

**UJIAN AKHIR SEMESTER GASAL 2021-2022**

Mata Kuliah : Full-stack Programming  
Kode Mata Kuliah : 1604B051  
KP : Semua KP  
Tanggal : Selasa, 7 Desember 2021  
Durasi : 125 menit  
Jenis Ujian : Terbuka  
Dosen : 210034 - Hendra Dinata  
209316 - Siprianus Harry Hoedijono  
206002 - Jimmy

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**There are two questions for this exam.**

1. Complete the content of the following index.html and backend.php (Total: 50 points)

**index.html**

**backend.php**

```
<?php
    $gambar = array("B.png", "G.png", "I.png", "N.png", "O.png");
    //Complete your PHP code here (b)
?>
```

```
</select>
<label>Gambar:</label>
<select id="gambar">
    <option value=""></option>
    <option value="0">Gambar 1</option>
    <option value="1">Gambar 2</option>
    <option value="2">Gambar 3</option>
    <option value="3">Gambar 4</option>
    <option value="4">Gambar 5</option>
</select>
<button type="button" id="btnPilih">Pilih Gambar</button>
<div id="box1"></div>
<div id="box2"></div>
<div id="box3"></div>
<div id="box4"></div>
<div id="box5"></div>

<script type="text/javascript">
    //complete your Jquery code here (a)
</script>
```

The four rules:

a. Do only the (a) and (b) sections!

b. When the user clicks "btnPilih" in the index.html file, then it will send any data to the "backend.php" (you may decide what data to send) to get the file name of the chosen image. After retrieving the data from the "backend.php" (the image file name), the image will be displayed according to the name of the selected box and the name of the image file. Again, you may decide how "backend.php" should return the data string.

Example:

The user selects "Box 1" and "Gambar 1", and then clicks the button "Pilih Gambar".

The "div" element with id "box1" will be loaded with an image "B.png"

Box:  Gambar:

```
<div id="box1">
  
</div>
<div id="box2"></div>
<div id="box3"></div>
<div id="box4"></div>
```



Example:

If the user chooses "Gambar 2", then "G.png" will be loaded in the selected box.

c. What if the user rechooses "Box 1"? According to the scenario above, Box 1 has already been loaded with an image. So, when the button is clicked, it will show an alert that says "Box sudah terisi". The user may not choose any boxes that have already been loaded with an image. The user must choose another box.



d. How to remove an image from the box? So simple. The user may do a double click action on the image. Example: User does a double click action on the image in Box 1, then the image will be removed, and Box 1 will reconsider as an empty box.

2. (Total : 50 points) Let say you have this HTML file with an internal CSS :

```
<DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Walrus Login</title>
    <link href="https://picsum.photos/id/1084/1024/790" rel="image">
  </head>
  <body>
    <div>
      <div>
        
      </div>
      <div>
        <div>
          <h2>Sign In</h2>
          <input type="text" value="User ID" />
          <input type="password" value="Password" />
          <button type="button" value="Sign In" />
        </div>
      </div>
    </div>
  </body>
</html>
```

Your task is to complete the HTML and CSS according to the following instructions. But remember, **Javascript/Jquery is unnecessary**, and for the Walrus image background, you may use this element:

```
<img src='https://picsum.photos/id/1084/1024/790' class='image'>
```

- a. When it is open in your PC browser, the first two-thirds of your page (horizontally) will show a full-size image in the area.  
The remaining third (on the right side) will be colored as CYAN for the background.  
The Walrus image is twice wider than the CYAN area.  
The height is full from the top of the browser until the bottom of the browser.  
In case you need to specify the height, you may choose one of these options. Otherwise, you might use your preferred method:

height: 100% or height: 100vh or height: auto;

Look at figure 1.

