

**EXAMINATION INFORMATION PAGE****Home exam**

Subject code: <b>WEB1100</b>		Subject name: <b>Web Development and HCI</b>	
Responsible course manager: Mohammad Tafiqur Rahman		Campus: Ringerike	Faculty: School of Business
Assignment given in WISEflow (date and time): 21.12.2021 – 09:00 AM		Submission time in WISEflow (date and time): 21.12.2021 – 01:00 PM	
No. of assignments: 4	No. of attachments: 5	No. of pages incl. front page and attachments: 5	
<b>Aids and collaboration:</b>  Permitted aids: All aids are allowed.			
		Yes	No
Is it an individual exam?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is it allowed to collaborate with other persons?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Description of individual examination and illegal cooperation will be found at <a href="https://my.usn.no">my.usn.no</a>			
<b>Criteria for the answers:</b>			
Font type:	Font size:	Line spacing:	
No. of words (min/max):	Maximum no. of pages excl. front page and attachments:		
<b>Important Notes:</b> <ul style="list-style-type: none"> <li>All printed and electronic <b>aids are allowed</b>, but you must still follow the rules to avoid cheating.</li> <li>The answer must be uploaded in Wiseflow/FLOWhandin. You are allowed to upload any type of files. Please upload all of your HTML, CSS, and image files directly here – no conversion is needed. No screenshot from the code editor is accepted. Please follow the <b>naming convention</b> indicated after each problem.</li> <li>Remember that it takes some time to submit the answer, both to upload files and the steps for delivery in Wiseflow/FLOWhandin. Although you will be having <b>15 minutes extra for submission</b>, you should have finished this well in advance to avoid end-time pressure and stress.</li> <li>The problem set consists of <b>4 tasks and all the tasks must be answered by maintaining the assigned order</b>. The mark for each problem is mentioned right after the problem number.</li> <li>Read through the entire set of problems before you start solving the problems. Read each assignment carefully as follows that <b>you answer what you are asked for</b>.</li> </ul>			

**THE CANDIDATE MUST CHECK THAT THE ASSIGNMENT SET IS COMPLETE**

**Part 1: Task analysis and Heuristics evaluation (30 Marks)****1.1 (15 Marks): Perform hierarchical task analysis (HTA) for the case described below.**

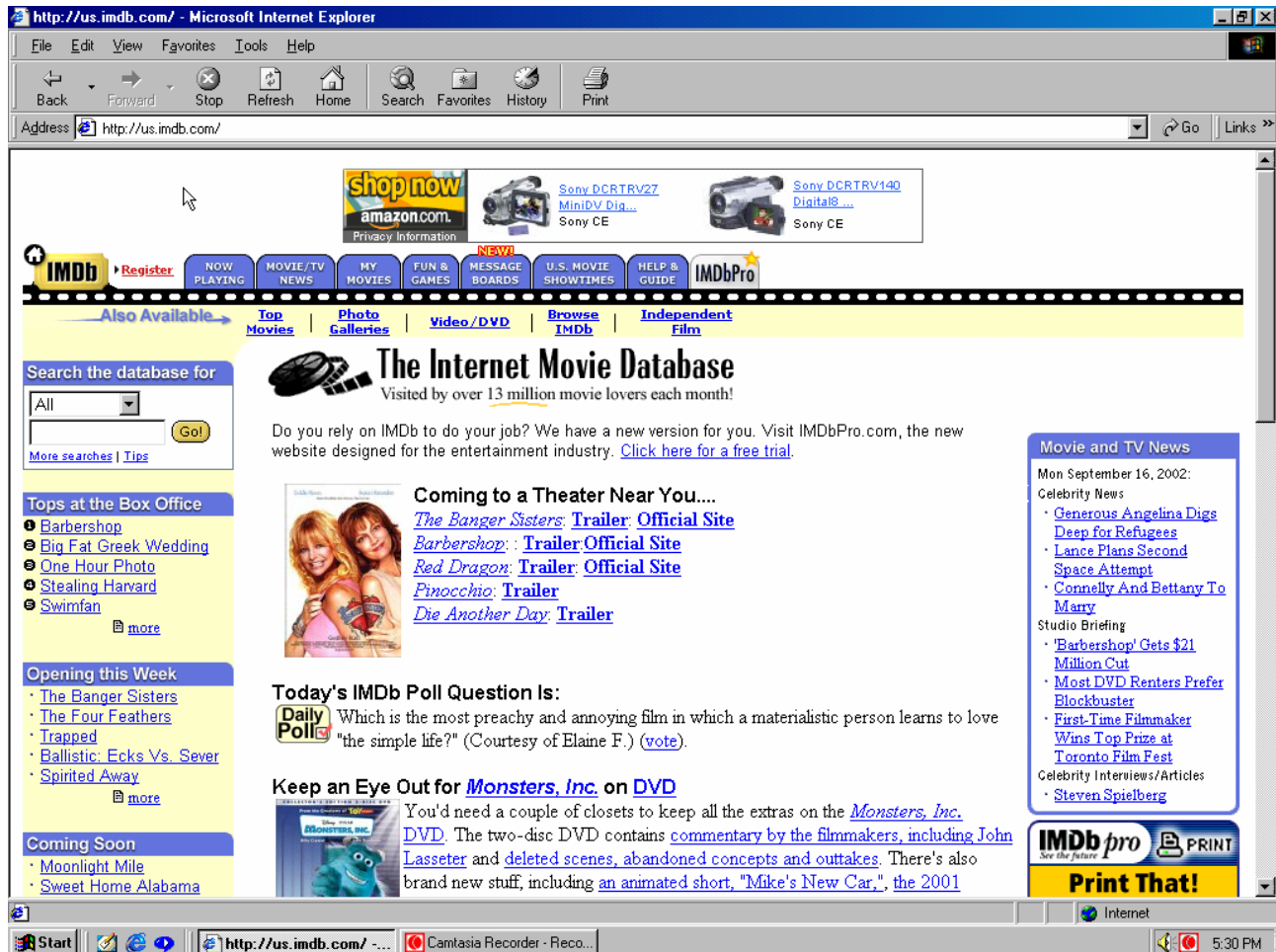
After studying the case carefully, you are asked to express a HTA graphically. Include all plans conveniently in your answer. Use a separate sheet of paper to draw the HTA – when drawing is completed, take a photo and upload it into the FLOWhandin.

