

Project 4 – Super Fun Land



Super Fun Land features a water park, an amusement park, and a ski park in one location. Each park has three “main attraction” rides that are best suited for different ages of guests (young, tween, and teens/adults).

Super Fun Land is a year-round place, but the three individual parks are open/closed based on the season and the temperature. The only time all of Super Fun Land is closed is in the winter when it is too warm to safely ski.

The operation/main attraction schedule can confuse guests, so you will create a Guest Recommendation System (GRS) for Super Fun Land. The program will make a recommendation on which park and which attraction guests should visit based on information guests provide and the following park rules/operations schedule (in the summer, we want to recommend rides in the Water Park if the temperature allows; otherwise, recommend Amusement Park rides):

	Water Park	Amusement Park	Ski Park
Season	Only open in summer	Open in spring, summer, & fall	Open only in winter
Age:			
Under 7	<i>Goldfish River</i>	<i>Super Safari</i>	<i>Snow Drift Slope</i>
7 – 13	<i>Wild Waterfall</i>	<i>Crazy Coaster</i>	<i>Blizzard Slope</i>
14 and older	<i>Thunder Rapids</i>	<i>Adrenaline Overflow</i>	<i>Avalanche Slope</i>
Temperature	Only open if temperature is 72 degrees or warmer	N/A (temperature is not a factor)	Closed if temperature is warmer than 48 degrees

You must follow the age/season/temperature rules in the above chart. You can use different graphics than the ones provided. If you choose to change the names of the rides, you must provide a chart that Mr. Bower can follow (either in a separate document or at the top of your code in the documentation).

Objectives

- Evaluate decisions & conditions using control structures
 - IF-THEN
 - IF-THEN-ELSEIF
 - Select Case
 - Nested IF
- Use of relational & logical operators
- Comparing Strings
- Converting Strings to all caps/lower case
- Testing for numeric input
- Use of Substring
- Use of Trim
- Arithmetic Operators
- MessageBox arguments
- User input validation

Requirements

- Comment your code!!!
- Program output is displayed in a message box with this format (or very similar):
 - <NAME>, because you are <AGE> and it is <TEMPERATURE> degrees this <SEASON>, you should ride the <ATTRACTION> in the <PARK>.
 - Put a title/caption in the MessageBox, such as Our Recommendation.
 - Use the information icon
- The form will display a park graphic with the name of the recommended park and the name of the recommended attraction near the graphic.
- Don't worry about rounding issues that may occur close to the required temperatures when users type decimals into the textbox. Mr. Bower will only test with integer data for temperature.
- The CLEAR (or RESET) button restores all values to the original start state (shown on page 1) and assigns the focus to the name text box.
- Must use (at least once):
 - If...Else
 - If...Then...Elseif
 - Select Case
 - Nested If (an If inside another If)
- The form's AcceptButton is Recommendation and CancelButton is Exit
- All text boxes must be checked for valid input. If input is invalid...

- A MessageBox with the title/caption **Invalid Input** (or something else appropriate) with an exclamation icon appears
- The text of the MessageBox explains what is wrong
- When OK is clicked, the focus is assigned to the textbox with the error

- You've learned several ways to validate input, including Try...Catch, Integer.TryParse, and isNumeric. You will need to use some of these.

- When the program checks the season...
 - Look at only the **first two characters** of the user input (**sp**ring and **sp**ecial would both work for the season of spring)
 - User input is not case-sensitive (summer, SUMMER, SuMmEr, sUmMeR are all valid)
 - Account for (remove) leading spaces

- Type and modify the following at the top of the code:

```
'Your Name  
'Date  
'Assignment Name (Project 4 - Super Fun Land, for example)  
'Computer Programming I - Bower (or CS 11400 - Bower if you want IPFW class)  
'This program will... (describe the program)
```

