Government of Pakistan

National Vocational and Technical Training Commission

Prime Minister's Hunarmand Pakistan Program

"Skills for All"



Course Contents / Lesson Plan

Course Title: Web Designing & Web Engineering

Duration: 6 Months

Revised Edition

Trainer Name	
Course Title	Web Designing & Web Engineering
Objectives and Expectations	Employable skills and hands-on practice for Web Designing & Web Engineering
	This course is designed to start you on a path toward future studies in web development and web engineering, no matter how little experience or technical knowledge you currently have. The web is a very big place, and if you are the typical internet user, you probably visit several websites every day, whether for business, entertainment, or education. But have you ever wondered how these websites actually work? How are they built? How do browsers, computers, and mobile devices interact with the web? What skills are necessary to build a website? With more than 1 billion websites now on the internet, the answers to these questions could be your first step toward a better understanding of the internet and developing a new set of internet skills.
	By the end of this course, you will be able to describe the Domain Name, Web Hosting, Domain Name Servers (DNS), How domain name and web hosting works together, structure and functionality of the world wide web, create dynamic web pages using a combination of HTML, PHP, Asp.Net, Bootstrap, CSS, and JavaScript, apply essential programming language concepts when creating HTML forms, select an appropriate web hosting service, and publish your webpages for the world to see. Furthermore, you will study web designing and development tools like Adobe Dreamweaver, Microsoft Expression, Visual Studio and then how to use content management systems (CMS) like, WordPress, Wix, Shopify etc, to create, publish and manage CMS based dynamic website without any using coding or programming language. Finally, you will be able to develop a working model for creating your own personal or business websites in the future and be fully prepared to take the next step in a more advanced web development or design course or specialization.
	Main Expectations: In short, the course under reference should be delivered by professional instructors in such a robust hands-on manner that the trainees are comfortably able to employ their skills for earning money (through wage/self-employment) at its conclusion. This course thus clearly goes beyond the domain of the traditional training practices in vogue and underscores an expectation that a market-centric approach will be adopted as the main driving force while delivering it. The instructors should therefore be experienced enough to be able to identify the training needs for the possible market roles available out there. Moreover, they should also know the strengths and weaknesses of each trainee to prepare them for such market roles during/after the training.
	i. Specially designed practical tasks to be performed by the trainees have been included in the Annexure-I to this document. The record of all tasks performed individually or in groups must be preserved by the management of the training Institute clearly labeling name, trade,

- session, etc so that these are ready to be physically inspected/verified through monitoring visits from time to time. The weekly distribution of tasks has also been indicated in the weekly lesson plan given in this document.
- **ii.** To materialize the main expectations, a special module on **Job Search** & Entrepreneurial Skills has been included in the latter part of this course (5th & 6th month) through which, the trainees will be made aware of the Job search techniques in the local as well as international job markets (Gulf countries). Awareness around the visa process and immigration laws of the most favored labor destination countries also form a part of this module. Moreover, the trainees would also be encouraged to venture into self-employment and exposed to the main requirements in this regard. It is also expected that a sense of civic duties/roles and responsibilities will also be inculcated in the trainees to make them responsible citizens of the country.
- iii. A module on **Work Place Ethics** has also been included to highlight the importance of good and positive behavior in the workplace in the line with the best practices elsewhere in the world. An outline of such qualities has been given in the Appendix to this document. Its importance should be conveyed in a format that is attractive and interesting for the trainees such as through PPT slides +short video documentaries. Needless to say that if the training provider puts his heart and soul into these otherwise non-technical components, the image of the Pakistani workforce would undergo a positive transformation in the local as well as international job markets.

To maintain interest and motivation of the trainees throughout the course, modern techniques such as:

- Motivational Lectures
- Success Stories
- Case Studies

These techniques would be employed as an additional training tool wherever possible (these are explained in the subsequent section on Training Methodology).

Lastly, evaluation of the competencies acquired by the trainees will be done objectively at various stages of the training and a proper record of the same will be maintained. Suffice to say that for such evaluations, practical tasks would be designed by the training providers to gauge the problem-solving abilities of the trainees.

