

## Project 4-1 – StormLand

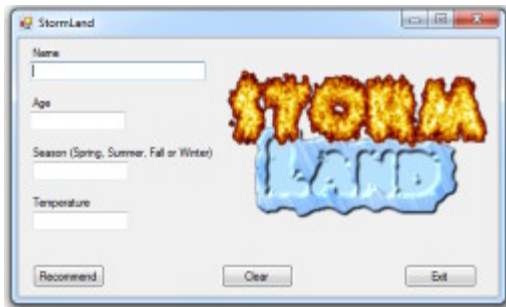


Figure 1

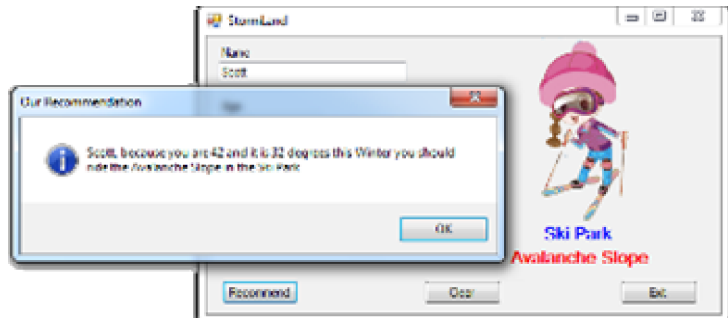


Figure 2

StormLand is an amazing amusement park that features a water park, an amusement park, and a ski park all in one location. Each park features three “main attraction” rides that are best suited for their young, tween, and teen and older guests. While StormLand as a whole is opened year-round, the three individual parks have seasonal operation based on the season and temperature. The only time the entire park will be closed is in winter when it is too warm to safely ski. Because the operation/main attraction schedule can get confusing to guests, you have been hired as the lead programmer responsible for coding a Guest Recommendation System (GRS). This program will make a recommendation on which attraction a user should visit based on the guest’s information and the following park rules/operation schedule:

	Water Park	Amusement Park	Ski Park
<b>Season</b>	Only open in summer	Open in spring, summer & fall	Only open in winter
<b>Age:</b>	<b>Under 7</b> Rain Storm <b>7-13</b> Summer Storm <b>14 and up</b> Thunder Storm	<b>Lil’ Tornado</b> <b>Storm Chaser</b> <b>Storm Buster</b>	<b>Snow Drift Slope</b> <b>Blizzard Slope</b> <b>Avalanche Slope</b>
<b>Temperature</b>	Only open if temperature is 74 degrees or warmer	N/A	Park is closed if temperature is warmer than 50 degrees

After the user enters his/her information (Figure 1), the program will make a recommendation (Figure 2) based on season & temperature (which park to visit) and age (which attraction to ride). For example, if the season is summer, the temperature is 86 & the guest’s age is 24, the program would recommend visiting the Water Park and riding the Thunder Storm. In the same example, if the temperature were 69, the program would recommend visiting the Amusement Park and riding the Storm Buster.

### Project Objectives:

- Evaluate decisions and conditions using control structures
  - If...Then Statement
  - If...Then...Else Statement
  - Select Case Statement
  - Nested if statements
- Use of relational & logical operators
- Ability to compare Strings
- Converting strings to all caps/lower case
- Testing for numeric input
- Use of substring
- Use of trim
- Message Box Arguments
- Use input validation

## Requirements

- Comment your code!!!
- Program output will be displayed in a message box with the following format:  
<NAME>, because you are <AGE> and it is <TEMPERATURE> degrees this <SEASON> you should ride the <ATTRACTION> in the <PARK>.
- Message box will be titled **Our Recommendation** and have the Information icon
- The form will display a park graphic with the name of the park and the name of the attraction below the graphic (graphics do not have to match mine)
- Clear button restores all values to original start state and sets focus to the name text box
- Must use (at least once):
  - If...Else
  - If...Then...Elseif
  - Select Case
  - Nested If
- Tab order should progress from text boxes to Recommend, Clear, and Exit buttons
- Recommendation is the form's AcceptButton & Exit is the form's CancelButton
- All text boxes need to be checked for valid input – if the input is invalid, a message box titled Invalid Input with an exclamation icon will be displayed telling the user what is wrong. When OK is clicked, the focus will be set to the text box with the error
- Must use both IsNumeric and Try/Catch
- When checking season, the program will only look at the first two characters of the user input
  - Account for leading spaces
  - User input is not be case sensitive

## EXAMPLE OUTPUT

