and where we were in the script. This was put off until later.

At this point we were still limiting our script lengths to only five nodes or less, just to get the basic stuff implemented first. At this time I also implemented a 'Run Script' button which ran through the created script, playing each node. I also still had a button that would play the current node. Stefan and I created a quicky help/info box for our gui as well.

The next step I took on our gui was to implement a highlighting mechanism that would highlight the current node. I did this by using a control array of frames of which we changed the background color and set up a timer to make it blink.

After much time spent debugging the gui, I took a break and spent some time with Stefan working on the database stuff. We implemented a button that would add the script to a database which could then be loaded on the handheld device and played. This was pretty straight-forward although we had some struggles with the sizes of the pictures and sounds, and realized that we had to do some modifications to make the pictures and sounds smaller.

When I returned to working on the gui I implemented insert node and replace node functionality. With this in place a user could click on a box (which would then be selected) and either insert a new node before the selected node or replace the picture or sound in the current node. To do this I created a new form that would appear and have the user choose whether they were inserting or replacing a node. While doing this we also tried harder to make the order in which you could insert items more intuitive (i.e. allowing the user to insert all the sounds first, or the pictures then sounds, basically in any order they wanted).

The next big task that I undertook was to implement scrolling capabilities for our gui, because obviously, most scripts will be longer than five nodes. Somewhere lost in the bugs of this part did I end the month of August, with a mostly implemented gui that looked pretty groovy.

I also spent some time this month recording sounds and modifying pictures to use while we tested our script creator.