(i) Motivational Lectures

The proposed methodology for the training under reference employs motivation as a tool. Hence besides the purely technical content, a trainer is required to include elements of motivation in his/her lecture. To inspire the trainees to utilize the training opportunity to the full and strive towards professional excellence. Motivational lectures may also include general topics such as the importance of moral values and civic role & responsibilities as a Pakistani. A motivational lecture should be delivered with enough zeal to produce a deep impact on the trainees. It may comprise of the following:

- Clear Purpose to convey the message to trainees effectively.
- Personal Story to quote as an example to follow.

- Trainees fit so that the situation is actionable by trainees and not represent a just idealism.
- Ending Points to persuade the trainees on changing themselves.

A good motivational lecture should help drive creativity, curiosity, and spark the desire needed for trainees to want to learn more.

The impact of a successful motivational strategy is amongst others commonly visible in increased class participation ratios. It increases the trainees' willingness to be engaged on the practical tasks for a longer time without boredom and loss of interest because they can see in their mind's eye where their hard work would take them in short (1-3 years); medium (3 -10 years) and long term (more than 10 years).

As this tool is expected that the training providers would make arrangements for regular well planned motivational lectures as part of a coordinated strategy interspersed throughout the training period as suggested in the weekly lesson plans in this document.

Course-related motivational lectures online link is available in Annexure-II.

(ii) Success Stories

Another effective way of motivating the trainees is using Success Stories. Its inclusion in the weekly lesson plan at regular intervals has been recommended till the end of the training.

A success story may be disseminated orally, through a presentation, or using a video/documentary of someone that has risen to fortune, acclaim, or brilliant achievement. A success story shows how a person achieved his goal through hard work, dedication, and devotion. An inspiring success story contains compelling and significant facts articulated clearly and easily comprehendible words. Moreover, it is helpful if it is assumed that the reader/listener knows nothing of what is being revealed. The optimum impact is created when the story is revealed in the form of:-

- Directly in person (At least 2-3 cases must be arranged by the training institute)
- Through an audio/ videotaped message (2-3 high-quality videos must be arranged by the training institute)

It is expected that the training provider would collect relevant high-quality success stories for inclusion in the training as suggested in the weekly lesson plan given in this document.

Suggestive structure and sequence of a sample success story and its various shapes can be seen in **Annexure III**.

(iii) Case Studies

Where a situation allows, case studies can also be presented to the trainees to widen their understanding of the real-life specific problem/situation and to explore the solutions.

In simple terms, the case study method of teaching uses a real-life case example/a typical case to demonstrate a phenomenon in action and explain theoretical as well as practical aspects of the knowledge related to the same. It is an effective way to help the trainees comprehend in depth both the

theoretical and practical aspects of the complex phenomenon in depth with ease. Case teaching can also stimulate the trainees to participate in discussions and thereby boost their confidence. It also makes the classroom atmosphere interesting thus maintaining the trainee interest in training till the end of the course. Depending on suitability to the trade, the weekly lesson plan in this document may suggest case studies be presented to the trainees. The trainer may adopt a PowerPoint presentation or video format for such case studies whichever is deemed suitable but only those cases must be selected that are relevant and of a learning value. The Trainees should be required and supervised to carefully analyze the cases. For this purpose, they must be encouraged to inquire and collect specific information/data, actively participate in the discussions, and intended solutions to the problem/situation. Case studies can be implemented in the following ways: -A good quality trade-specific documentary (At least 2-3) i. documentaries must be arranged by the training institute) Health & Safety case studies (2 cases regarding safety and ii. industrial accidents must be arranged by the training institute) Field visits (At least one visit to a trade-specific major industry/ site iii. must be arranged by the training institute) **Entry-level of** trainees Intermediate By the end of this course, students will be able to: Learning Outcomes of Understand Domain Name Registration and Web Hosting Subscription the course Understand Linkage/Configuration of Web Hosting with Domain Name via DNS • Understand the basic programming language of HTML (Hyper Text Markup Language) and PHP (Hypertext Preprocessor) with their most common tags. Understanding of CSS (Cascade Style Sheet) and Bootstrap and their application. • Understanding of JavaScript and its application. Understanding of Asp.Net and its application. Understanding of source code compiling software like Adobe Dreamweaver, Microsoft Expression and Microsoft Visual Studio. Understand the well-known Php Based CMS - Content Management Systems like WordPress. Understand the Difference between Website and Web Portal Create and Publish Static Website using HTML, CSS and JavaScript. Create and Publish Dynamic Website using PHP and Asp.Net. Create and Publish Dynamic Website using CMS of WordPress. The total duration of the course: 6 months (26 Weeks) Course **Execution Plan** Class hours: 4 hours per day

