## CTIS 255 - Final

05 Jan 2024

Duration: 120 mins.

Q1 (35Pts) Write a javascript program that fulfill the following tasks:

- a. (15Pts) Initial page content will be as in Fig 1. Initially, the font size is 10px. (HTML, CSS)
- b. (10Pts) Clicking "+5px" button changes the font size of the green paragraph accordingly.
- c. (10Pts) Clicking "+5px" button updates the current font size.

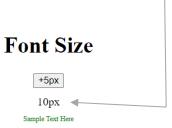
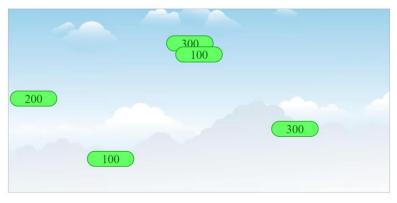


Fig 1: Initial page

**Q2 (35Pts)** Write a javascript program that creates 5 random capsules within the game area.

- a. (5Pts) Create a rectangular region (game area) with a dimension of 970x465px, centered, 1px solid #DDD border, and a background image (bg.png).
- b. (20Pts) Using a timer, generate 5 capsules randomly within this area every seconds. Capsules may overlap with each other. Each capsule has a random number from 100 to 500. Use approximate CSS properties for the capsules with the ones given in the video. If you distribute capsules without a timer, you will still get 10Pts.
- c. (**5Pts**) After all capsules are shown, the user is now ready to click on capsules. Clicking on a capsule removes it with a fadeout animation.
- d. (5Pts) Update the score based on the capsule clicked. It updates the score with an animation given in the video. (animation order: fadeOut → update score → fadeIn)



Score: 000

Fig 2: Randomly distributed capsules within the game area

Q3 (30Pts) Write a javascript program in "q3.js" that transforms the content of "q3.html" to a Todo List as in Fig3. You are not allowed to modify "q3.html" in any way. You will use "q3.js" and "q3.css" only.

- a. (15Pts) Clicking "Transform" button replaces previous html content in #todos div element with the new content. First, It parses old html codes, and extracts the information about todo list items such as their status (completed or not), content, and orders in the list. It places "Todo List" h1 element, and a div for each todo items based on their order numbers as in Fig 3.
- b. (5Pts) Apply necessary CSS properties for todo list items. (Order number, content and delete icon "delete.svg"), its border, background color and local layout.
- c. (5Pts) Clicking on the div for the todo list item toggles its status (line-through or not)
- d. (5Pts) Clicking trash icon deletes the item with fadeout animation, and the order numbers are updated accordingly

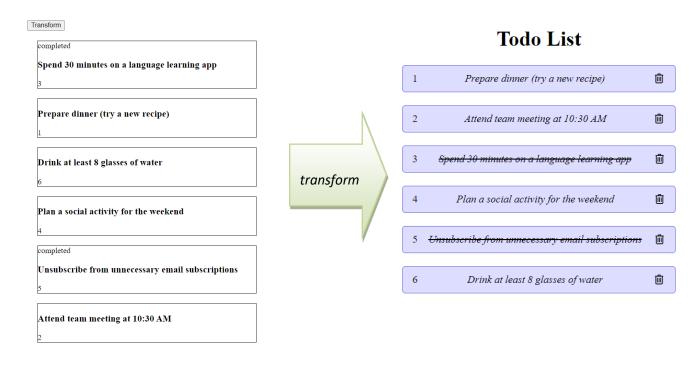


Fig 3: Transformation with jQuery

## **Attention:**

- Submit *name\_surname.zip* ( <u>do not use</u> final\_name\_surname.zip , 203454323\_name\_surname.zip, etc), otherwise, <u>I will drop 3pts from your grade</u>.
- You are free to use any materials. However, USB devices are strictly forbidden during the exam.
- You don't have to use external CSS or JS for question 1 and 2. You can write everything in a single html page except question 3.
- You have to use jQuery for DOM Manipulations.