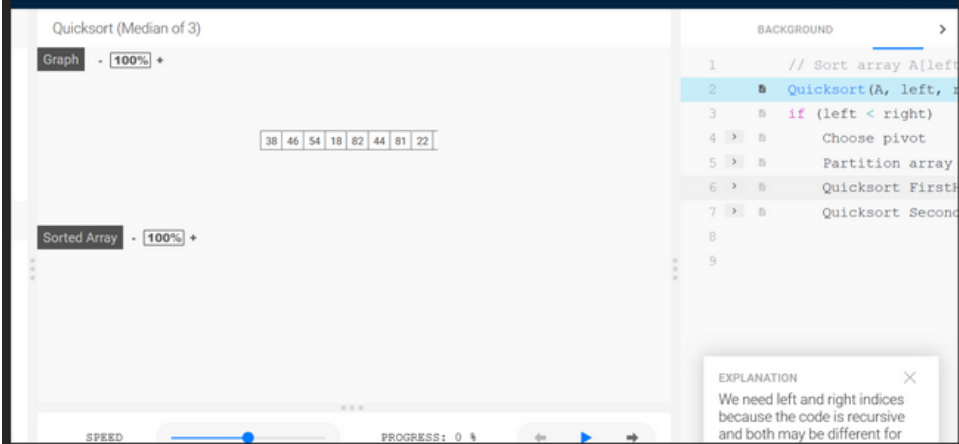


Detailed design and requirements: User Interface

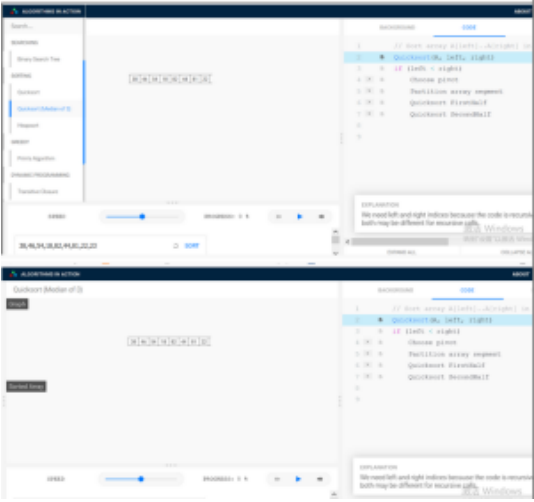
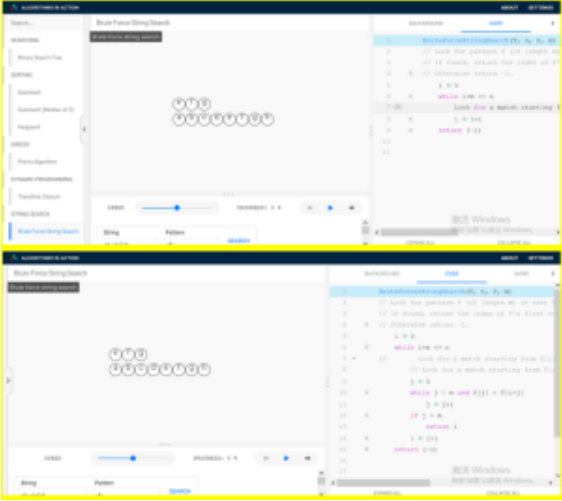
This document listed the improvements that clients required on User Interface and general visualization. These are shared through teams and implemented by team Boxjelly.

A.animation size

version	solution/subtasks	status
1	We already have a scroll-down to zoom-in and scroll-up to zoom-out function.	approved by client
2	<p>If there is enough time after essential features are implemented, we can add a new option to change animation/visualization as following:</p> 	approved by client

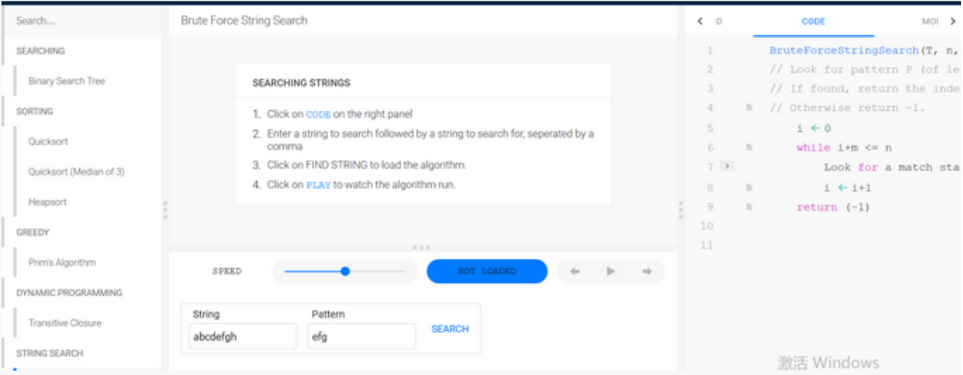
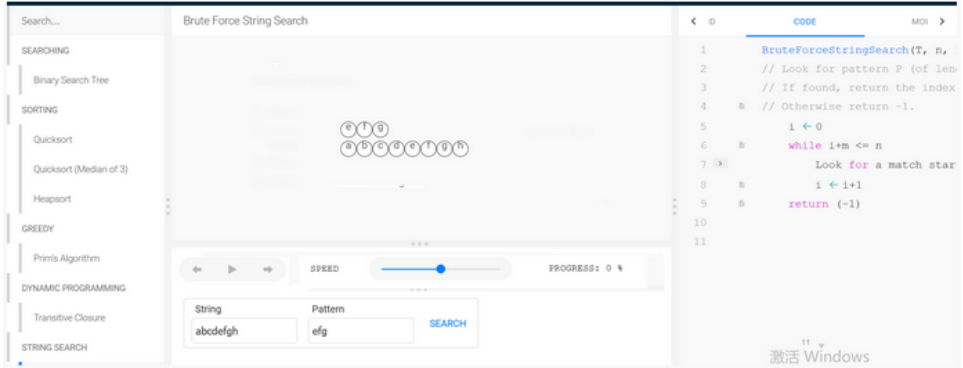
B.code cannot fully shown