Companies	Theory: 20% Practical: 80% Weekly hours: 20 hours per week Total contact hours: 520 hours 1. Software Houses
offering jobs in the respective trade	 Digital Advertising Agencies Web Agencies BPO Services Industry Freelance Industry IT Departments of all Major Industries
Job Opportunities	All over the world there is a high demand in the Web Development and Web Engineering industry for Welders in various fields Such as: junior and senior web designer, junior and senior web developer, junior WordPress developer, senior WordPress developer, and full stack web developer. With the help of this course, we will be able to give technical trainings of web development to our youth. There are also opportunities for start-up entrepreneurship due to the high demand in the market in following designated jobs. Junior Web Developer Senior Web Developer WordPress Web Developer Full Stack Web Developer
No of Students	25
Learning Place	Classroom / Lab
Instructional Resources	 HTML & CSS: Design and Build Web Sites Originally published: October 25, 2011 Author: Jon Duckett Original language: English JavaScript and JQuery: Interactive Front-End Web Development Originally published: 2013 Author: Jon Duckett Original language: English Learning PHP, MySQL & JavaScript: With JQuery, CSS & HTML5 Originally published: 2011 Author: Robin Nixon 1-Hour WordPress 2021: A Visual Step-by-step Guide Originally published: January 12, 2021 Author: Dr Andy Williams C# 10 and .NET 6 - Modern Cross-Platform Development - Sixth Edition: Build Apps, Websites, and Services with ASP.NET Core 6, Blazor, and EF Core 6 Using Visual Studio 2022 and Visual Studio Code Originally published: November 9, 2021 Author: Mark Price

MODULES

Scheduled Weeks	Module Title	Learning Units	Remarks
Week 1	Orientation/Course Introduction Overview of Domain Name, Web Hosting and Basic Website Structuring	 Motivational Lecture (For further detail please see Page No: 3& 4) Job market Course Applications Institute/work ethics Describe Domain Name with respect to the most common TLDs and their importance Describe ICANN and demonstrate, how it works. Describe, how to register a domain name using any domain registrar. Describe Web Hosting, Types, Web Hosting Company, DNS and Common Parameters of Web Hosting Account Describe Basic Website Structure Design a Basic Static Web Page to print a single text line. 	Home Assignment • Task 1 • Task 2 • Task 3 Details may be seen at Annexure-I
Week 2	Webpage Designing with HTML Basics using Notepad	Success stories (For further detail please see Page No: 3& 4) Students are introduced to: Extensions of Web Pages (.html, .htm, .php .aspx) Basic Structuring of HTML based Web Page. Designing of HTML Web Page with Title Tag Designing of HTML Web Page with displaying Background Image Designing of HTML Web Page with displaying Inline Image/images Designing of HTML Web Page using inline styling of font, size and color Designing of HTML Web Page with embedding a YouTube video Designing of HTML Web Page with a table or multiple columns and rows.	•Task 4 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>

Week 3	Webpage Designing using CSS and JavaScript in Adobe Dreamweaver or Microsoft Expression	 Motivational Lecture(For further detail please see Page No: 3& 4) Students are introduced to: Understanding of Dreamweaver software to create and manage html, php and dot net web pages Install Adobe Dreamweaver Software on the laptop/desktop Understanding of Microsoft Expression software to create and manage html, php and dot net web pages Install Microsoft Expression on laptop/desktop Different webpage layouts (view) of Dreamweaver and Microsoft Expression (code, design split). Understanding of Basic CSS Understanding of Basic CSS Understanding of Basic CSS and JavaScript as library files. Design a basic HTML Form with JavaScript Controls 	• Task 5 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
Week 4	Designing a html- based website of Multiple Webpages with CSS and JavaScript, using Dreamweaver or Microsoft Expression	 Success stories (For further detail please see Page No: 3& 4) Students are introduced to learn: Designing a complete HTML based website of multiple web pages, using basic CSS and JavaScript files in Dreamweaver or Microsoft Expression Uploading the html website on Live Cloud Server / Web Hosting Troubleshoot and resolve the html website issue 	• Task 6 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u> • Monthly <u>Test 1</u>
Week 5	Introduction to PHP	 Motivational Lecture(For further detail please see Page No: 3& 4) Students are introduced to: Setup PHP on the local Machine. Basic Structure of PHP Complete PHP Syntax and Programming Language Basics. Handle Strings in Webpage with String Functions Setup Apache Server Framework on the laptop/desktop 	• Task 7 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>

		 Setup Mysql Database on the laptop/desktop Concept of already available complete packaged Linux framework (Apache+PHP+Mysql) for windows like xamp and wamp. 	
Week 6	Learn PHP Variables and Functions	 Success stories (For further detail please see Page No: 3& 4) Students are introduced to: Define Variables and Constants. Write PHP program using Data Types - Strings, Numbers, Double, Boolean and null. Learn the basics of defining Functions, Passing Parameters and Function Concepts. 	• Task 8 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
Week 7	Learn PHP Arrays and Loops	 Motivational Lecture(For further detail please see Page No: 3& 4) Students are introduced to: Describe types of loops Describe usage of different types of loops. Write conditions and looping statements in PHP Describe Arrays, its types and their applications. Handling Arrays in PHP. 	• Task 9 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
Week 8	Design & Develop PHP based Website using Dreamweaver or Microsoft Expression	Success stories (For further detail please see Page No: 3& 4) Students are introduced to: Learn to organize the source code with Namespaces. Learn how to use PHP to handle HTML forms. Learn how to use PHP to validate HTML forms. Learn how to use object-oriented programming in PHP. Build Complete PHP based dynamic website using loops, functions, arrays and forms.	Task 10 Task 11 Details may be seen at Annexure-I Monthly Test 2

Week 9	Introduction to Basic Microsoft ASP.Net Development with Visual Studio and MS SQL Server	 Motivational Lecture(For further detail please see Page No: 3& 4) Students are introduced to: Download and install Visual Studio Download and Install Microsoft SQL Server Understand the settings/preferences of Visual Studio Understand the settings/preferences of MS SQL Server Understand the purpose of web.config Understand the concept of a code-behind file Build a simple user interface using drag and drop 	• Task 12 • Task 13 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
Week 10	Learn how to connect MS SQL database with Asp.net Web Pages	 Success stories (For further detail please see Page No: 3& 4) Students are introduced to: Learn how to connect ASP.NET to SQL Server and view the results live Learn how to use the List View with Paging and SQL Server. Learn how to update, delete and update data from a web page with SQL Server Learn how to interact with databases using AJAX 	• Task 14 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
Week 11	Learn how to generate text area, drop downs, radio button, lists and tables, dynamically	 Motivational Lecture (For further detail please see Page No: 3& 4) Students are introduced to: Create and manage text area, drop downs, radio buttons, lists and tables in web page using visual studio and generate asp.net web page/s. 	• Task 15 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
Week 12	Learn How to Create, Compile and Build a .Net Web project and run it in a web	 Success stories (For further detail please see Page No: 3& 4) Understand the concept of an object and its properties 	• Task 16 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>

	browser	 Create a .net web project and run it in a browser, and examine the html code in a browser Create a complete dynamic web project in visual studio with connection of MS SQL Database. Compile and Build the Source code of asp.net and run the web page in any browser 	
	Start Preparing your portfolio	 Motivational Lecture(For further detail please see Page No: 3& 4) Students are introduced to: the concept of design portfolios the concept of present design work/projects in a professional manner websites that provide free portfolio hosting such as Behance and Dribble creating a portfolio how to select work for presenting in your portfolio 	
	Build your CV	Download professional CV template from any good site (https://www.coolfreecv.com or relevant) Add Personal Information Add Educational details Add Experience/Portfolio Add contact details/profile links	
Week 14	Introduction to WordPress and Xamp.	Success stories (For further detail please see Page No: 3& 4) Students are introduced to: WordPress and its directory structure. Download, Install and Configure xamp on your laptop or desktop Start Xamp services and Create mysql database using phpMyAdmin of xamp Download, Install and Configure WordPress on your PC, so you can learn without having to pay hosting or domain fees, using xamp. Understand the main features of WordPress	• Home Assignment • Task 17 Details may be seen at Annexure-I

Week 15	Customize WordPress Website	 Motivational Lecture (For further detail please see Page No: 3& 4) Students are introduced to: Navigate around the WordPress dashboard, know what everything does and how to use it. Create pages and posts, and most importantly, know the difference between the two. Correctly use post categories and tags and understand why these can cause you problems at the search engines if used incorrectly. Create custom menus and navigation systems that both visitors and search engines will find useful. Create a static homepage useful for most websites, or a blog like homepage useful for bloggers. 	• Task 18 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
	Introduction to Freelancing	 Motivational Lecture (For further detail please see Page No: 3& 4) Students are introduced to: the concept of freelancing how to become freelance and create a sustainable income pros and cons of freelancing the ethical and professional way of becoming a productive freelancer resources available for freelancing in the field of design how to join freelancing sites the process of creating a freelancing profile 	•
	Create an account profile on Fiverr (at least two gigs) and Upwork	Create an account by following these steps: Step 1: Personal Info Step 2: Professional Info Step 3: Linked Accounts Step 4: Account Security	•
Week 16	Understand plugins & themes and how to find/install them	 Success stories (For further detail please see Page No: 3& 4) Students are introduced to: Find, Install, activate and configure 	• Task 19 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>

Week 17	Secure and Optimize WordPress Website	 any given WordPress plugins Find, Install, activate and configure any given WordPress theme Troubleshoot the errors and warnings. Motivational Lecture (For further detail please see Page No: 3& 4) Students are introduced to: Know how to configure WordPress for best results Protect their WordPress website from hackers and spammers using given modules/plugins Create a Responsive Website that looks good on any browser 	• Task 20 Details may be seen at Annexure-I • Monthly Test 3
		looks good on any browserOptimize WordPress Website with relevant plugins /modules	
Week 18	Deploying WordPress Website on cloud server / web hosting	 Success stories (For further detail please see Page No: 3& 4) Students are introduced to: Getting the complete website backup from xamp (local machine) Restoration of complete WordPress website backup on cloud server/web hosting Connectivity of database with WordPress website file using wpconfig file. Correction of Permalinks/URLs 	•Task 21 •Task 22 •Task 23 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
Week 19	Understanding and Configuration of htaccess and php.ini file at web hosting	 Motivational Lecture (For further detail please see Page No: 3& 4) Students are introduced to: Understanding of importance of htaccess file, its parameters and application Understanding of importance of php.ini file, its parameters and their application 	•Task 24 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
Week 20	On-Page SEO	 Success stories (For further detail please see Page No: 3& 4) Students are introduced to: Understanding of On-Site SEO with respect to: Optimization of Page Title as per the google standards Optimization of Page Meta title as per the google standards 	• Task 25 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>

		 Optimization of Page Meta Description as per the Google Standards Optimization of Page Meta Tags and Keywords as per the google Standards. 	
Week 21	Employable Project/ Assignment (6 weeks) i.e. 21-26 besides regular classes. OR On the job training (2 weeks)	 Guidelines to the Trainees for selection of students employable project like final year project (FYP) Assign Independent project to each Trainee A project-based on trainee's aptitude and acquired skills. Designed by keeping in view the emerging trends in the local market as well as across the globe. The project idea may be based on Entrepreneur. Leading to successful employment. The duration of the project will be 6 weeks Final viva/assessment will be conducted on project assignments. At the end of the session, the project will be presented in a skills competition The skill competition will be conducted on zonal, regional, and National levels. The project will be presented in front of Industrialists for commercialization The best business idea will be placed in the NAVTTC business incubation center for commercialization. OR On the job training for 2 weeks: Aims to provide 2 weeks of industrial training to the Trainees as part of the overall training program Ideal for the manufacturing trades As an alternative to the projects that involve expensive equipment Focuses on increasing Trainee's motivation, productivity, efficiency, and quick learning approach. 	
Week 22	Learn Google Search Console	Success stories (For further detail please see Page No: 3& 4) Students are introduced to: Describe the importance of google search console Learn to add property in google	• Task 26 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>

