

WEB UI PROGRAMMING

IT076

LAB 3 - Advanced JavaScript Techniques

1. Scope of Knowledge:

- Understand advanced JavaScript programming techniques
- Understand JSON, Web APIs, jQuery

2. Materials/Softwares/Tools:

- Visual Studio Code
- Chrome

3. Coding Convention:

4. Exercises:

❖ **Exercise 1:** Write the following script to practice arrow function:

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>JavaScript "this"</h2>
```

```
<p>This example demonstrates that in a regular function, the "this" keyword represents different objects depending on how the function was called.</p>
```

```
<p>Click the button to execute the "hello" function again, and you will see that this time "this" represents the button object.</p>
```

```
<button id="btn">Click Me!</button>
```

```
<p id="demo"></p>
```

```
<script>
```

```
var hello;
```

```
hello = function() {
```

```
    document.getElementById("demo").innerHTML += this;
```

```
}
```

//The window object calls the function:

```
window.addEventListener("load", hello);
```

//A button object calls the function:

```
document.getElementById("btn").addEventListener("click", hello);
```

```
</script>
```

```
</body>
```

```
</html>
```

❖ **Exercise 2:** Write a script to convert a JSON text to a JavaScript object.

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>Create Object from JSON String</h2>
```

```
<p id="demo"></p>
```

```
<script>
```

```
var text = '{"employees":[{"first
```

```
"firstName":"John","lastName":"Doe" },' +
```

```
'{"firstName":"Anna","lastName":"Smith" },' +
```

```
'{"firstName":"Peter","lastName":"Jones" }]}';
```

```
obj = JSON.parse(text);
```

```
document.getElementById("demo").innerHTML =
```

```
obj.employees[1].firstName + " " + obj.employees[1].lastName;
```

```
</script>
```

```
</body>
```

```
</html>
```

❖ **Exercise 3:** Create a jQuery form validation script for the following form:

E-mail ✖
You have not given a correct e-mail address

User name ✔

Password ✖
The password isn't strong enough

Repeat password ✔

Birth date ✖
You have not given a correct date

Country ✖
The input value is incorrect

Profile image Файл не выбран.
No image selected

User presentation 100 chars left

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