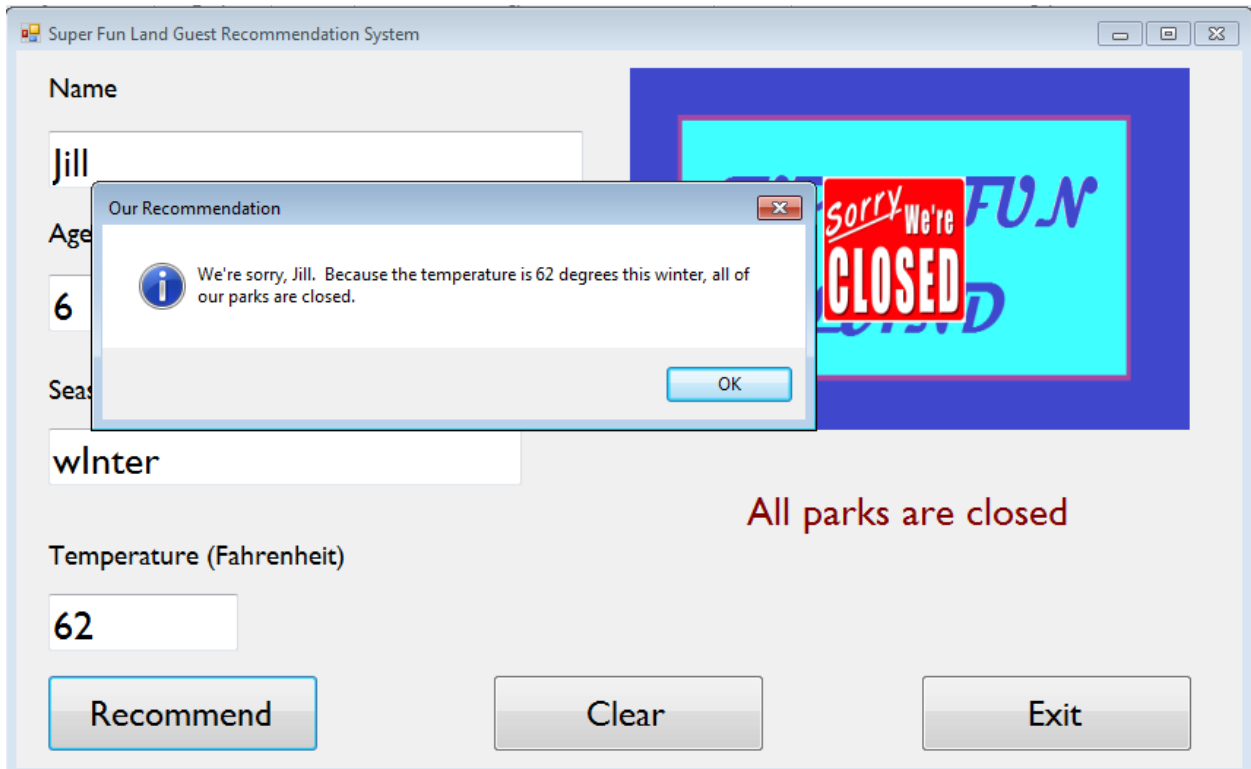
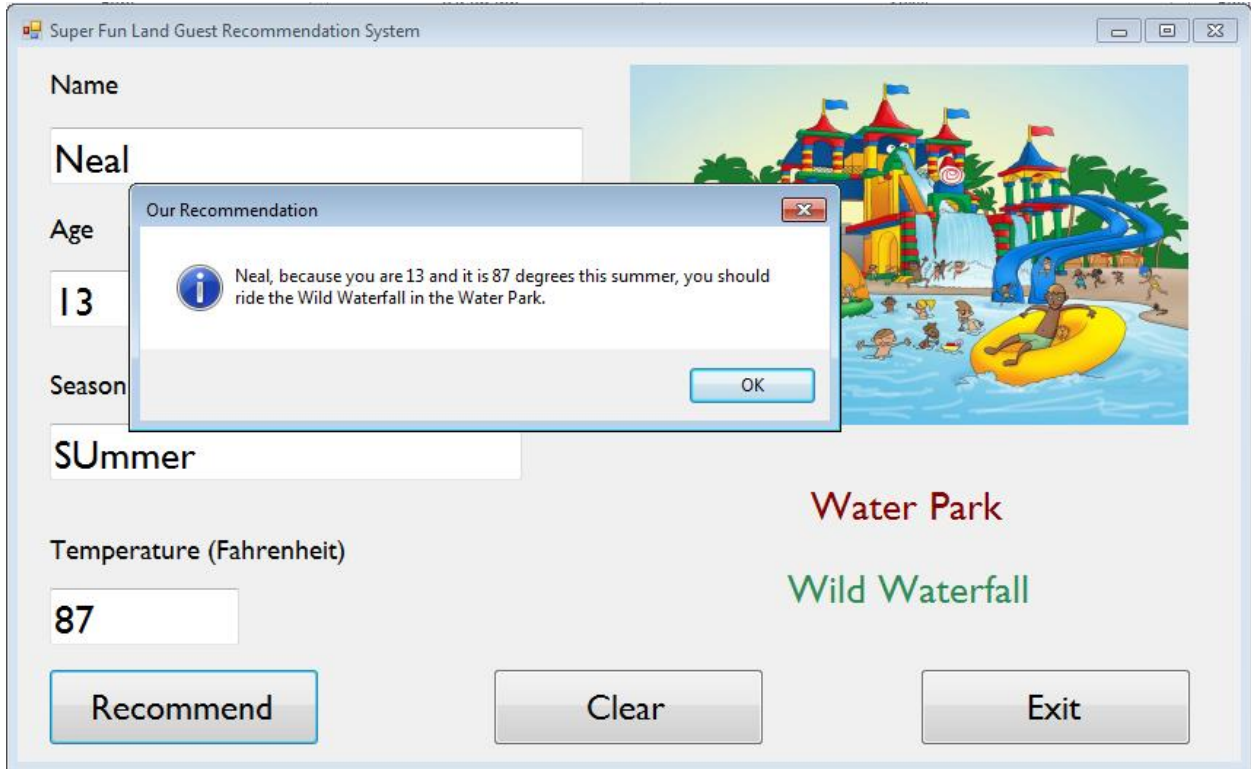
...and beyond!

