Adaptation Project Explanation and Summary

Sometimes, an idea can stick in your head, insisting on its materialization until you comply. Such was the case for my fascination with the Fibonacci sequence, which survived through numerous changes to my original concept.

I first thought about graphing the Fibonacci sequence as a fractal, an idea which failed miserably. My computer imaging skills simply were not up to the task, nor could I find anyone’s who were. I eventually found a program which could generate Fibonacci sequence fractals, but it was $30 and seemed to require far too little effort (I basically would just manipulate the colors, and it would do all the dirty work).

Next came the music idea- I could assign note pitches and frequency to the numbers in the Fibonacci sequence. This too unfortunately proved a bit too complicated, and even my roommate, who was a music major, couldn't help me.

At this point I was ready to scrap the whole proposal, but for some reason I just couldn’t come up with another idea. I was stuck with Fibonacci, and not much else would occur to me. So I moved on to a much simpler idea- creating an animation in Macromedia’s Flash which would mirror how the Fibonacci sequence can create something as simple and as beautiful as a nautilus shell. I required a little help with the program, since I hadn’t worked with Flash since high school, but it wasn’t hard to get the hang of. I created the sequence of so-called “golden rectangles,” whose sides were successive Fibonacci numbers in length and were numbered in accordance with the sequence, and colored them in with shades of blue and green, to create a “sea-like” feel. Then I drew in the resulting spiral by hand, which took a lot more time than I thought. For fun, I also added ocean sounds in the background. I felt that these effects would draw more
connections to the nautilus shell than the simple spiral itself. For the presentation, I also brought in a tangible shell for contrast and comparison.

While I find it fascinating that Fibonacci numbers are present everywhere in nature, from the swirl of a galaxy to the swirl of a sunflower, I don’t really understand my personal infatuation, at least with regards to this project. I’ve never even read *The Da Vinci Code* (and I’m not a math buff, either). I think the theory and its applications are very interesting, though. Someday I would like to gain the skills necessary for graphing a Fibonacci fractal (or any fractal at all, for that matter), but for now this animation is my adaptation.