BOX ORIENTED PROGRAMMING PARADIGM

I AM CONVINCED THAT THE WAY COMPUTER PROGRAMS ARE WRITTEN IS CONVOLUTED, STRANGE, VERBOSE AND INSANE. OBJECT ORIENTED LANGUAGES LIKE C++ AND PHP ARE DIFFICULT TO READ, UNDERSTAND, AND TAKE YEARS TO MASTER.

IF WE GO BY THE BASIC RULE THAT ALL COMPUTER PROGRAMS BOIL DOWN IN ONE WAY OR ANOTHER TO INPUT AND OUTPUT, AND A LOT OF CRAZINESS HAPPENING IN BETWEEN THEN WE CAN START THINKING ABOUT A NEW PARADIGM WHERE WE NEVER LOOK INSIDE THE IN BETWEEN. WE NEVER OPEN THAT BOX.
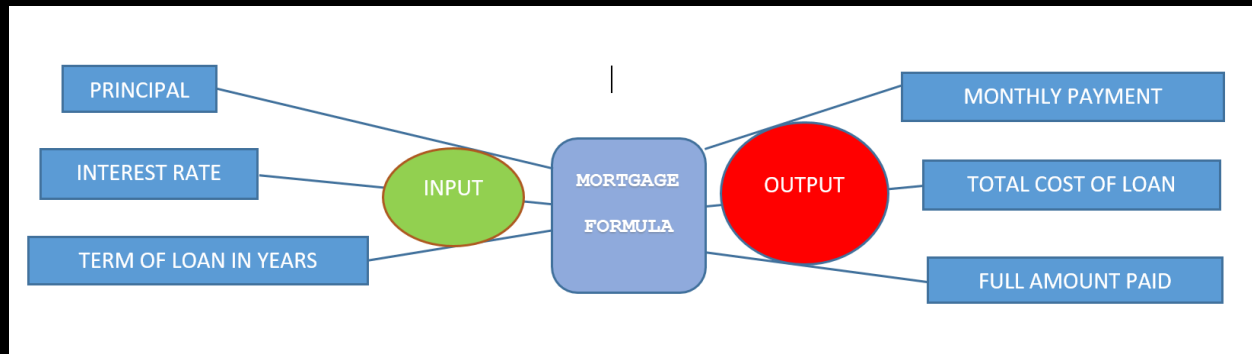
MORE CODE NEEDS TO BE WRITTEN FOR ALL KINDS OF REASONS AND IT SEEMS THAT A VISUAL BASED SOLUTION IS THE ONLY WAY FORWARD. THE CODE FOR BASIC APPLICATIONS AND EVEN THE MOST ADVANCED APPLICATIONS HAS ALREADY BEEN WRITTEN BY SOMEONE, SOMEWHERE IN THE WORLD THOUSANDS OF TIMES.

WHY ARE WE CONTINUALLY REWRITING IT?

FOR EXAMPLE, A LONG TIME AGO I CODED A MORTGAGE CALCULATOR. MY APP WAS AN IPHONE PROGRAM, WAS WRITTEN IN OBJECTIVE-C AND TOOK 4 NUMERICAL INPUTS AND GAVE 3 NUMERICAL ANSWERS.

THE CODE INSIDE WAS VERY COMPLEX BUT IT DID ONE THING AND ONE THING ONLY – TAKE THE INPUT – AND GIVE OUTPUT. NOTHING LESS OR MORE. SO IN MY VIEW, NO ONE SHOULD EVER HAVE TO WRITE THAT MORTGAGE CODE EVER AGAIN BECAUSE I ALREADY DID IT AND UNLESS THE BASIC FORMULA CHANGES, WHICH IT NEVER WILL, THAT CODE WILL ALWAYS BE GOOD.

SO NOW WHY CAN WE NOT ALWAYS USE THE CODE I WROTE AND KEEP IT CONTAINED AND FROM THERE ONLY EVER ROUTE NUMBERS TO IT AS NEEDED. SO, IN A FLOW BASED CODING ENVIRONMENT SOMEONE CAN PULL UP A MORTGAGE BOX AND FROM THERE THIS WILL SHOW UP:

SO NOW THE ONLY QUESTION I HAVE IS WHY DON'T WE CODE LIKE THIS? THE CODER CAN THEN SEND A FORM INPUT FROM A WEBSITE TO THE 3 INPUTS AND NEVER THINK ABOUT WHAT INSIDE THE MORTGAGE FORMULA BOX AND THEN JUST WIRE UP THE OUTPUTS ALSO.

THAT CODER WOULD HAVE ADDED A MORTGAGE CALCULATOR TO HIS WEBSITE IN 1 MINUTE OR LESS.

TO FURTHER SPECIFY THE INPUT AND OUTPUT TYPE, HERE THE INPUT TAKES A FLOATING POINT NUMBER OR NUMERICAL INPUT AND THE OUTPUT IS ALSO A NUMBER.

THE INPUT CAN COME FROM ANYWHERE – BUT THE USER SHOULD BE ABLE TO EASILY SEE WHAT KIND OF INPUT THE BOX TAKES AND WHAT KIND OF OUT PUT THE BOX GIVES.

THE FACT THAT SOFTWARE DOESN'T ALREADY WORK LIKE THIS ACROSS THE BOARD IS INSANE AND ARCHAIC TO ME.

NO WONDER MOST CODERS ARE NUTS.

OF COURSE WE SHOULD BE ABLE TO CLICK ON THE MORTGAGE FORMULA BOX AND SEE WHAT IS WRITTEN IN THERE, BUT A LOT OF SOFTWARE OUT THERE IS TOTALLY REDUNDANT. LANGUAGES SHARE THE SAME DATA TYPES LIKE FLOATS, INTS, STRINGS, AND LOOPS. SO WHY HAVE SO MANY LANGUAGES THAT EVERYONE HAS TO MASTER.

THE BEHAVIOR OF AN ENTIRE DATABASE COULD BE SUMMARIZED WITH A BOX AS WELL. FOR EXAMPLE, I RUN AN OPENCART ECOMMERCE WEBSITE. I KNOW IT RUNS ON MYSQL BUT I HATE LOOKING INSIDE THE DATABASE.

ITS UGLY IN THERE. IT'S MESSY. A LOT OF DUMB STUFF HAPPENS IN THERE. WHAT I DO KNOW IS THAT IF ANYTHING INSIDE THERE GOES WRONG THEN MY WEBSITE STOPS SELLING VINYL RECORDS.

I ONCE LOOKED AT THE SOURCE CODE FOR OPENCART. ITS OVER A MILLION LINES OF WHO KNOWS WHAT. IT'S A CONCEPTUAL NIGHTMARE TO TRY TO UNDERSTAND – BUT IT WORKS.

WHAT EVERYONE REALLY WANTS IS TO <u>NOT</u> KNOW HOW THE LOGIC FLOWS THROUGH THE CORE SYSTEM OF OPENCART. WHAT WE WANT IS FOR IT TO WORK WELL SO WE CAN BUY AND SELL STUFF.

WHAT WE REALLY WANT TO HAVE IS A WAY TO CHANGE THINGS EASILY WITHOUT HAVING TO SEE THE CODE. SO TO ALTER SOMETHING WE ONLY EVER SCRATCH THE SURFACE. MAYBE OPENCART WOULD LOOK SOMETHING LIKE THIS BELOW.

MYSQL DATABASE

PAYMENT GATEWAY

SHOPPING CART

LOGIC FLOW

IMAGES

UX/UI