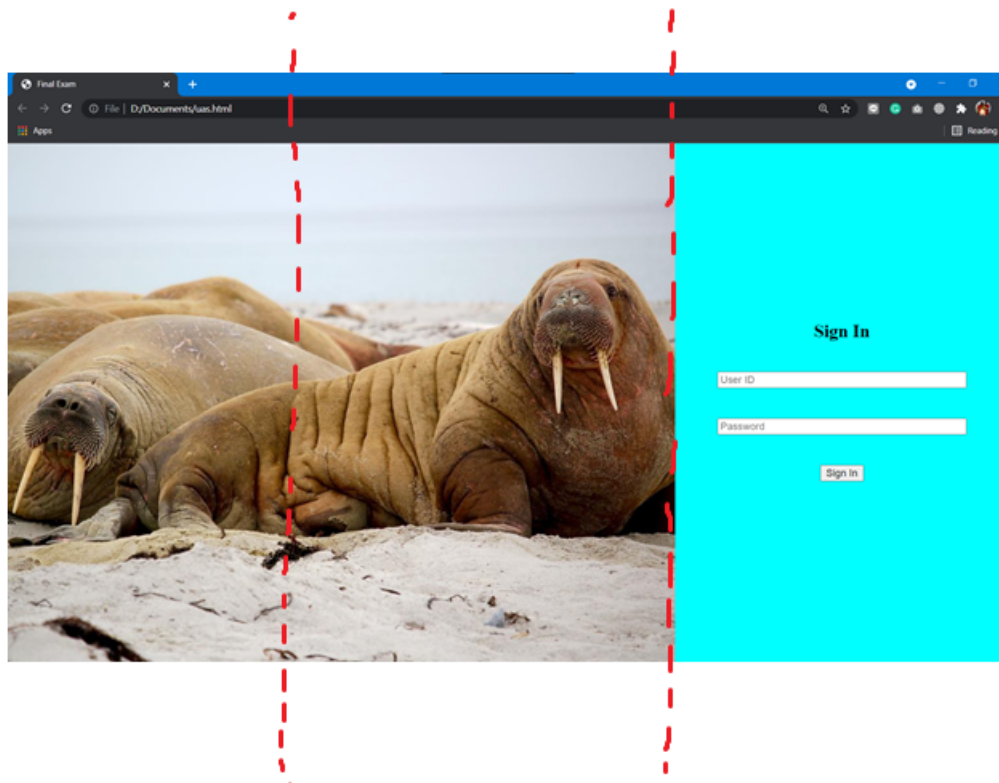


Figure 1a. The page opened in PC Browser with a width of more than 1000px and has no scrollbar (ignore the red dashed-line)

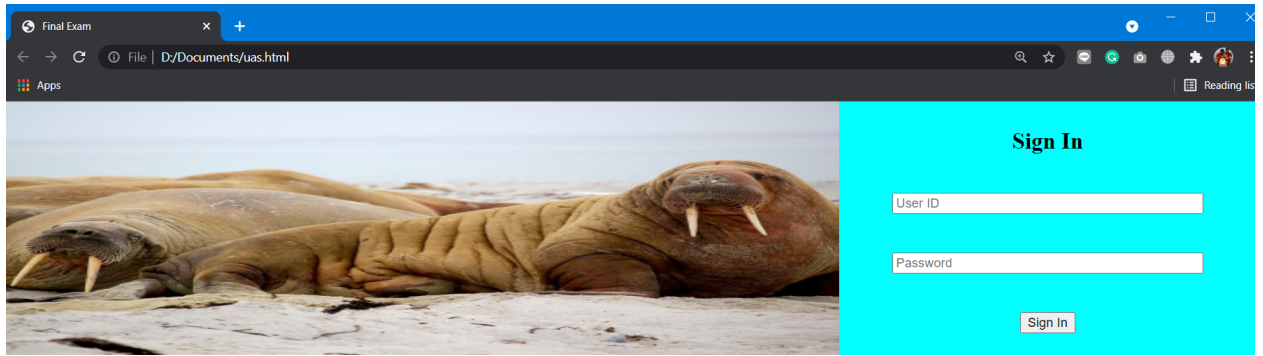


Figure 1b. The page opened in PC Browser with a width of more than 1000px, but the height is approximate 250px with no scrollbar

- b. (20 points – combined with point 2.a.) Figure 2 is the layout when opened in a browser screen with a width of 500px. There are no differences between Figure 1 and Figure 2. It's just that the image looks disproportionate because the width is reduced, but the height remains, and that's okay.

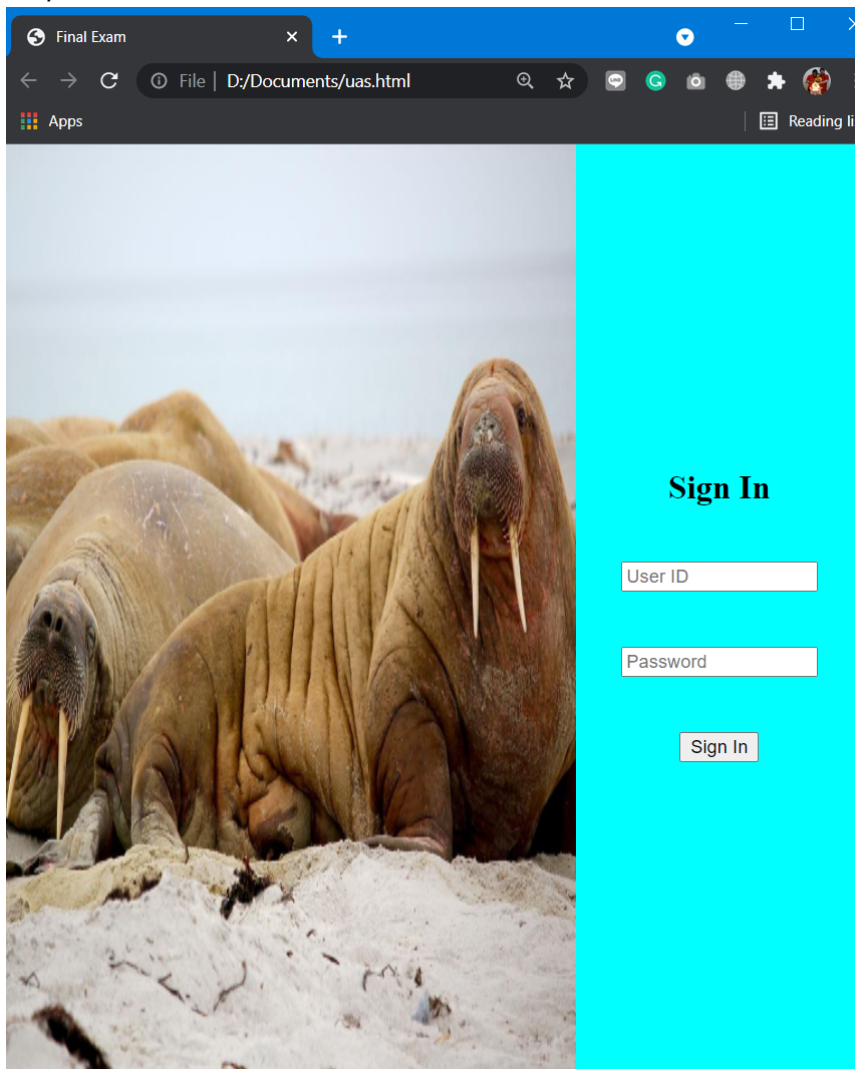


Figure 2. The page opened in PC Browser with a width of 550px

- c. (10 points) In the last third area of the web page (on the right side; Cyan area), at least the four main elements are: Heading that says "Sign In", two Textboxes, and one Button. The Textbox's width will be 80% of the Cyan Area.  
You have to arrange the layout, as you can see in figure 1a.  
**Horizontally**, each element (Heading, Textboxes, and the Button) is in the middle of its line.  
**Vertically**, the elements are arranged in the middle of the CYAN area and have some space between them. For example, see Figure 1b; they are still in the middle of the Cyan area vertically.
- d. (15 points) But, when we open the page in a browser with a width less than 540px, we **will not** see the image. It is hidden. The CYAN area will be 70% wide of the browser area and be right in the center horizontally. The height is 220px. Also, this CYAN area will have a distance of 20px from the top edge of the browser.  
Pay attention to the alignment, the width, and/or the margin/padding of the heading, textboxes, and button element. They must be arranged, as you can see in Figure 3. The Textbox's width will be 80% of the Cyan Area.

