I want you to write code using HTML and PHP to create a user interface using Bootstrap. In particular, using HTML, I want a web page where there are 5 portions segments of the webpage.

The 1st segment I want to be at the top of the webpage stretching across the entire length of the webpage (using bootstrap to ensure this) and making this segment 200 pixels tall in height. In this 1st segment, I want to have a gray background and on the very right I want to have a white box whose length is adjusted to the text length where the text in the box reads, "Consequence of F ~" and to the right of the white box still in the first segment that is gray, I want you to create 7 circular check boxes where there is text to the right of each check box and this text corresponds to the left of it and from left to right the text that corresponds to each of these circular check boxes reads, "Given", "Reflexivity", "Transitivity", "Augmentation", "Union", "Decomposition", and "Pseudo Reflixivity".

In what we'll call the 2nd segment, I want to have a light pink background and be on the very left-hand side of the screen about 1/6 the horizontal length of the screen (use bootstrap), and vertically from below the 1st segment to the very bottom of the page. In this, I want to have 4 square check boxes stacked horizontally where the first check box reads, "1. A->B", the second check box reads, "2. B->C", the third check box reads, "3. BC->AD", and the 4th check box reads, "4. BCD->E"; the corresponding text to each check box should be to the right of each text box.

In what we'll call the 3rd segment, I want to have a white background and be to the right of the 2nd segment where the 3rd segment is about 7/12 the horizontal length of the screen (use bootstrap), and vertically from below the 1st segment to the very bottom of the page. In this segment, there are several dividing sections which exist as a concept but graphically can not be seen (all use square check boxes); these sections in the third segment stretch the entire vertical length of the 3rd segment. To the very left of the 3rd segment in what will be called the first section, there is a vertical column of check boxes, each of them numbered starting with the integer after the number of check boxes in the 2nd segment. To the right of the first section in the 3rd segment, in what we'll call the 2nd section, I want to have rows of check boxes vertically aligned with each row of the numbered check boxes in the first section of the 3rd segment. In the 2nd section of the 3rd segment I want to have 5 check boxes corresponding to the letters, "A", "B", "C", "D", "E" and I want 5 check boxes with corresponding letters that read "A", "B", "C", "D", "E" for every row in this section. To the right of the 2nd section in the 3rd segment, in what we'll call the 3rd section, I want horizontal arrows "->" pointing to the right towards the 4th section for every row in the collective 1st and 2nd section (the 1st and 2nd section should have the same number of check box rows). To the right of the 3rd section in the 3rd segment, in what we'll call the 4th section of the 3rd segment, I want to have 5 check boxes corresponding to the letters, "A", "B", "C", "D", "E" for the first check box row and I want 5 check boxes with corresponding letters that read "A", "B", "C", "D", "E" for every check box row in this section.

In what we'll call the 4th segment, I want to have a light gray background and be to the right of the 3rd segment where the 4th segment is about 1/6 the horizontal length of the screen (use bootstrap), and vertically from below the 1st segment to the very bottom of the page. In this segment, I want text vertically aligned and corresponding to each check box row described in segment 3. I want the text for each row to read, "Row " and then the row index that the row is; so the 1st row will be "Row 1", the 2nd will be "Row 2", "Row 3", and so on and so forth continuing the pattern.

In what we'll call the 5th segment, I want to have a light brown background and be to the right of the 4th segment where the 5th segment is about 1/6 the horizontal length of the screen (use bootstrap), and vertically from below the 1st segment to the very bottom of the page. In this segment, I want two columns of check boxes right next to each other. In the first column of check boxes on the left, I want to be colored yellow. In the second column of check boxes on the right of the first column of check boxes, I want to be colored green. Every time a yellow check box is checked, another yellow check box will appear below the yellow check box that was just checked and another green check box will be created to the right of the newly created yellow check box in the green check box column to the right of the yellow check box column. Also every time the yellow check, box is checked, an entire row of check boxes described in the sections of the 3rd segment will be created; the newly created yellow and green check boxes of the new row in the 5th segment will correspond to the newly created check box row in the 3rd segment. New check box, rows will stop being created as soon as the very bottom green check box is checked.

This is the web page I want you to create. Ask me if you have any questions or concerns that need to be clarified before creating. You could also draw a diagram of the webpage as you understood it to demonstrate your understanding to me before you start.