



School of Computing,  
Electrical & Applied  
Technology

## HTML5 Test Semester 1, 2024

### ISCG6420 IWD Task 2

<b>Date:</b>	Wednesday, 15 May 2024
<b>Commencement Time:</b>	7:00 PM
<b>Time Allowed:</b>	40 min
<b>Marks:</b>	33

#### Instructions:

1. This is semi-open book test. IWD demo website is closed.
2. There are 3 tasks in this test. Each task is 40 min, you need to upload each task after 40 min. Submission will be allowed for 10 min only. You should complete all the tasks. You should attempt all the requirements.
3. Code abstraction **is** allowed. You may create additional functions and data structures to assist with your tasks.
4. Please keep each test part in the corresponding folder, for example Part\_2. Please save all files during the test frequently. In the end of each 40 minutes, re-name your folder with your name (example: Part\_2\_Joe\_Bloggs), Zip this folder and submit.

Instructions

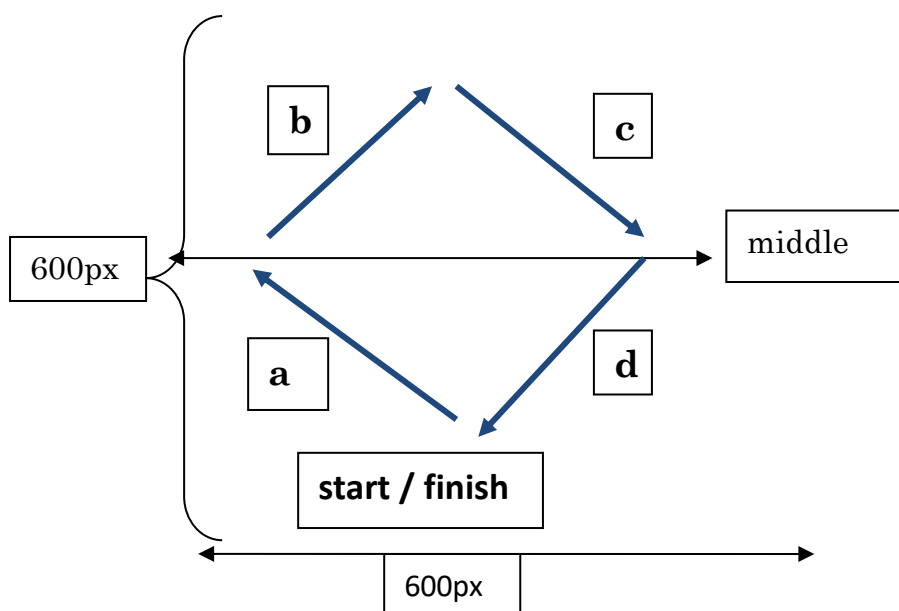
1. Use the provided file named moving.html with a defined internal style and script. Inside the script tag block, write a function named **moveBee** to move the div with ID **mybee** by 2 pixels for y-direction and 2 pixels for x-direction. The movement should be repeated using a timer. The timer should run every 30 milliseconds. Assign the function to the provided start button to make the *bee* start moving once the start button is clicked.

(10 marks)

2. Write code to move the bee along the following path (a -> b -> c -> d):
  - a. **Path a**: move diagonally up and left. When the **bee** arrives at  $\text{top} \leq 250\text{px}$ , it changes its direction.
  - b. **Path b**: move diagonally up and right until  $\text{top} \leq 0\text{px}$ , then it changes its direction.
  - c. **Path c**: move diagonally down and right. When the **bee** arrives at  $\text{top} \geq 250\text{px}$ , it changes its direction.
  - d. **Path d**: move diagonally down and left until  $\text{top} \geq 500\text{px}$ , then the bee stops.

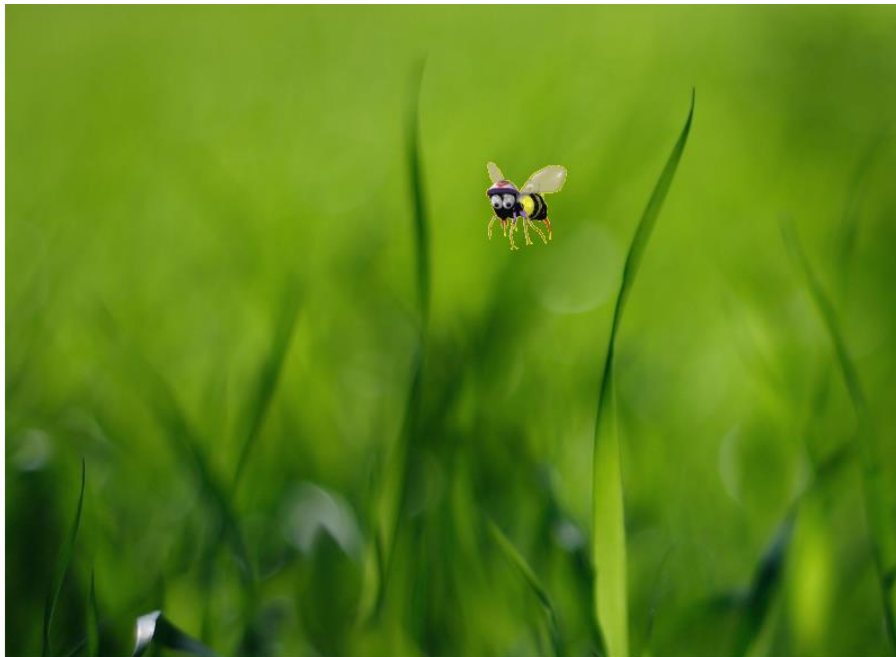
Please see trajectory on the graph below.

(16 marks)



3. Add code to play a looping sound (from bee.mp3) while the bee is moving.  
When the bee stops, the sound stops.

(7 marks)



Start