CMSC 105: Elementary Programming
Project 3: Stage I – Design writeup

Your last project for the semester is to produce an Alice program of your own design. It should be an interactive (i.e. event-driven) program, but beyond that, the nature of the program is up to you. It can be a game, some sort of interactive demonstration, an interactive story, or some other type of program of your own invention.

By next Tuesday (Nov. 21), I would like a design writeup for your program. The design writeup will count for 40% of this project assignment. This writeup will consist of two parts:

Provide a conceptual-level description of a proposal for your final project. Think in very high-level terms here – choose a user-interactive animation/story/game that is of interest to you, without concern for the details of implementation. This should be in paragraph form.

Once you have decided on your theme, provide a detailed specification-level description of how you will implement your theme in Alice. Describe appropriate algorithms, variables and data structures you will use, events that are necessary, etc. Discuss the logical flow and control structures necessary to implement your theme. At this level, ensure that your final project will include all the topics we have discussed this semester: conditional statements, loops, events, variables, lists, methods, parameters, etc. If it does not, go back to the conceptual level and beef up your ideas so that these requirements are met. Your detailed writeup should include a description of the objects that will appear in your world, variables you will use to control the program, methods you will write and the algorithms they will implement, and the events you will use and the event-handling methods they will call.

Spend time thinking about your project, and err on the side of being verbose for this write-up.

NOTE: If your write-up is simplistic and exhibits little forethought, you will receive no credit for this assignment, and will be forced to resubmit until I receive an appropriate write-up.