EE472

Lab 2 Documentation

**Pseudo Code**

Schedule {

delay //500 ms delay

globalCount++;

display globalCount;

}

NorthTrain {

if (north && trainPresent) {

display trainSize;

display “North Train”;

//blink displayed information

sound North Train pattern;

}

}

EastTrain {

if (east && trainPresent) {

display trainSize;

display “East Train”;

//blink displayed information

sound EastTrain pattern;

}

}

WestTrain {

if (West && trainPresent) {

display trainSize;

display “West Train”;

//blink displayed information

sound West Train pattern;

}

}

SwitchControl {

if (trainPresent or !gridlockedChecked) {

gridlockChecked = TRUE;

//flash “alarm”

// generate random number between -2 and 2

if (random num < 0) {

gridlock = TRUE;

trainPresent = FALSE;

“alarm”

//delay for -2 \* random num minutes

//routing

gridlock = false;

else {

traversalTime = 0.1 \* trainSize minutes;

// display direction

// after traversalTime

//set all directions to FALSE

trainPresent = FALSE;

trainSize = 0;

}

}

}

TrainCom {

//generate random number n between 0 and 2

if (n == 0) {

west = TRUE;

} else if (n == 1){

north = TRUE;

} else {

east = TRUE;

}

// generate random number size between 2 and 9

trainSize = size;

}

**Timing**

**Block Diagram**

**Time Spent**

Design:

Coding:

Test/Debug:

Testing code:

Documentation: