

Ethan's Design Notes

UI

The UI was separated into five panels the purpose of this was so that different portions of the code UI would load separately.

ContentPane

This panel exists for the other panels that can be added on top of it and organized them.

BitPanel

This panel exists to keep track of the 16 bits that you will load into other programs. The bits are toggle buttons and when they are toggled on, they become a value of 1 and when toggled off, they have a value of 0. This Panel uses the Flowlayout so that way when the buttons are added they are nicely added and are centred on the screen.

LabelBitPanel

LabelBitPanel is a panel that simply labels the bits with the ones that they belong to. For example, the opcode is the first 6 bits from the left.

CommandPanel

This panel also uses the Flowlayout which centers the buttons. This just centers it on the screen and makes it easy to see. It's also just below the bitpanel so that you go from one to another. Here has the store button, the load button, the next step and the reset. The reset button resets everything that is on the screen. The next step button takes the current bit from the PC and puts it into the MAR field and then the PC increments by one.

ProcessingPanel

The processing panel contains the most that exist on the screen including but not limited to GPR0-GPR3, PC, and MAR. Every command has a load button function by using the toggle buttons at the top which allows you to load in the sequence that is shown. If a load contains less than 16 bits then it only loads the amount that it can hold.