

Front End Development

Session No#	Session mode	Session Details	Week-Day	Duration Hrs
1	Adaptive Knowledge KN-Async	<p>IU1: Web Design Concepts</p> <p>1. Instructional contents (text)</p> <ul style="list-style-type: none"> • Introduction to Web and Internet • Introduction to Web Development • UI Design Principles • Wireframing • Prototyping • Information Architecture <p>2. Instructional contents converted to PPT Video/Podcast</p> <ul style="list-style-type: none"> • User Interface Design Principles • BloomCart Online Store <p>3. Instructional contents curation from third party (eLearning videos/articles)</p> <p>Videos</p> <ul style="list-style-type: none"> • Introduction to web design and development (LinkedIn Learning Course) <p>Supplementary Learning Materials</p> <ul style="list-style-type: none"> • User experience for web design (LinkedIn Learning Course) <ul style="list-style-type: none"> • Learners are required to complete all e-content to develop a strong understanding of the concepts. • If clarification is required, learners should seek assistance from the AI Mentor. • Any unresolved questions related to concepts, case studies, or skills should be posted in the Teams channel for peer or mentor support. • Learners must complete formative assessments (e.g., MCQs, short-answer questions) and achieve minimum 70% score before progressing. • Auto-graded results and feedback will be provided. Learners are required to review the feedback and reattempt the assessments until minimum 70% is achieved. 	Week 1 - Before next Sync session	3
2	Adaptive Knowledge KN-Sync	<p>IU1: Web Design Concepts</p> <p>Concept and Demo</p> <ul style="list-style-type: none"> • Web Design Concepts and User Experience <p>Case Study</p> <ol style="list-style-type: none"> 1. Maple Lane Shop (concept understanding and scenario walkthrough) 2. BloomCart Online Store <p>Assignment 1</p> <p>FitTrack Fitness App</p>	1-1	3

		<ul style="list-style-type: none"> This session will be delivered either as a live synchronous session conducted by the instructor or through a recorded instructor-led flipped class, which learners are required to attend. During this session, the instructor will explain the case study to reinforce learners' understanding of the concepts. An overview of the assignment will be provided, outlining the requirements that learners are expected to complete. This is a mandatory session, and attendance is required to meet the 75% attendance criteria. 		
3	Adaptive Skills Practice SK-Async	<ul style="list-style-type: none"> Upon completing the adaptive knowledge (synchronous and asynchronous) sessions, learners will be able to work on the assignments. <p style="text-align: center;">Assignment 01: FitTrack Fitness App</p> <ul style="list-style-type: none"> If clarification is required, learners should seek assistance from the AI Mentor. If further support is needed, they may post queries in the Teams channel for peer or mentor support. After submission, learners are required to review the auto-grading results and feedback provided by the AI Mentor and iteratively refine their work until competency is achieved. 	Week 1-3 Before next Sync Session	
4	Adaptive Mentoring Support MS-Sync (M)	<ul style="list-style-type: none"> This is a live synchronous session conducted by the mentor to support learner queries across all modules of the qualification. <p>The mentor will review During this session:</p> <ul style="list-style-type: none"> questions posted by learners and the corresponding responses from peers related to the assignments. The mentor will address queries from attending learners across all subjects within the qualification. The objective of this session is to ensure that learners complete all pending assignments within the stipulated deadlines and score minimum 70% in each assignment Attendance at this session is mandatory to meet the minimum 75% attendance requirement. 	1-2	3
5	Adaptive Mentoring Support MS-Sync (M)	<ul style="list-style-type: none"> This is a live synchronous session conducted by the mentor to support learner queries across all modules of the qualification. <p>During this session:</p> <ul style="list-style-type: none"> The mentor will review questions posted by learners and the corresponding responses from peers related to the assignments. The mentor will address queries from attending learners across all subjects within the qualification. 	1-3	3

