



Daffodil International University

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Midterm Examination, Summer 2020 @ DIU Blended Learning Center

Course Code: CSE417 (Day), Course Title: Web Engineering

Level: 4 Term: 1 Section: UC-A

Instructor: Md Nazmul Hoq Modality: Open Book Exam

Date: Sunday 12 July, 2020 Time: 02:00 pm - 06:00pm

Four hours (4:00) to support online open/case study based assessment Marks: 25

Directions:

- Students need to go through the CASE STUDY shown in this exam paper.
- Analyze and answer specific sections based on your own thinking and work.
- Do not share as this will be treated as plagiarism by Blended Learning Center.
- Left hand side number indicates the marks of the question.

Part A (Basic organization) (6)

In real life, to build a web application we need to first gather the user requirements. Based on the requirements we have to design the web application and then get approval from the client. We also need to decide on the protocol we have to use to communicate over the web.

Suppose you joined a web application development company and assigned yourself to a new project named “**Dynamic Web application for Course Management System**”. Based on this information answer **any two of** the following questions:

1. Who are the main stakeholders of this project. Write their name, properties and roles in the web application in detail. For example, courses, students etc.. (3)
2. Write the functional and non-functional requirements of the given web application. (3)
3. What kind of challenges may you face in gathering the requirements and in the development phase of the given project? (3)
4. How would you like to test your project after development? Write different kinds of tests techniques with respect to your “**Dynamic Web application for Course Management System**” project. (3)

Part B (Web Design using HTML, CSS and JS) (19)

Based on the above scenario described above regarding “**Dynamic Web application for Course Management System**” project. Answer the following questions:

Build the following pages fulfilling all the requirements stated below. Give it your own personal style.

You can use HTML, JavaScript, and CSS to complete this project. Plain external or internal CSS is recommended, inline CSS is not recommended.

Additional technologies (just for example Bootstrap, jQuery, React, Angular, or Vue) are not recommended for this project, and using them will degrade your project. Happy coding!

1. Registration Page: (7)

Build a registration page which will be used to register new users in the system. Maintain the following requirements. You may also add additional features. But below are must (Example: <https://bit.ly/3gKfC6u>)

- a. **Requirement #1:** I can see a title with id="title" in H1 sized text.
- b. **Requirement #2:** I can see a short explanation with id="description" in P sized text.
- c. **Requirement #3:** I can see a form with id="survey-form".
- d. **Requirement #4:** Inside the form element, I am required to enter my name in a field with id="name".
- e. **Requirement #5:** Inside the form element, I am required to enter an email in a field with id="email".
- f. **Requirement #6:** If I enter an email that is not formatted correctly, I will see an HTML5 validation error.
- g. **Requirement #7:** For the name, email, and number input fields, I can see placeholder text that gives me a description or instructions for each field.
- h. **Requirement #8:** Inside the form element, I can select a field from one or more groups of radio buttons. Each group should be grouped using the name attribute (i.
- i. **Requirement #9:** Inside the form element, I can select a field in checkboxes which will ensure user agreement.
- j. **Requirement #10:** Inside the form element, I am presented with a textarea at the end for additional comments.
- k. **Requirement #11:** Inside the form element, I am presented with a button with id="submit" to submit all my inputs.

2. Course Home page: (12)

Build a course home page following the below requirements. You may also add additional features. But below are must (Example: <https://www.coursera.org/learn/introcss>)

- a. **Requirement #1:** I can see a title with id="title" in H1 sized text.

- b. **Requirement #2:** I can see a logo of the course in the right hand side id="logo" in img
- c. **Requirement #3:** I can see a rating bar id="rating"
- d. **Requirement #4:** I can see a link of the course teacher
- e. **Requirement #5:** I can see a menu which will have the below options in clickable link
 - i. About
 - ii. Instructors
 - iii. Syllabus
 - iv. FAQ
- f. **Requirement #6:** I can see a schedule of the course in a table which must have date, time and course module information. Use id="table-schedule"
- g. **Requirement #7:** I can see a footer with all the social image logos and copyright text.
- h. **Requirement #8:** I can see the description of the course below the table of schedule which will consist of several P text
- i. **Requirement #9:** I can see a list of enrolled students in the right hand side of the page. Use unordered list.

Thank you.

Now convert your answer into a single .pdf and rename the pdf file as follow

Course Code-Section-Student ID (i.e CSE134-UC_A-111-15-2345-mid.pdf)

Upload the file in the BLC and submit.