

Implemented Components

1. Form Setup:

- a. Created a new Windows Forms project named **StudentRegistrationForm** with the title "**Student Registration**".

2. GUI Components:

- a. **Labels:** Described each input field for user clarity.
- b. **Text Boxes:**
 - i. **First Name** and **Last Name** for user's name.
 - ii. **Student ID** restricted to numeric-only.
- c. **Radio Buttons:** Gender selection (Male, Female).
- d. **Check Boxes:** Areas of interest (Science, Math, Literature).
- e. **Date Picker:** For Date of Birth selection.
- f. **Combo Box:** Grade selection (Freshman, Sophomore, Junior, Senior).
- g. **Buttons:**
 - i. **Submit Button:** Submits and validates the form.
 - ii. **Clear Button:** Clears all form fields.
- h. **Summary Display:** Multiline text box for showing a summary after submission.

3. Event Handling:

- a. **Submit Button (OnClick):**
 - i. Validates required fields, displaying an error if any are incomplete.
 - ii. Displays a summary in the summary text box with:
 - 1. Full Name (First and Last)
 - 2. Student ID
 - 3. Gender
 - 4. Date of Birth
 - 5. Selected Interests
 - 6. Grade Level
- b. **Clear Button (OnClick):**
 - i. Resets fields to default (clear text boxes, reset radio buttons and checkboxes, etc.).

4. Form Validation:

- a. **Student ID:** Accepts only numeric input.
- b. **First Name** and **Last Name:** Must not be empty.
- c. **Interests:** At least one checkbox must be selected.
- d. Displays appropriate error messages if validation criteria are not met.

Conclusion

This assignment demonstrated the fundamentals of GUI design and event handling in C#. Implementing validation and feedback mechanisms created a user-friendly form, reinforcing essential skills for interactive C# applications.