		<ul style="list-style-type: none"> The objective of this session is to ensure that learners complete all pending assignments within the stipulated deadlines and score minimum 70% in each assignment Attendance at this session is mandatory to meet the minimum 75% attendance requirement. 		
6	Adaptive Knowledge KN-Async	<p>IU2: HTML & CSS</p> <p>1. Instructional contents (text)</p> <ul style="list-style-type: none"> Preparing for Web Development Understanding HTML Introduction to CSS Markup Language – HTML Styling Language – CSS <p>2. Instructional contents converted to PPT video/Podcast</p> <ul style="list-style-type: none"> HTML CSS Basics Landing page and Inner Page Creations <p>3. Instructional contents curation from third party (eLearning videos/articles)</p> <p>Videos</p> <ul style="list-style-type: none"> HTML Essential Training (LinkedIn Learning Course) CSS fundamentals unlock the power of web styling (LinkedIn Learning Course) <p>Supplementary Learning Materials</p> <ul style="list-style-type: none"> HTML, CSS and JavaScript – building the web (LinkedIn Learning Course) <ul style="list-style-type: none"> Learners are required to complete all e-content to develop a strong understanding of the concepts. If clarification is required, learners should seek assistance from the AI Mentor. Any unresolved questions related to concepts, case studies, or skills should be posted in the Teams channel for peer or mentor support. Learners must complete formative assessments (e.g., MCQs, short-answer questions) and achieve minimum 70% score before progressing. Auto-graded results and feedback will be provided. Learners are required to review the feedback and reattempt the assessments until minimum 70% is achieved. 	Week 1 - Before next Sync session	3
	Adaptive Knowledge KN-Sync	<p>IU2: HTML & CSS</p> <p>Concept and Demo</p> <ul style="list-style-type: none"> Building Landing Page and Inner Pages using HTML and CSS <p>Case Study</p>	1-4	

7		<ol style="list-style-type: none"> 1. Café Aroma Homepage Development (concept understanding and scenario walkthrough) 2. Freelancer Portfolio Webpage 3. Small Business Landing Page Web <p>Assignment 2 Travel Destination Information Page</p> <p>This session will be delivered either as a synchronous session conducted by the instructor or through a recorded instructor-led flipped class, which learners are required to attend.</p> <p>During this session, the instructor will explain the case study to reinforce the learners’ understanding of the concepts.</p> <p>An overview of Assignment will also be provided, outlining the requirements that learners are expected to complete.</p> <p>This is a mandatory session, and attendance is required to meet the 75% attendance criteria.</p>		3
8	Adaptive Skills Practice SK-Async	<ul style="list-style-type: none"> • Upon completing the adaptive knowledge (synchronous and asynchronous) sessions, learners will be able to work on the assignments. • Assignment 02: Travel Destination Information Page • If clarification is required, learners should seek assistance from the AI Mentor. If further support is needed, they may post queries in the Teams channel for peer or mentor support. • After submission, learners are required to review the auto-grading results and feedback provided by the AI Mentor and iteratively refine their work until competency is achieved. 	Week 1- Before next Sync Session	3
9	Adaptive Mentoring Support MS-Sync (M)	<ul style="list-style-type: none"> • This is a live synchronous session conducted by the mentor to support learner queries across all modules of the qualification. <p>During this session:</p> <ul style="list-style-type: none"> • The mentor will review questions posted by learners and the corresponding responses from peers related to the assignments. • The mentor will address queries from attending learners across all subjects within the qualification. • The objective of this session is to ensure that learners complete all pending assignments within the stipulated deadlines and score minimum 70% in each assignment • Attendance at this session is mandatory to meet the minimum 75% attendance requirement. 	1-5	3

10	Adaptive Mentoring Support MS-Sync (M)	<ul style="list-style-type: none"> This is a live synchronous session conducted by the mentor to support learner queries across all modules of the qualification. <p>During this session:</p> <ul style="list-style-type: none"> The mentor will review questions posted by learners and the corresponding responses from peers related to the assignments. The mentor will address queries from attending learners across all subjects within the qualification. The objective of this session is to ensure that learners complete all pending assignments within the stipulated deadlines and score minimum 70% in each assignment Attendance at this session is mandatory to meet the minimum 75% attendance requirement. 	2-6	3
11	Adaptive Knowledge KN-Async	<p>IU3: Responsive Design (Bootstrap)</p> <p>1. Instructional contents (text)</p> <ul style="list-style-type: none"> Responsive Design (Concepts) Responsive Web Design Applying Responsive Design Responsive Design Sample Code <p>2. Instructional contents converted to PPT video/Podcast</p> <ul style="list-style-type: none"> Responsive pages development using Bootstrap <p>3. Instructional contents curation from third party (eLearning videos/articles)</p> <p>Videos</p> <ul style="list-style-type: none"> Create a quick, clean and cheap website with bootstrap templates (LinkedIn Learning Course) <p>Supplementary Learning Materials</p> <ul style="list-style-type: none"> Bootstrap5 essential training (LinkedIn Learning Course) <ul style="list-style-type: none"> Learners are required to complete all e-content to develop a strong understanding of the concepts. If clarification is required, learners should seek assistance from the AI Mentor. Any unresolved questions related to concepts, case studies, or skills should be posted in the Teams channel for peer or mentor support. Learners must complete formative assessments (e.g., MCQs, short-answer questions) and achieve minimum 70% score before progressing. Auto-graded results and feedback will be provided. Learners are required to review the feedback and reattempt the assessments until minimum 70% is achieved. 	Week 2 - Before next Sync session	3