		 search console Learn the importance of sitemap and generate Website XML based sitemap using plugin or sitemap generating website and submit to Google Search Console Learn the importance of Robots.txt file, its parameters and Generate or write a Robot.txt file and Submit to Google Search Console Crawling and indexing web pages in google search console Troubleshooting and fixing the web page errors. 	
	How to search and apply for jobs in at least two labor marketplace countries (KSA, UAE, etc.)	 Browse the following website and create an account on each website ✓ Bayt.com – The Middle East Leading Job Site ✓ Monster Gulf – The International Job Portal ✓ Gulf Talent – Jobs in Dubai and the Middle East Find the handy 'search' option at the top of your homepage to search for the jobs that best suit your skills. Select the job type from the first 'Job Type' drop-down menu, next, select the location from the second drop- down menu. Enter any keywords you want to use to find suitable job vacancies. On the results page you can search for part-time jobs only, full-time jobs only, employers only, or agencies only. Tick the boxes as appropriate to your search. Search for jobs by: ✓ Company ✓ Category ✓ Location ✓ All jobs ✓ Agency ✓ Industry 	
Week 23	Google Analytics	Motivational Lecture (For further	• Task 27

		 detail please see Page No: 3& 4) Students are introduced to: Describe the importance of Google Analytics Adding property in google Analytics Configuring Property and managing views in google analytics 	<u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
Week 24	3 rd Party Integration with WordPress Website	 Success stories (For further detail please see Page No: 3& 4) Students are introduced to: Describe APIs (Application Programmers Interface) and its types with respect to its importance, configuration and application Describe, how to integrate any API with WordPress website 	
Week 25	E Commerce Website designing and development in WordPress using WooCommerce	Motivational Lecture (For further detail please see Page No: 3& 4) Students are introduced to: • Describe E Commerce and its difference from Conventional Commerce • Describe major modules of E commerce website like inventory management system, order management system, delivery management, payment methods and customer support services. • Find, Install and Configure WooCommerce Plugin at WordPress Website • Manage the WooCommerce settings as per the given criteria	• Task 28 <u>Details may</u> <u>be seen at</u> <u>Annexure-I</u>
Week 26	Entrepreneurship and Final Assessment in project	 Success stories (For further detail please see Page No: 3& 4) Job Market Searching Self-employment Introduction Fundamentals of Business Development Entrepreneurship Startup Funding Business Incubation and Acceleration Business Value Statement Business Model Canvas Sales and Marketing Strategies 	Final Assessment

 How to Reach Customers and Engage Stakeholders Power Grid RACI Model, SWOT Analysis, PEST Analysis SMART Objectives OKRs Cost Management (OPEX, CAPEX, ROCE, etc.)
Final Assessment

Annexure-I:

Tasks For Certificate in Web Designing and Web Engineering

Task No.	Task	Description	Week
1.	Find the career path	 Prepare a career path related to your course and also highlight the emerging trends in the local as well as international market 	
2.	Work Ethics	 Generate a report on Institute work ethics and professionalism related to your course 	Week 1
3.	Identify Top Level Domain Names, (TLDs), Web Hosting Companies and Structure of Basic HTML Web page in notepad	 Prepare a list of top level domain names, web hosting companies and build a simple and basic HTML website with basic structure to print a single text line. 	
4.	Build an HTML web page with given basic parameters (tags)	 Identify different web page extensions for html, php and asp.net. Build an HTML web page with background image, inline image, embedding youtube video, different columns and rows, table and inline styling of font size and color in notepad 	Week-2
5.	Build an HTML web page with separate CSS and JavaScript file in Adobe Dreamweaver and Microsoft Expression	 Install Adobe Dreamweaver Install Microsoft Expression Demonstrate the settings/preferences in Adobe Dreamweaver Demonstrate the settings/preferences in Microsoft Expression Demonstrate basic html libraries in the main web page Build a basic CSS file with basic (sample) stylings code, call it in the main web page and 	Week 3