**Case: Task analysis of a supermarket checkout counter**

Susan works as a checkout operator in CoopExtra nearby the university campus. She starts the checkout system by signing in and signs out when her shift ends. She deals with customers' purchases in the store – starting from initializing the checkout system for next customer to assisting him/her packing the purchased products. On the checkout counter, she approaches to products by removing the customer divider and starting the product-belt. She either prices individual items by scanning bar-codes or by checking weighed products bar-code sheet after weighing non-coded items. If bar-codes do not work for some products, she enters prices by key in the item code or manually. When no product is available on the product-belt, she calculates the total to be paid. She checks ID card for those products that have age restriction. Finally, she obtains payment by cash or card (debit/credit) as preferred by the customer. It is Susan's responsibility to take prompt action if there is a spillage on the product-belt. She signs out from the system and cleans the product-belt immediately before serving the next customer. However, if some problems arise that cannot be dealt by herself, she can refer them to her shift supervisor.

**Submitting file name should be: *hierarchical\_task\_analysis.jpg***

**1.2 (15 Marks): Perform a heuristics evaluation for the provided screenshot – a web-site for internet movie database – by using Benyon’s 12 design principles or heuristics. Appropriately applied principles to the screenshot are required to be briefly explained showing how the specific principle is followed or not followed.**



**Figure1: Screenshot for problem 1.2**

Submitting file name should be: *heuristics\_evaluation.docx*

## Part 2: HTML and CSS Coding (70 Marks)

**2.1 (30 Marks): Upgrading the given HTML and CSS code** to achieve the desired output demonstrated in figure 2. Please keep the files names unchanged.