12	Adaptive Knowledge KN-Sync	<p>IU3: Responsive Design (Bootstrap)</p> <p>Concept and Demo</p> <ul style="list-style-type: none"> Responsive Website creation using Bootstrap <p>Case Study</p> <ol style="list-style-type: none"> Responsive News Website (concept understanding and scenario walkthrough) Responsive Personal Blog Homepage <p>Assignment 3</p> <ul style="list-style-type: none"> E-Commerce Product Listing Page <p>This session will be delivered either as a synchronous session conducted by the instructor or through a recorded instructor-led flipped class, which learners are required to attend.</p> <p>During this session, the instructor will explain the case study to reinforce the learners' understanding of the concepts.</p> <p>An overview of Assignment will also be provided, outlining the requirements that learners are expected to complete.</p> <p>This is a mandatory session, and attendance is required to meet the 75% attendance criteria.</p>	2-7	3
13	Adaptive Skills Practice SK-Async	<ul style="list-style-type: none"> Upon completing the adaptive knowledge (synchronous and asynchronous) sessions, learners will be able to work on the assignments. Assignment 03: E-Commerce Product Listing Page If clarification is required, learners should seek assistance from the AI Mentor. If further support is needed, they may post queries in the Teams channel for peer or mentor support. After submission, learners are required to review the auto-grading results and feedback provided by the AI Mentor and iteratively refine their work until competency is achieved. 	Week 1- Before next Sync Session	3
14	Adaptive Mentoring Support MS -Sync (M)	<ul style="list-style-type: none"> This is a live synchronous session conducted by the mentor to support learner queries across all modules of the qualification. <p>During this session:</p> <ul style="list-style-type: none"> The mentor will review questions posted by learners and the corresponding responses from peers related to the assignments. The mentor will address queries from attending learners across all subjects within the qualification. 	2-8	3

		<ul style="list-style-type: none"> The objective of this session is to ensure that learners complete all pending assignments within the stipulated deadlines and score minimum 70% in each assignment Attendance at this session is mandatory to meet the minimum 75% attendance requirement. 		
15	Adaptive Mentoring Support MS-Sync (M)	<ul style="list-style-type: none"> This is a live synchronous session conducted by the mentor to support learner queries across all modules of the qualification. <p>During this session:</p> <ul style="list-style-type: none"> The mentor will review questions posted by learners and the corresponding responses from peers related to the assignments. The mentor will address queries from attending learners across all subjects within the qualification. The objective of this session is to ensure that learners complete all pending assignments within the stipulated deadlines and score minimum 70% in each assignment Attendance at this session is mandatory to meet the minimum 75% attendance requirement. 	2-9	3
16	Adaptive Knowledge KN-Async	<p>IU4: JavaScript & jQuery</p> <p>1. Instructional contents (text)</p> <ul style="list-style-type: none"> Introduction to JavaScript JavaScript Variables, Data Types, Operators & Conditional Statements JavaScript Strings, Arrays & Functions jQuery Widgets <p>2. Instructional contents converted to PPT video/Podcast</p> <ul style="list-style-type: none"> JavaScript Functions and its applications jQuery Concepts <p>3. Instructional contents curation from third party (eLearning videos/articles)</p> <p>Videos</p> <ul style="list-style-type: none"> Learning the JavaScript Language (LinkedIn Learning Course) jQuery essential training (LinkedIn Learning Course) <p>Supplementary Learning Materials</p> <ul style="list-style-type: none"> HTML, CSS and JavaScript – building the web (LinkedIn Learning Course) <p>IU5: Single Page Application, Testing & Documentation</p> <p>1. Instructional contents (text)</p> <ul style="list-style-type: none"> Documentation, Debugging and Workflow Testing and Documentation Testing Fundamentals and Manual Testing Automated Testing – End-to-End Testing Automated Testing – Unit Testing 	Week 2 - Before next Sync session	3