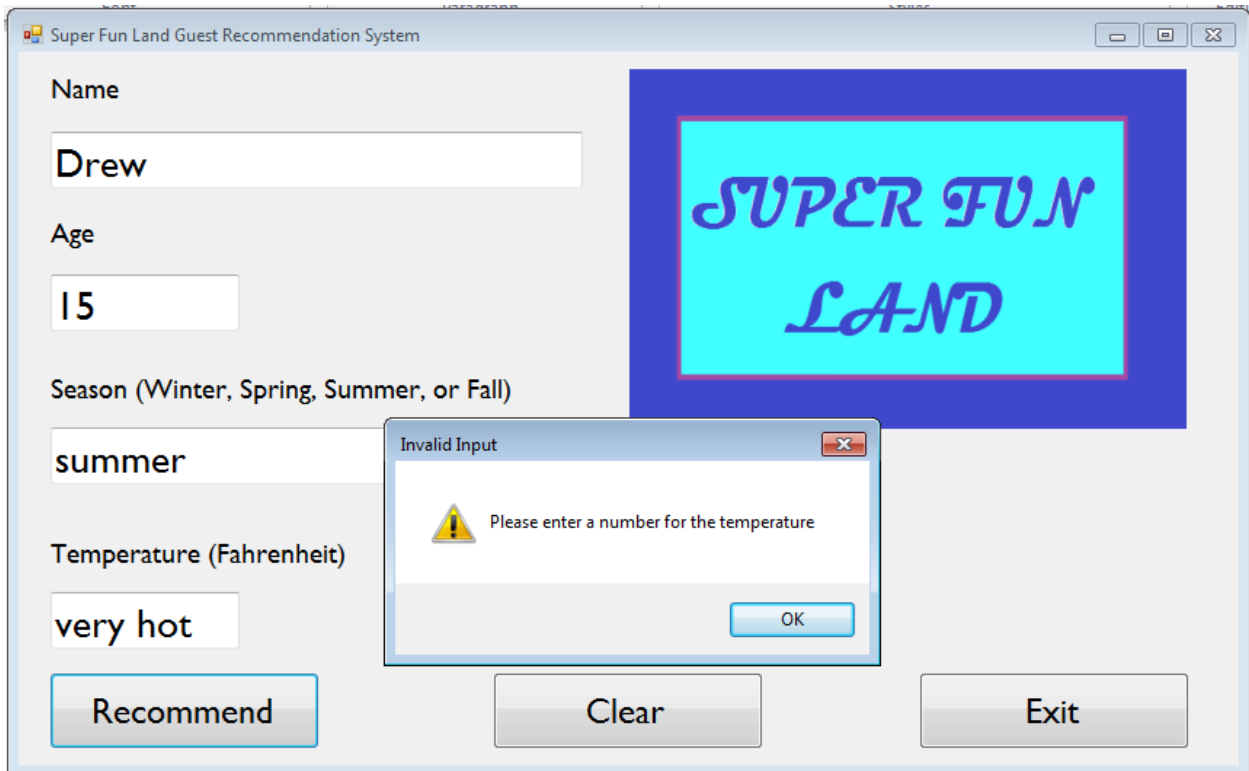
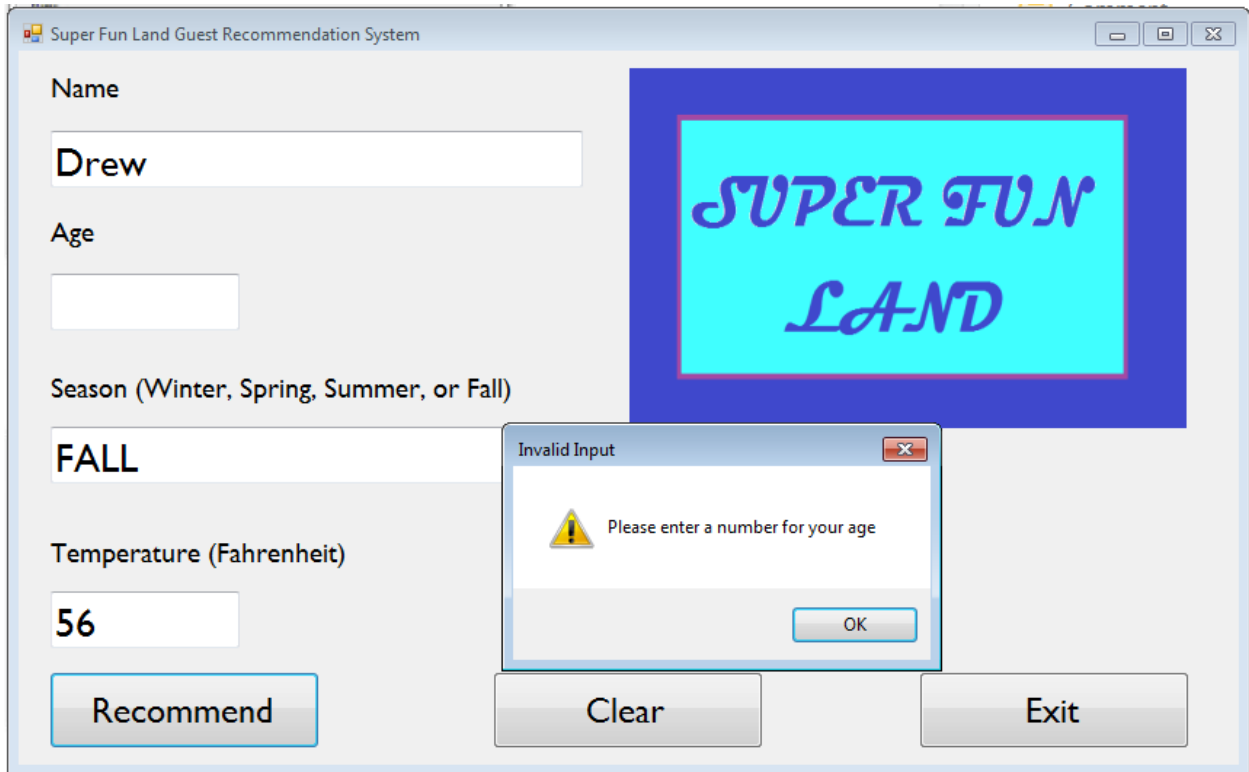
You can earn up to five bonus points by fulfilling and going beyond these requirements (giving your project something(s) extra!)

