

CS6.201 - INTRODUCTION TO SOFTWARE SYSTEMS

Assignment 3 – HTML, CSS, JavaScript

Due Date: **21/4/2025 8:00 PM (Monday)**

Total Marks: 50 - Duration: 2 Weeks

NOTE: This assignment is an individual submission, not a group activity. Evaluation will be conducted based on a fixed grading rubric (syntax, logic, input and output) and the marks are divided as per prescribed weightage in respective question. Inputs/output should fit the criteria mentioned in respective questions. Unless it is specified, all input/output criteria are open to interpretation. All questions in the assignment are self-explanatory. Do not reach us for any clarifications. If you are answering a question based on a certain assumption, please feel free to mention it as you code comment(s). Submissions are to be made on both moodle and github classroom.

Q1: Create a personal website and host it on github.io pages. Please ensure that you include the following items as part of your personal home page. **(10 Marks)**

- a. About yourself in a paragraph
- b. Include your profile picture along with some local pictures from your birthplace
- c. Write about your education background, schools you studied, achievements
- d. Write the technical skills you have based on your level of expertise
- e. Include a CV as a PDF in a hyperlink

Q2: USER EVENT TRACKER – JavaScript function that captures all click events and page views. Write a JavaScript function that can capture all click events and page views performed by a user across CSS objects. Print the output into a file as follows:

Timestamp_of_click , type of event (click/view) , event object (drop-down,image, text etc.)

Dataset: <https://medchal-malkajgiri.telangana.gov.in/> Pick the source-code from view-source and apply click events on this page locally by adding beacon.js. **(20 Marks)**

Q3: Using JavaScript, read the text input using a Text box with more than 10000 words. Perform the following tasks and print output from the same web page.

- a. Calculate and display number of letters, words, spaces, newlines and special symbols **(5 Marks)**
- b. Tokenize the text and Print count of pronouns group by pronouns **(5 Marks)**
- c. Tokenize the text and Print count of prepositions group by prepositions **(5 Marks)**
- d. Tokenize the text and Print count of indefinite articles group by article **(5 Marks)**

Submission Instructions:

1. Submit your submissions by accepting the Github classroom invite.
2. Also submit your solutions in moodle by creating Q1, Q2, Q3 folders and include all scripts associated with respective question under them. ZIP these folders into single file as <rollnumber>.ZIP
3. Please do not forget to include a README.TXT file to mention your assumptions, execution instructions or anything else in the ZIP. If you are using any LLM for this task, please declare your usage with all required details here - <https://forms.office.com/r/Mg97epP413> If you are found not mentioning about your LLM usage despite using one, you will be awarded '0'.
4. You will be awarded '0' if your submission is found to be plagiarized with other submissions.

Happy -- Programming!