		<p>2. Instructional contents converted to PPT video/Podcast</p> <ul style="list-style-type: none"> • Aurora Reader Text • Interactive To-Do List Web Application <p>3. Instructional contents curation from third party (eLearning videos/articles)</p> <ul style="list-style-type: none"> • Learners are required to complete all e-content to develop a strong understanding of the concepts. • If clarification is required, learners should seek assistance from the AI Mentor. • Any unresolved questions related to concepts, case studies, or skills should be posted in the Teams channel for peer or mentor support. • Learners must complete formative assessments (e.g., MCQs, short-answer questions) and achieve minimum 70% score before progressing. • Auto-graded results and feedback will be provided. Learners are required to review the feedback and reattempt the assessments until minimum 70% is achieved. • 		
17	Adaptive Knowledge KN-Sync	<p>IU4: JavaScript & jQuery IU5: Single Page Application, Testing & Documentation</p> <p>Concept and Demo</p> <ul style="list-style-type: none"> • Developing Single Page Application Using HTML, CSS, JavaScript <p>Case Study</p> <ol style="list-style-type: none"> 1. SPA Testing for Interactive To_Do_List(concept understanding and scenario walkthrough) 2. HelpDesk Email Validator(concept understanding and scenario walkthrough) 3. Aurora Reader Text 4. Interactive To-Do List Web Application <p>Assignments</p> <ul style="list-style-type: none"> • Assignment 04 - Personal Expense Tracker Web Application • Assignment 05 - Nexus Support Portal <p>This session will be delivered either as a synchronous session conducted by the instructor or through a recorded instructor-led flipped class, which learners are required to attend.</p> <p>During this session, the instructor will explain the case study to reinforce the learners' understanding of the concepts.</p> <p>An overview of Assignment will also be provided, outlining the requirements that learners are expected to complete.</p>	2-10	3

		This is a mandatory session, and attendance is required to meet the 75% attendance criteria.		
18	Adaptive Skills Practice SK-Async	<ul style="list-style-type: none"> Upon completing the adaptive knowledge (synchronous and asynchronous) sessions, learners will be able to work on the assignments. <ul style="list-style-type: none"> Assignment 04 - Personal Expense Tracker Web Application Assignment 05 - Nexus Support Portal If clarification is required, learners should seek assistance from the AI Mentor. If further support is needed, they may post queries in the Teams channel for peer or mentor support. After submission, learners are required to review the auto-grading results and feedback provided by the AI Mentor and iteratively refine their work until competency is achieved. 	Week 3- Before next Sync Session	3
19	Adaptive Mentoring Support MS -Sync (M)	<ul style="list-style-type: none"> This is a live synchronous session conducted by the mentor to support learner queries across all modules of the qualification. <p>During this session:</p> <ul style="list-style-type: none"> The mentor will review questions posted by learners and the corresponding responses from peers related to the assignments. The mentor will address queries from attending learners across all subjects within the qualification. The objective of this session is to ensure that learners complete all pending assignments within the stipulated deadlines and score minimum 70% in each assignment Attendance at this session is mandatory to meet the minimum 75% attendance requirement. 	3-11	3
20	Adaptive Mentoring Support MS -Sync (M)	<ul style="list-style-type: none"> This is a live synchronous session conducted by the mentor to support learners in completing the project and submitting the project report. The objective of this session is to ensure that learners complete and submit the project report prior to the summative assessment. <p>Attendance at this session is mandatory to meet the minimum 75% attendance requirement.</p>	3-12	3
21	SA-Sync	<p>Learners who have submitted the project report will attend this session.</p> <p>Summative Assessment (Individual learner)</p> <ul style="list-style-type: none"> Presentation Oral Questioning 	3-13	30 min

Copyright Disclaimer

All rights reserved. No part of this document may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author or publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law. For permission requests, write to the publisher, addressed "Attention: Permissions Coordinator," at the address below.