.Net Technologies Using C# PROG32356
Mid Term Assignment

Due Date:

See SLATE

Project Type:

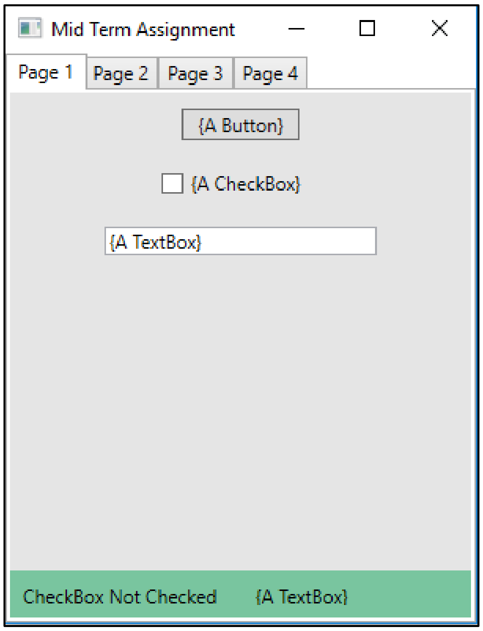
Individual

Submission:

- Your submission will be completed by uploading your C# solution, as a ZIP file, to the Mid Term drop box on SLATE, before the due date/time.

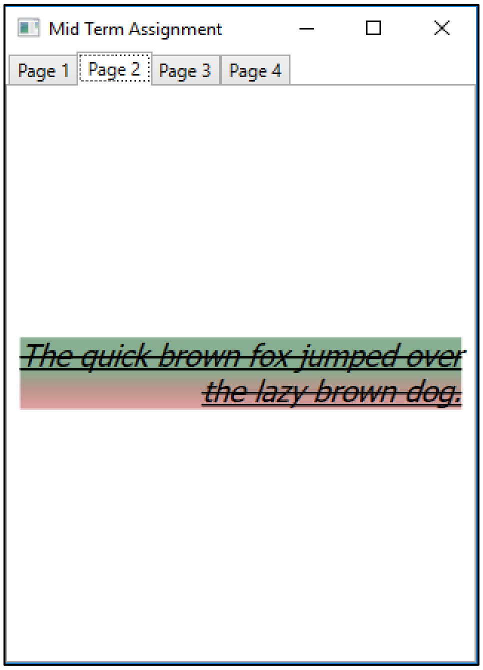
Assignment details and tasks

- Create a WPF application in Visual Studio, with the following user interface:



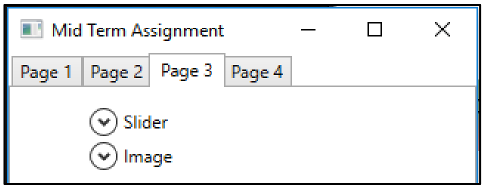
- The main window is titled "**Mid Term Assignment**" and it:
  - contains a tab control with 4 pages, titled "**Page 1**", "**Page 2**", "**Page 3**" and "**Page 4**". The tab control always fills the entire window; and
  - has a minimum width of 315 and minimum height of 400;
- **Page 1** contains:
  - a status bar at the bottom of the page. It contains 2 labels, one displaying the check status of the checkbox, and the other containing the current text in the textbox. It has a green background.
  - a button, with the default text "**{A Button}**".
    - the button is always centred in **Page 1**, even when the window is resized
    - the button is never resized; and
    - when the button is pressed, flip to **Page 2** of the tab control
  - a checkbox, with the default text "**{A CheckBox}**".
    - the checkbox is always centred in **Page 1**, even when the window is resized;
    - the checkbox is never resized; and
    - when the user checks the checkbox, update the status bar label to "**CheckBox Checked**"; and

        - when the user un-checks the checkbox, update the status bar label to “**CheckBox Not Checked**”.
    - A textbox, with the default text “**{A TextBox}**”.
        - the textbox resizes as the window resizes;
        - do not allow the characters ‘Q’, ‘q’, ‘Y’, ‘y’, ‘Z’ or ‘z’ in the textbox. If the user presses these keys, they should be ignored and not added to the textbox; and.
        - continuously update the status bar label with the current text in the textbox.
- **Page 2** contains:

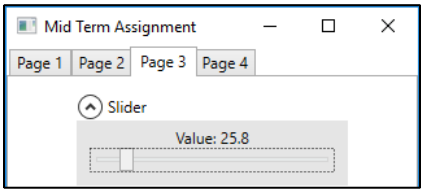


~~The quick brown fox jumped over the lazy brown dog.~~

    - A textblock containing the text “The quick brown fox jumped over the lazy brown dog”;
    - The background of the textblock transitions from green to red; and
    - It uses the font Tahoma, size 20, styled italic, light fontweight, and the text is right aligned. The text is underlined and struck through. Lastly, the text is wrapped.
- **Page 3** contains:



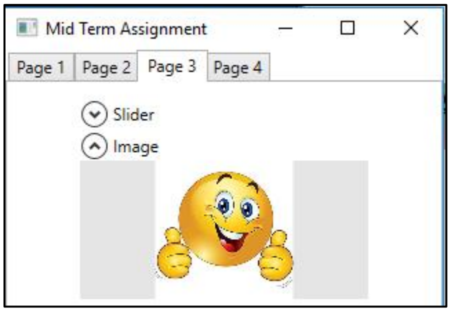
    - Two expander controls, titled “**Slider**” and “**Image**”, stacked vertically. Their widths resize with the window;
    - The expander controls cannot be open at the same time. I.e., when the user opens **Slider**, then **Image** closes. If the user opens **Image**, then **Slider** closes.
    - The **Slider** expander contains:



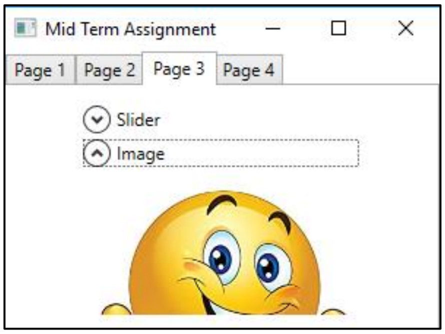
Value: 25.8

        - a slider, with a minimum value of 0 and maximum value of 200; and
        - a label, which is updated with the value of the slider while the slider is moved around.