version	solution/subtasks	status
1	Make code window self-adapt to page margin	rejected

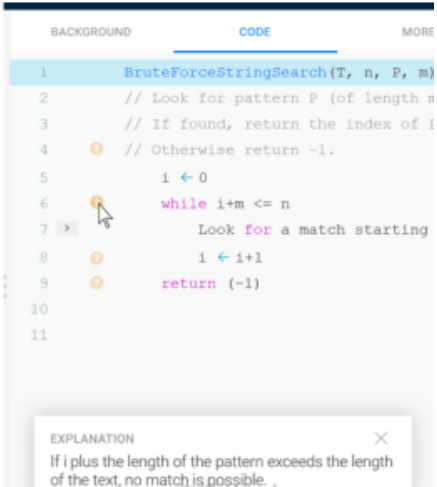
2	<ul style="list-style-type: none"> - algorithm list on the left : change to a pull-down menu, so that we can save more space - set default proportions for animation and code like the following ensuring that code does not expand outside the screen. -change .real files to assure lines won't be too long(Linda) -For future development, make sure that we can change "comment" separately. 	Difficulty occurs
3	<p>The previous web allowed a function to hide the menu but it's very hard to find. To achieve better efficiency, we implemented a substitute solution.</p> <p>If it's not perfect enough:</p> <ul style="list-style-type: none"> -Make it visually more obvious to achieve the same result from 2, since this solution requires less coding time. -Instead of dragging to change size of the menu, single click to collapse the menu. 	approved by client

C.button position

version	solution/subtasks	status
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1	<p>Before:</p>  <p>After:</p> 	approved by client
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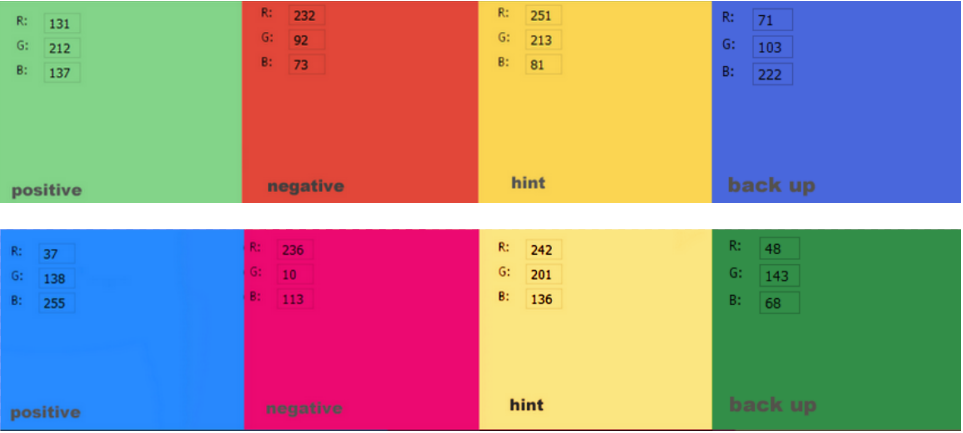
D."explain" should be more visible

version	solution/subtasks	status
1	<p>-click on lines of code, show explanation</p> <p>-change the icon into a question mark with circle and a more vivid color</p> 	approved by client

E."not-loaded" bar is confusing

version	solution/subtasks	status
1	<p>Set a default setting for each algorithm.</p> <p>Let each algorithm load the data and generate the initial animation frame. So that we won't have a "not-loaded" state. And also there won't be "successfully loaded".</p>	approved by client
2	<p>One problem occurred after solution v1 was implemented: As the data is automatically loaded, we won't be able to see the instructions.</p> <p>Solution:</p> <p>a.setting the instructions to a pop up window while first loading the scene</p> <p>or</p> <p>b.a tab on right panel.</p>	approved by client

1. it would be better to have common standard colors

version	solution/subtasks	status
1	<p>Try to involve the existing blue color into the standard color design.</p> <p>Also, need to evaluate the colors through color-blindness test:</p> <p>https://pilestone.com/pages/color-blindness-simulator-1</p>  <p>1. Positive: matches 2. Negative: unmatched, not found, out of range... 3. Hint color 4. a back up color in case some algorithm needs 4 colors to visualize</p> <p>For color blindness concern: make positive and negative have significant difference for color blind users</p> <p>The color scheme will be set in the common colors of data structures under the "setting" on top right.</p> <ul style="list-style-type: none"> Make sure that each algorithm imports the common color scheme. 	approved by client

