Assignment 2 FSM

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The C++ Code is written and tested on Visual Studio 2012. It may not be fully portable to gcc because of the different behavior in ifstream (tellg specifically and alike).

An executable is found on the bin folder along with some samples.

The ClassDiagram is auto generated by Visual Studio .The name of the file is ClassDiagram.cd

For opening the existing project, just click on FSMSimulator.vcxproj

Upon opening the process, it prompts the user to enter the fsm (relative or absolute) path.

By default, the starting state is the first one to get executed, and from which we can move to the other states.

Execution of the current state happens first. Afterwards, the user will be prompted to type the next transition. Then goes the flow.

When specifying in the run command the fsm , the fsm variable describes the path of the file of the fsm ( with or without the extension .fsm )

When running an fsm inside another one, the program tries to open a file having the same machine name.

The instructions of each state aren’t dynamically interpreted, they are rather transformed to opcodes ( little endian ) while parsing; the instructions are afterwards executed through its opcodes.

The opcodes are of variable length ( 1/3/7 bytes ). That’s why some restrictions apply:

Variables Values maximally occupy 16 bit

Variables number maximally can be 2^16

Strings symbols number maximally can be 2^16

The maximum number of variable

The Expected format of the file should be the same as given in the assignment example