**Morse Code Decoder**

Milestone 1

- The design will be finalized (as a result of discussion and inquiry) and its constraints and specifications will be noted for later reference

- If we decide to make the decoder self-sustaining (i.e., make it function apart from the DE2 board) we will determine what the necessary parts are and gather them

Milestone 2

- Most of the software component will be completed

- We will review Morse Code for testing

- We will test the software by simulation until we are satisfied with its functionality

Milestone 3

- If we decide that the decoder should be self-sustaining, we will test the physical device combined with the software that would have been tested for the previous milestone

- We will verify the timing of the decoder, the frequency at which it should make noise, as well as any other specifications that would have been finalized at the first milestone

**How does this project relate to material covered in CSC258?**

This project will help us exercise our knowledge of finite state machines and how they get broken down. Specifically, this will be through analyzing how the different sequences of characters (in Morse Code) result in the output of different letter. This project will also have a crucial focus on timing and synchronization of circuits since consistency will be essential for the correct communication of Morse Code.

**What's cool about this project (to CSC258 students and non-CSC258 students)?**

It will be a stand-alone, primitive model for a device that is/was used to broadcast a universal form of communication: Morse Code. It represents the birth of radio communication.

**Why does the idea of working on this appeal to you personally?**

It is very humbling and informative to break down what might now be a primitive means of communication into snippets of dots and dashes that get translated into everyday language.