**National University of Computer and Emerging Sciences**



**Lab Exercise 10**

*for*

# Web Programming

# Spring 2024

**FAST School of Computer Science**

# LABORATORY OUTCOMES

The practical/exercises in this section are psychomotor domain Learning Outcomes (i.e. subcomponents of the COs), to be developed and assessed to lead to the attainment of the competency.

This Course is designed to take the students full adventure of “**Full Stack Web Development**.”

**Today’s Agenda**

Module 1: NodeJS.

Module 2: Express, JS Server.

Module 3: Nodemailer, URL.

Module 4: MVC.

**Content covered in this week is**:  
  
**-MVC and Node JS Architectures**  
**-Nodemailer, URL and Uploads Module   
-Custome Backend to access your web application**  
**-Express JS Server, Rourting of your application,**

* <https://expressjs.com/en/starter/basic-routing.html>
* <https://expressjs.com/en/starter/hello-world.html>

**-AJAX XMHTTRequest:**

* <https://www.w3schools.com/js/js_ajax_http.asp>
* <https://www.w3schools.com/js/js_ajax_http_send.asp>
* <https://www.w3schools.com/js/js_ajax_http_response.asp>
* <https://www.w3schools.com/js/js_ajax_xmlfile.asp>  
  <https://www.w3schools.com/js/js_ajax_applications.asp>

**-JSON:**

* <https://www.w3schools.com/js/js_json_syntax.asp>  
  <https://www.w3schools.com/js/js_json_xml.asp>
* <https://www.w3schools.com/js/js_json_datatypes.asp>
* <https://www.w3schools.com/js/js_json_parse.asp>
* <https://www.w3schools.com/js/js_json_stringify.asp>
* <https://www.w3schools.com/js/js_json_html.asp>
* <https://www.w3schools.com/js/js_json_objects.asp>
* <https://www.w3schools.com/js/js_json_arrays.asp>
* <https://www.w3schools.com/js/js_json_server.asp>

**You are done with your exercise(s), make your submission on Classroom.**

**BEST WISHES**

**References**

*W3Schools free online web tutorials*. Choose a Bootstrap Version (3, 4 or 5). (n.d.). Retrieved February 22, 2022, from <https://www.w3schools.com/bootstrap/bootstrap_ver.asp>

JavaScript tutorial. (n.d.). Retrieved February 22, 2022, from <https://www.w3schools.com/js/default.asp>