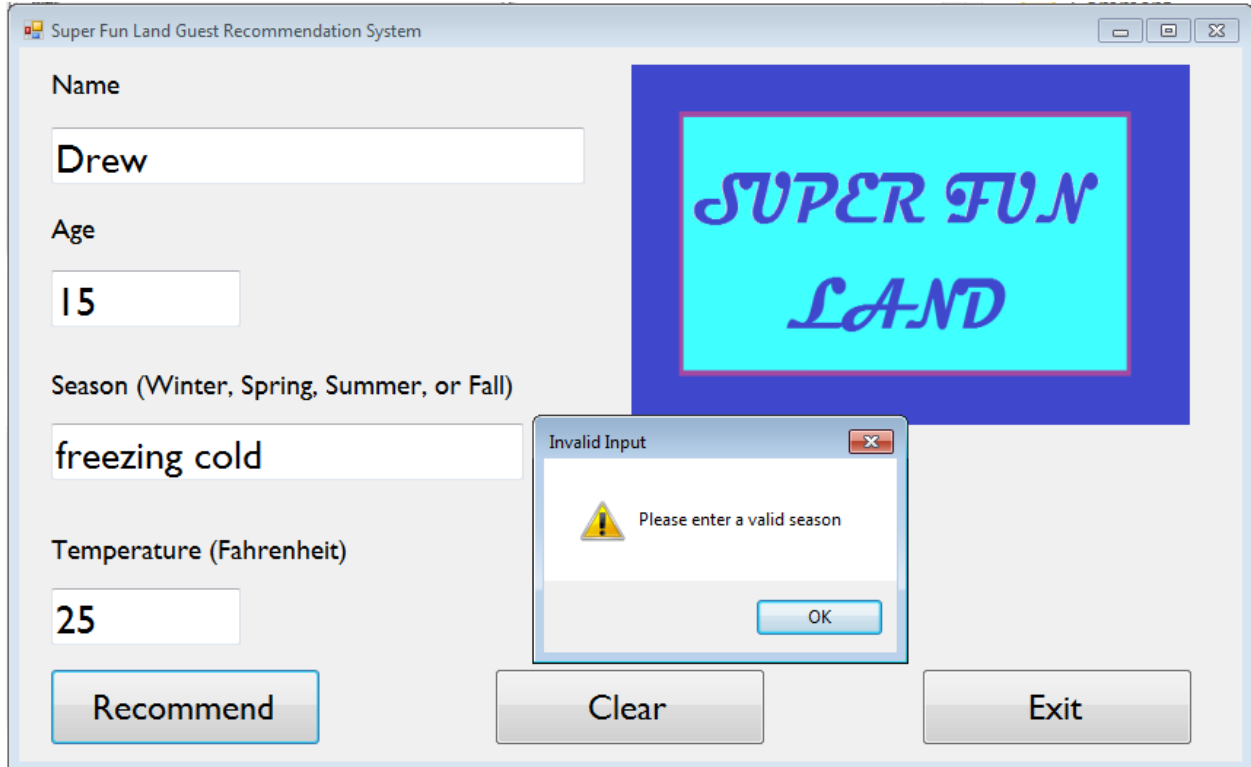
Sample Data

The screenshot shows a software window titled "Super Fun Land Guest Recommendation System". The main form contains the following fields: "Name" with the value "Stacia", "Age" with the value "37", "Season" with the value "Winter", and "Temperature (Fahrenheit)" with the value "31". A modal dialog box titled "Our Recommendation" is open, displaying an information icon and the text: "Stacia, because you are 37 and it is 31 degrees this winter, you should ride the Avalanche Slope in the Ski Park." Below the dialog are "OK", "Recommend", "Clear", and "Exit" buttons. The background features an illustration of a skier and the text "Ski Park" and "Avalanche Slope".

The screenshot shows the same software window with the name "Amie" and age "62". The "Season" field is set to "fAll" and the "Temperature (Fahrenheit)" is "31". The modal dialog box displays the recommendation: "Amie, because you are 62 and it is 31 degrees this fall, you should ride the Adrenaline Overflow in the Amusement Park." The background features an illustration of a roller coaster and the text "Amusement Park" and "Adrenaline Overflow".







Grading (THIS RUBRIC WILL BE UPDATED)

TOTAL	50