System Manager

Contains main() - is
not designed using an
object - Instantiates
single instance of each
connected class.

Validator

calculator *connected_calculator
calc_preprocessor *connected_preprocessor

Validates
equations
in calculators

Calculator Manager

ulist<calc_object> calc_list
calc_object *current_calc
calc_preprocessor *preprocessor
validator *equation_checker

Preprocess
calculator
order

Calc_preprocessor

token_name *correlator
string_class inverse_correlator[256]
int array_length
istrstream *input_stream
char *input_char_array

Returns user
names found
in string

Data Manager

ulist<record_object> record_list
ulist<data_set_obj> data_list
ulist<data_set_obj> map_list
ulist<set_input_object> set_input_list

Graph Manager

Ulist<graph_spec_obj>
spec_list

Graph Device

port_info port
border_info border
bound_info bound
scale_info horiz_scale
scale_info vert_scale
range_info horiz_scale
range_info vert_scale
tick_info ticks
int scaleSize
window Ptr mainPtr

System_Process

string_class calc_name
string_class data_set_name
string_class graph_spec_name
ulist<string_object>
set_input_names
ulist<string_object> set_input_fields
uliser<string_object> map_names

port_info

double top
double left
double width
double height

border_info

double top
double bottom
double left
double right

bound_info

double top
double bottom
double left
double right
double width
double height

scale_info

double MajScale
double MinTicks

range_info

double Min
double Max

tick_info

double MajTickSize
double MinTickSize

Figure 8: Top-Level Design