Flow Program IP

1. Initializare program:

ProgramManager pManager = new ProgramManager();

ProgramManager constructor:

\_variableConfiguration = new GlobalVariables();

\_commandConfiguartion = new CommandGraph();

\_commandConfiguration.AddElement( new Command( new Eticheta(“Start”) ) );

1. Adaugare variabila globala:

pManager.VariablesConfiguration.AddElement( new Variable(“nume\_var”));

// verifica daca nu exista elemente cu acelasi nume

// arunca exceptie in caz contrar

1. Adaugare atribuire constanta:

// Get selected variable

Variable selectedVariable = pManager.VariablesConfiguration.GetVariableByName(“nume\_var”);

IExpression add = new Expression( selectedVariable, new Operator(“+”), new ConstValue(10) );

ICommand atrib = new Command( new Atribuire(selectedVariable, add ));

pManager.CommandConfiguration.AddElement( atrib );

nume\_var = nume\_var + 10

pManager.CommandConfiguration.BindElementFirst( firstSelected, secondSelected );

nume\_var = nume\_var + 10

1. Adaugare decizie:

Variable check = pManager.VariablesConfiguration.GetElementByName(“nume\_var”);

ICondition myCondition = new AtomCondition( check, new RelationalOperation(“<=”), new ConstValue(20));

ICommand myDecision = new Decision( myCondition );

pManager.CommandConfiguration.AddElement( myDecision );

pManager.CommandConfiguiation.BindElementFirst( attrib, myDecision );

// adaug cele doua ramuri (optional only for demonstration purposes)

ICommand trueLeaf = new Command(new Eticheta(“True”));

ICommand falseLeaf = new Command(new Eticheta(“False”));

pManager.CommandConfiguration.AddElement( trueLeaf );

pManager.CommandConfiguration.AddElement( falseLeaf );

// realizez bindings intre noile comenzi

pManager.CommandConfiguration.BindElementFirst( trueLeaf );

pManager.CommandConfiguration.BindElementSecond( falseLeaf );

nume\_var = nume\_var + 10

nume\_var <= 20

1. Executie program

pManager.RunProgram();

// this refers to pManager

ICommand pointerCmd = this.CommandConfiguration.CommandList[0];

// eticheta de start.

while( pointerCmd != null ){

pointerCmd.Execute();

Boolean isNext = pointerCmd.GetNext();

If( isNext == True ){

pointerCmd = this.CommandConfiguration.Graph.GetItem(pointerCmd).first;

}

Else{

pointerCmd = this.CommandConfiguration.Graph.GetItem(pointerCmd).second;

}

}