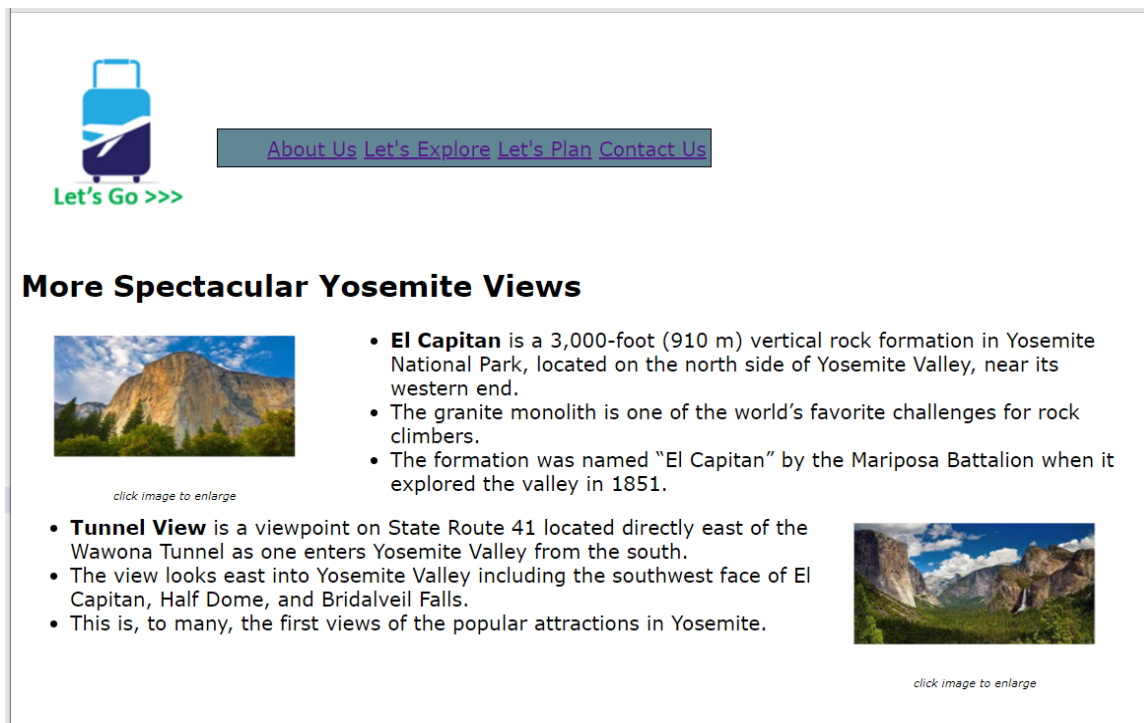
**To start:** Download the html and image files: **letsgo\_exercise.html**, **logo.png**, **elcap.jpg** and **tunnelview.jpg**. You would be needing to access images from the html file. Run the **letsgo\_exercise.html** file to understand the current output.

**Task 1 (5 Marks):** Create an external CSS file named **letsgo\_exercise.css**. Transfer all internal CSS content to the external CSS file (**letsgo\_exercise.css**) and link it with the **letsgo\_exercise.html** file in order to get all styling effects.

**Task 2 (5 Marks):** You are given the **logo.png** file already. Now, add this logo to the page as demonstrated in figure 2.

**Task 3 (5 Marks):** Make other two images (**elcap.jpg** and **tunnelview.jpg**) clickable. The “**click image to enlarge**” notifying text should appear just under the picture (see figure 2). When an image is clicked, the original image should be linked to get an enlarged view. You don’t need to do any editing to the images – just simply link them accordingly.

**Task 4 (15 Marks):** Now, make sufficient changes in the code (CSS and HTML) for getting the content output as demonstrated in figure 2.



**Figure2: The expected outcome (for problem 2.1)**

Submitting file names should be: **letsgo\_exercise.html**, **logo.png**, **elcap.jpg** and **tunnelview.jpg**

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## 2.2 (40 Marks): Writing codes for designing a survey

You are given an assignment of developing a survey. Check the attached file named **survey.docx**. The website would be containing two webpages: Introduction Page and Questionnaire Page. Please note here that you are just designing the survey form as pictured here. So, you don't need to add any programmability. The **Blue Boxes** are not the part of the form – they just indicate the types of HTML elements that you may use.

### Page 1 (20 Marks): Introduction Page (Figure 3)

The introduction page contains the motivation to the survey, necessary descriptions to the used key terms, and instructions to answer the questionnaire. After welcoming, you present the survey motivation to the respondents in regular texts. Then you use a table to categorize the key terms and explain them. Please concentrate here that you are using the concept of spanning multiple rows and columns here.

Now, it is the time to provide respondents with questionnaire answering instructions. By using numbered lists, you explain here the procedure of filling the survey. Please be informed that you also need to use nested list here.

When you are done with the steps, you are giving the respondent a chance to quit the survey by clicking the **“No”** radio button if s/he is not interested anymore. However, if they want to participate, you would be requesting them to click the **“Yes”** radio button. Afterwards, they would continue to the next page for answering the questionnaire by clicking the **“To the Survey >>”** button.

You emphasize texts by making them bold or italic in all over the assignment.

### Page 2 (20 Marks): Questionnaire Page (Figure 4)

Now, it is the time to present the questionnaire. You use table extensively to do the task. The cells contain different types of HTML elements here: regular texts, text boxes (in different length) and check boxes.

You end the survey by thanking the respondents.

**Submitting file names should be: introduction.html and survey.html**