CTIS 255 – Final

Duration: 120 mins.

Q1 (30Pts) Write a DHTML program that shows a rectangle with a green background image ("*green-bg.jpg*") with a dimension of 300x400 pixels, Fig1a. At the bottom, there is a random number which is between 100 and 500, and multiple of 10, i.e., 100, 110, 120, … , 480, 490, 500. Its font size is 50px. A button will be shown below the number, namely, "Next". At the top right corner, it shows "history". When you click "Next" button, it add the current number to the history list, and generates a new random number, Fig1b. Font family for the page is "arial". Watch "**video/q1.webm**".

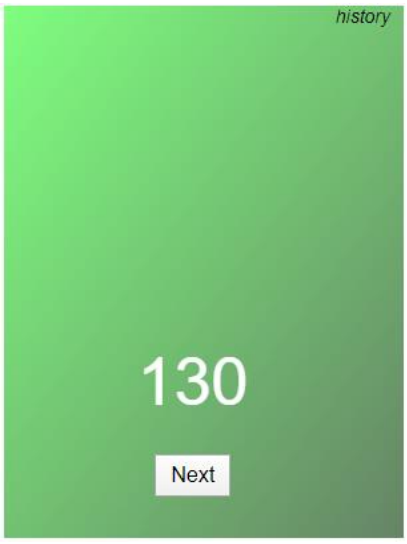


Fig1a: Initial page

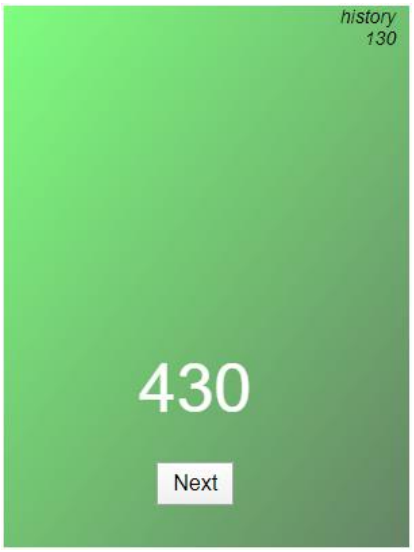


Fig1b: After clicking "Next" button

Grading: HTML and CSS (**10Pts**), Random Number (**10Pts**), History (**10Pts**)

Q2 (40Pts) In q2.html, it contains a list of employees in html format, Fig2a. First check out its structure. If you click on "Transform" button, a javascript function will turn this list to an ***html table*** as in Fig2b. Do not generate table manually since its content may change. It displays progress in a green bar, whose height is 20px, and width is the same as progress value. It also shows rating in star notation. Use "*empty.png*" and "*full.png*" to display to display ratings. For the driver part, show check image ("*yes.png*") if driver is 1, and cross image ("*no.png*") if it is 0. The distance between stars is 2px. If you click on a "Driver" icon, it toggles between "cross" and "check" images. When you move your mouse over driver icons, the cursor will be "pointer" shape. Table borders are collapsed, and centered withing the page. All cells have a padding of 10px, left aligned, and a border, 1px solid #DDD. The first row is bold, and its background color is #EEE. Use "arial" font for all text in the page. Watch "**video/q2.webm**".

Transform
Oli Bob 12 United Kingdom 1 14/04/1984 1
Mary May 1 Germany 2 14/05/1982 1
Christine Lobowski 42 France 0 22/05/1982 1
Brendon Philips 100 USA 1 01/08/1980 0
Margret Marmajuke 16 Canada 5 31/01/1999 0
Frank Harbours 38 Russia 4 12/05/1966 1
Jamie Newhart 23 India 3 14/05/1985 1
Gemma Jane 60 China 0 22/05/1982 1
Emily Sykes 42 South Korea 1 11/11/1970 0
James Newman 73 Japan 5 22/03/1998 0

Fig 2a : Page initially

Name	Progress	Location	Rating	Date of Birth	Driver
Oli Bob		United Kingdom	★☆☆☆☆	14/04/1984	✓
Mary May		Germany	★★☆☆☆	14/05/1982	✓
Christine Lobowski		France	☆☆☆☆☆	22/05/1982	✓
Brendon Philips		USA	★☆☆☆☆	01/08/1980	✗
Margret Marmajuke		Canada	★★★★★	31/01/1999	✗
Frank Harbours		Russia	★★★★☆	12/05/1966	✓
Jamie Newhart		India	★★★☆☆	14/05/1985	✓
Gemma Jane		China	☆☆☆☆☆	22/05/1982	✓
Emily Sykes		South Korea	★☆☆☆☆	11/11/1970	✗
James Newman		Japan	★★★★★	22/03/1998	✗

Fig 2b: After transformation

Grading: Create an HTML table (15Pts), Table CSS (5Pts), Progress Bar (5Pts), Rating (5Pts), Change Driver (10Pts).

Q3 (30Pts) You will place a game area ("*bg.png*"), and a bird ("*bird.png*") in a container. Locate the bird using absolute positioning system at a similar position in Fig3a. At the top, the status of the left mouse button is displayed, it is "Mouse Left: UP" initially. On the game area, if you press left mouse button down, the bird moves in forward direction, the status of button changes to "DOWN, Fig3b. When it hits the border, it changes its direction in other way. Watch "**video/q3.webm**" movie. To flip bird image, you can use transform propery as scaleX(-1) or scaleX(1).

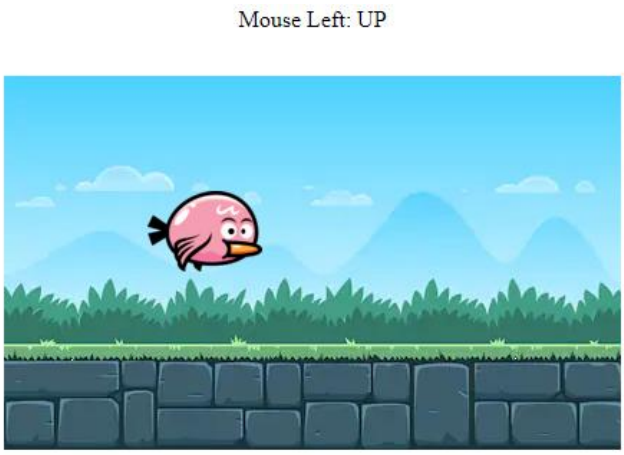
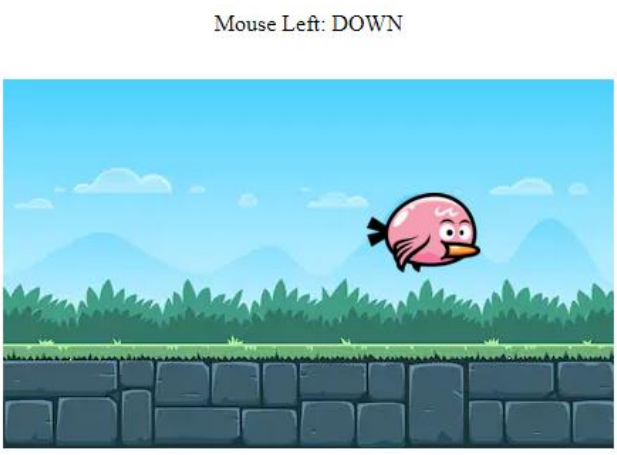


Fig3a: Page initially



Page3b: the bird moves.

Grading: Initial Page (5Pts), Detect mouse down/up (5Pts), Move Forward (10Pts), Change Direction (7Pts), Bird Flips (3Pts)

GOOD LUCK