Elevator Program Build Instructions

1. Install Microsoft Visual Studio 2010, which includes the .NET 4.0 Framework. If you do not have a licensed version, you can download one for free from the following MS website:

   http://www.microsoft.com/express/Downloads/

2. Download the attachments provided in my response email to your desktop. The class files should be named as follows:

   ElevatorProgram.cs
   ElevatorState.cs
   Floor.cs
   Elevator.cs
   BuildingUtilityClass.cs

3. Open Visual Studio and create a new Console Application called **ElevatorSystemConsoleProgram** (The source code references this namespace).

4. A new Solution and Project should be created. You can simply delete **Program.cs** since **ElevatorProgram.cs** will replace it as the Main Entry point of the application.

5. Right Click on the ElevatorSystemConsoleProgram project in Solution Explorer and select **Add -> Existing Items** to import the source code from step 2 into the new project.

6. My code references the **TreeView** class from the standard .NET library **System.Windows.Forms.** You will need to add a reference to this library in the project. To do so, right click on References in Solution Explorer and select Add References->.NET tab and add System.Windows.Forms to the project.

7. You should now be able to build the solution from Visual Studio 2010 and run it against your test harness in order to validate the results.

Miscellaneous Notes:

- Please note that in your requirements that you state that the program should print out a set of legal actions to arrive at the Final Destination from the Starting elevator. Since it is possible to have many paths (or sequences of legal actions) to the Final Destination, I read the requirement that my program needs to print out ALL valid actions strings to a separate line in stdout and not just one single action. If you only want to see one valid action, it would require the following line change in ElevatorProgram.cs:

```
BuildingUtilityClass.PrintValidActionStrings(validActionStringsList, FinalTime);
```

To the following:

```
BuildingUtilityClass.PrintValidActionString(validActionStringsList[0].ToString(), FinalTime);
```

-This program took me from 4 – 8 hours to complete. If you have any questions regarding my algorithm or implementation please do not hesitate to contact me.

Regards,
-Matt Meuse