



UNIVERSITI UTARA MALAYSIA

SCHEME OF WORK (SECOND SEMESTER 2021/2021) (A212)

Lecturer's Name: AHMAD HANIS MOHD SHABLI

Course: STIW3044 WEB ENGINEERING

WEEK/ DATE	TOPIC SUB-TOPIC	LO	HOUR	METHOD	AVA	REMARKS
1 27/3/2022 – 2/4/2022	1. Introduction to web engineering. 1.1. Web development lifecycle. 1.2. Web application basic development stacks. 1.3. Web application development environment. 1.4. Web application frameworks.	Students will be able to: - Learn basic web application development cycle. (CLO1)	4 TM2 OL	Lecture, discussion, and SCL Online Learning via Webex	<ul style="list-style-type: none"> Books/Slides 	<ul style="list-style-type: none"> Distribute syllabus to the students Brief on Coursework and Exams requirements Discuss on Lesson plan
2 3/4/2022 – 9/4/2022	2. Web Design Modelling Overview 2.1. User interface design 2.2. User interface experience 2.3. Basic web design layout management 2.4. HTML and CSS Landing Page Development	Students will be able to: - Design a simple web page. - Implement CSS (CLO2)	4 TM2 OL	Lecture, discussion, and SCL Online Learning via Webex	<ul style="list-style-type: none"> Book/Slides Lab instruction Live coding 	<ul style="list-style-type: none"> Individual project discussion

3 10/4/2022 – 16/4/2022	3. Markup Language Frameworks 3.1. CSS Frameworks 3.2. Basic Page with CSS framework 3.3. Form design and development Sessions and Cookies	Students will be able to: - Develop a web page using CSS framework. - Implement Form (CLO2,CLO3)	4 TM2 OL	Lecture, discussion and SCL Online Learning via Webex	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	<ul style="list-style-type: none"> • Project title and RFP • Assignment 1 (10%)
4 17/4/2022 – 23/4/2022	4. Scripting Language 4.1. Introduction to JavaScript 4.2. JavaScript with DOM JavaScript Framework	Students will be able to: - Develop a web page using JS. - DOM manipulation with JS. (CLO2,CLO3)	4 TM2 OL	Lecture, discussion and SCL Online Learning via Webex	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	<ul style="list-style-type: none"> • Discussion on the proposed project • Quiz 1 (5%) <p>Deepavali 4 Nov 2021</p>
5 24/5/2022 – 30/5/2022	5. The Design Process and Development 5.1. Web application databases 5.2. Database web design 5.3. Database development	Students will be able to: - Design web application - Design database (CLO2)	4 TM2 OL	Lecture, discussion and SCL Online Learning via Webex	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	<ul style="list-style-type: none"> • Assignment 2 given (15%)
MID SEMESTER BREAK (1 May 2022 – 7 May 2022)						
6 8/5/2022 – 14/5/2022	6. CRUD database operations 6.1. Create a table 6.2. Read from a table 6.3. Update a table 6.4. Delete from a table	Students will be able to: - Learn basic SQL CRUD database operations (CLO2,CLO3)	4 TM2 OL	Lecture, discussion and SCL	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	<ul style="list-style-type: none"> • Discuss progress on Project
7 15/5/2022 –	7. Backend Requirement Services 7.1. Web application	Students will be able to: - Develop web services.	4 TM2 OL	Lecture, discussion and SCL	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	

21/5/2022	backend 7.2. Web Sessions 7.3. Backend service development 7.4. User interface and service integration.	- Implement CRUD database operation (CLO2,CLO3)				
8 22/5/2022 – 28/5/2022	8. Backend database operations. 8.1. Create data 8.2. Read data 8.3.	Students will be able to: - Develop web services implementing CRUD database operations. (CLO2,CLO3)	4 TM2 OL	Lecture, discussion and SCL	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	
9 29/5/2022 – 4/6/2021	9. Backend database operations. 9.1. Update data 9.2. Delete data 9.3. Asynchronous operations	Students will be able to: - Develop web services implementing CRUD database operations. (CLO2,CLO3)	4 TM2 OL	Lecture, discussion and SCL	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	<ul style="list-style-type: none"> • Discuss progress on project • Midterm Online Exam (20%)
10 5/6/2022 – 11/6/2022	10. Analysis, debugging, and publishing 10.1. Console debug and error log 10.2. Elements and layout 10.3. Data recorder 10.4. Performance analysis Publishing a web application	Students will be able to: - Use the debugging tools for web application (CLO3)	4 TM2 OL	Lecture, discussion and SCL	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	<ul style="list-style-type: none"> • Quiz 2 (5%) (online)
11 12/6/2022 –	11. Web Application Framework Design	Students will be able to: - Learn basic developing	4 TM2 OL	Lecture, discussion and SCL	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	<ul style="list-style-type: none"> • Assignment 3 (15%)

18/6/2022	11.1. Frontend frameworks 11.2. Backend frameworks 11.3. Full stacks frameworks	applications with Web app framework. - (CLO1,CLO2)				
12 19/6/2022 – 25/6/2022	12. Framework Design 12.1. Framework installation 12.2. Application structure 12.3. Database 12.4. Environment 12.5. Configuration Routing	Students will be able to: - Developing applications with Web app framework. (CLO2,CLO3)	4 TM2 OL	Lecture, discussion and SCL	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	
13 26/6/2022 – 2/7/2022	13. Framework Management 13.1. Middleware 13.2. Controllers 13.3. CRUD operations	Students will be able to: - Developing applications with Web app framework. (CLO2,CLO3)	4 TM2 OL	Lecture, discussion and SCL	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	
14 3/7/2022 – 9/7/2022	14. Web Engineering Issue 14.1. Current Issue	Students will be able to: - Exposed with current Web engineering issues. (CLO1)	4 TM2OL	Lecture, discussion and SCL	<ul style="list-style-type: none"> • Book/Slides • Lab instruction • Live coding 	Project Exam (30%)
FINAL EXAMINATION						

Teaching Method 1 (TM1) – In Campus

Teaching Method 2 (TM2) – Strong Access Internet

Teaching Method 3 (TM3) – Moderate/Low Access Internet

Teaching Method 4 (TM4) – No Internet

Prepared By Course Coordinator

Checked By Head of Department

Approved By Dean

(Ahmad Hanis Mohd Shabli)

Date: 3/4/2022

Signature and Official Stamp

(.....)

Date:

Signature and Official Stamp

(.....)

Date:

Signature and Official Stamp

AHMAD HANIS BIN MOHD SHABLI
Lecturer
School of Computing, College of Arts and Sciences,
Universiti Utara Malaysia, 06010 Sintok, Kedah.
Office: +604 928 5170, Mobile: +6019 470 2493
Email: ahmadhanis@uum.edu.my