    - The **Image** expander contains:

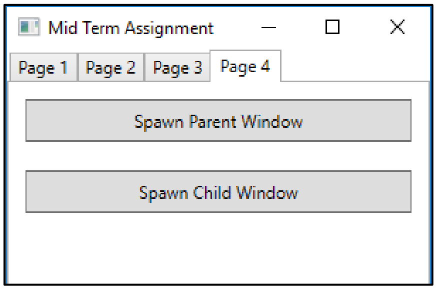


        - the thumbs up image (you can find this image on Slate, uploaded in the Mid Term Assignment);
        - when the mouse is not hovering over the image, it's height must match exactly that of the expander's grid height, regardless of the grid width; and

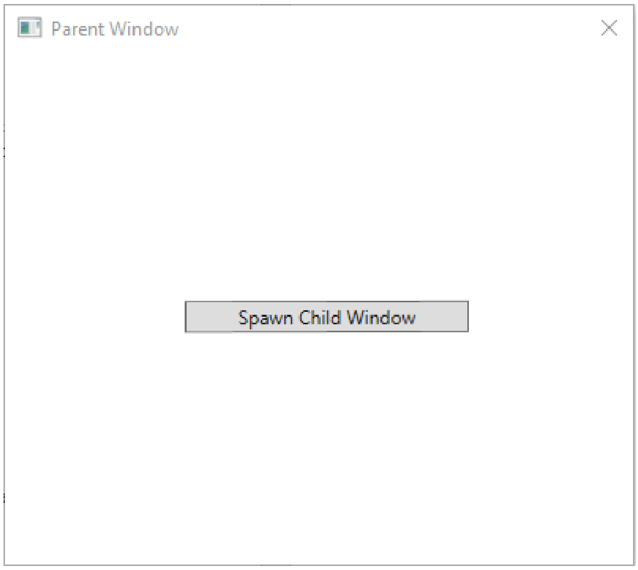


        - when the mouse is hovering over the image, it's width must match exactly that of the expander's grid width, regardless of the grid height.

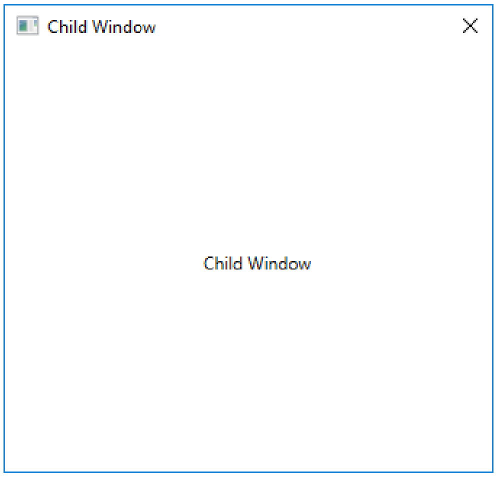
- **Page 4** contains:



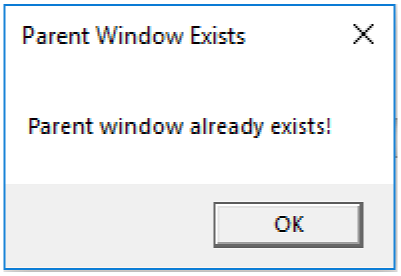
    - Two buttons, titled "**Spawn Parent Window**" and "**Spawn Child Window**";
    - You will need to add 2 extra WPF forms to your project, name them ParentWindow and ChildWindow;
    - When the user clicks Spawn Parent Window, create and display a new ParentWindow. If a parent window already exists, show an error dialog;
    - When the user clicks Spawn Child Window, create and display a new ChildWindow.
        - If a parent window does not exist, show an error message; and
        - If a parent and a child window already exist show an error message.
    - The ParentWindow looks like:



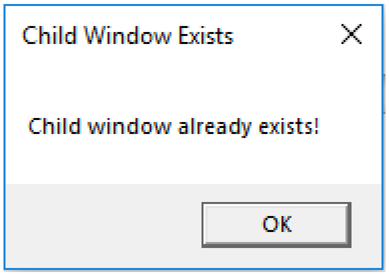
- When the user clicks Spawn Child Window, create and display a new ChildWindow.
  - If a child window already exists show an error message.
- The ChildWindow looks like:



- The error messages look like:



Parent window already exists!



Child window already exists!

Submission:

1. Assignment submissions:
   - No Late submissions will be accepted
   - All online submissions are done via SLATE (**e-mail submissions will NOT be accepted**)
2. All Assignments must be completed as **individual efforts** unless stated otherwise. Please refer to the Academic Dishonesty Policy.
3. **Cheating:**
   a. Any attempt at cheating on an projects/assignment/quiz/exam will result in a grade of zero for that particular assessment. Documentation on Academic Dishonesty can be found here.

Grading Rubric

#	**Criteria**	**Marks**
1	Completed the minimum assignment tasks. Clear and concise code will receive higher marks	45
2	Adhered to coding standards and best practices as discussed in class	5
Total		***50***