

# Home Work 7

*Deadline: 11.04.2024, at 23:59*

## Task 1. (20 points)

### The Login Popup Form

#### Purpose

The purpose of this application is demonstrate the use of several of the Browser Object Model (BOM) objects to create a classic Log In form. The user will click a Log In button and a popup will appear complete with a form. Several other features will be added including the ability to cancel out of logging in as well as the ability to write back what the user types into the form within an output tag in the parent page.

## Task 2. (20 points)

### The FAQs Application

#### Purpose

The purpose of this application is demonstrate how DOM Scripting techniques can be applied to build an application that has "accordion"-type functionality. In this application, an accordion will be designed and the content within each heading will be shown and hidden programmatically using DOM Scripting techniques. Additionally, a + and - image will appear next to each heading, a + when the panel is closed, and a - when the panel is open. These images will also be manipulated programmatically using DOM Scripting techniques.

## Task 3. (20 points)

### The New User Registration Application

#### Purpose

The purpose of this application is demonstrate how DOM Scripting can be used in conjunction with forms and form objects. In this application, you will build a basic registration form. You will then use JavaScript code and DOM Scripting techniques to validate that the user entered data into text boxes, selected an item from a drop down list, and checked a check box before selecting a Register button and then redirecting the user to a "thank you for registering" page.

## Task 4. (20 points)

### The Pig Dice Game

#### Purpose

The purpose of this application is demonstrate the use of numbers and members of the Math object to create the Pig Dice game. In this game, users take turns rolling a pair of (digital) dice. Each player takes turns rolling and can roll as many times as they want until they reach a total of 100 points. A turn ends when a player holds or rolls 1 on one of the die. If the player rolls a 1 at any time, they lose the points accumulated during that turn and their turn is over. If the player holds, those points are stored and their turn is over.

## Task 5. (20 points)

### The Event Countdown Application

#### Purpose

The purpose of this application is demonstrate the use of the Date object and its members within the context of a usable application. In this application, the user will be able to enter an event name, event date, and then click a Countdown button. Once the button is clicked, the application will display the number of days left until that event occurs.