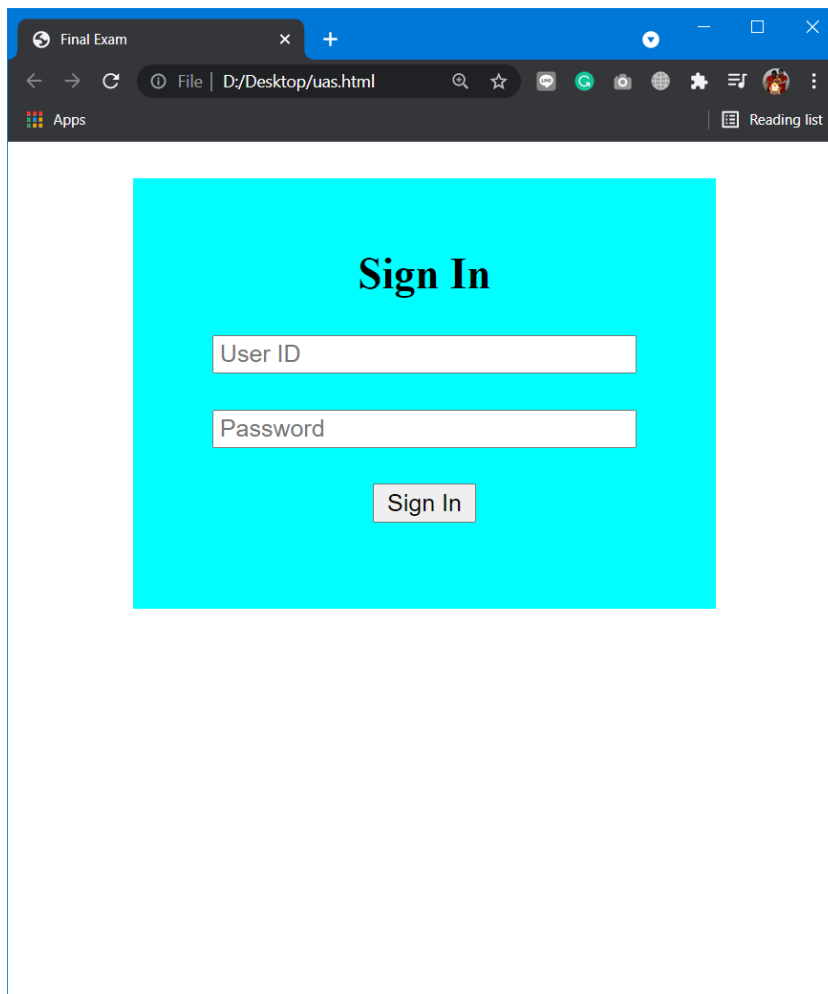


Figure 3. The page opened in a Browser with the width is less than equal to 520px

- e. (5 points) Let say you put this webpage on the server. Look at the Head Section of the HTML file. There are wrong OG Statements. Your task is to fix the OG so that it will appear like Figure 4 when you type the URL <http://www.walrus.com/login> in Whatsapp

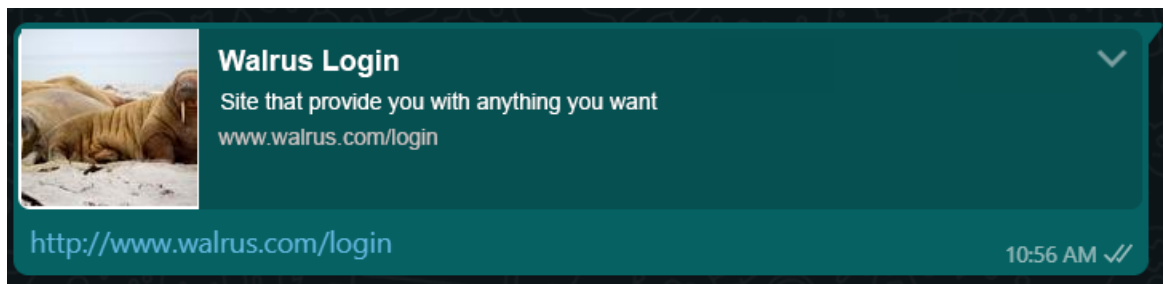


Figure 4. What you will get when you type the URL in Whatsapp

### Rekap Kompetensi/Kemampuan Akhir Yang Diharapkan

Nomer Soal	Level pada Taksonomi Bloom	Kompetensi/Kemampuan Akhir Yang Diharapkan
1 (Ajax)	L3: Applying	<ul style="list-style-type: none"><li>Mahasiswa mampu membangun sebuah aplikasi web yang berorientasi pada sisi presentasi sekaligus fungsionalitasnya</li></ul>
2 (Layouting)	L3: Applying	<ul style="list-style-type: none"><li>Mahasiswa mampu membangun sebuah aplikasi web yang berorientasi pada sisi presentasi sekaligus fungsionalitasnya</li></ul>

### Keseluruhan Kompetensi/Kemampuan Akhir Yang Diharapkan

Kompetensi/Kemampuan Akhir Yang Diharapkan	Level pada Taksonomi Bloom	Jenis Evaluasi
1. Mahasiswa mampu membangun sebuah aplikasi web yang berorientasi pada sisi presentasi sekaligus fungsionalitasnya	<b>L3: Applying</b>	<b>Quiz, UAS</b>
2. Mahasiswa mampu menerapkan teknik pemrograman database (CRUD) pada lingkungan web server	<b>L3: Applying</b>	<b>Quiz, Project, UTS</b>
3. Mahasiswa mampu membangun aplikasi web yang aman dengan memperhatikan teknik pengamanan standar	<b>L3: Applying</b>	<b>Quiz, UTS</b>

### **Soal telah diverifikasi**

**Pada tanggal : 03 Desember 2021**

**O l e h : Andre, M.Sc.**

**J a b a t a n : ~~WD / Kajur / Kadek~~ / Kalab /  
Koordinator Mk / KorProg**

**Tanda tangan :**