		 check its working Build a basic JavaScript file with basic (sample) code, call it in the main web page and check its working 	
6.	Build a complete HTML based website with 4-5 web pages using separate CSS and JavaScript file in Dreamweaver or Microsoft Expression	Build a complete website of multiple (4-5) web pages, with main menu, styling and scripting through separate css and js files in Adobe Dreamweaver or Microsoft Expression	Week 4
7.	Setup PHP, Apache and MySQL Environment on Windows machine. Demonstrate basic structure of PHP and build a sample static webpage in PHP	 Download and Install PHP (latest version) on the laptop/desktop Download and install latest version of Apache on the laptop/desktop Setup MySQL database Build a sample webpage in PHP and run it on the installed Apache/php/MySQL environment 	Week 5
8.	Demonstrate PHP Variables and their usage	 Demonstrate PHP Variables and Constants Build a webpage with writing a PHP program using Data Types - Strings, Numbers, Double, Boolean and null. Use php function in the webpage. 	Week 6
9.	Demonstrate Loops and Arrays in PHP web page	 Demonstrate different types of loops in PHP based webpage Demonstrate different types of arrays in PHP based webpage 	Week 7
	Build a complete static website of 4 to 5 web pages in PHP	 Build a complete static website of 4 to 5 web pages in PHP using php variables, functions, loops, arrays using separate CSS and JavaScript files in Adobe Dreamweaver or Microsoft Expression 	
	Build a complete dynamic website of 4 to 5 web pages in PHP with Mysql	 Build a complete dynamic website of 4 to 5 web pages in PHP with mysql database, using php based web forms and their connectivity with the database 	Week 8
12.	Installation of MS Visual Studio and MS SQL Server	 Demonstrate the installation of MS Visual Studio and MS SQL Server and their different layouts. Demonstrate the basic settings & preferences of MS Visual Studio and MS SQL Server 	Week 9

14.	Demonstrate the concept of web.config file build a simple user interface in visual studio Demonstrate MS SQL Server database connection with asp.net web pages	 Understand the purpose of web.config Understand the concept of a code-behind file Build a simple user interface using drag and drop. Create ms sql database using Sql server Connect database with asp.net web pages using web.config Demonstrate how to update, delete and update data from a web page with SQL Server Interact with MS SQL databases using AJAX in visual studio 	Week 10
15.	Demonstrate to generate text area, drop downs, radio button, lists and tables, dynamically	 Create and manage text area, drop downs, radio buttons, lists and tables in asp.net web page using visual studio 	Week 11
16.	Create, Compile and Build an asp.net webpage with its connection with MS SQL database	 Demonstrate the concept of an object and its properties in visual studio Create a .net web project and run it in a browser, and examine the html code in a browser Create a complete dynamic web project in visual studio with connection of MS SQL Database. Compile and Build the Source code of asp.net and run the web page in any browser 	Week 12
17.	Download, Install and Configure Xamp Download, Install and Configure WordPress	 Download, Install and Configure xamp on your windows based laptop or desktop Start Xamp Services and Create Mysql database using xamp via phpMyAdmin Download and Install WordPress with Mysql database 	Week 14
18.	Customize WordPress Website with basic settings	 Demonstrate the basic settings of WordPress dashboard which includes, general, permalinks, reading and writing configurations. Create pages and posts and demonstrate the difference of these two. Upload media (images and video), and use them in the page and post. Create custom menus and navigation systems that both visitors and search engines will find useful. Create a static homepage useful for most websites, or a blog like homepage useful for bloggers. 	Week 15

20.	Find, Install and Activate plugins & themes Secure WordPress Website Optimize WordPress Website	 Find, Install, activate and configure any given WordPress plugins Find, Install, activate and configure any given WordPress theme Troubleshoot the errors and warnings Find, Download, Install and Activate WordPress Security Plugins like Wordefence and Succuri Generate API Key of Succuri Plugin and do the needful hardening settings Scan the website using wordefence plugin and generate the report of infected files Optimize website using plugin of Autoptimize Optimize website images using Smush (Plugin) 	Week 16 Week 17		
21.	Generate Website Backup	 Complete website backup from xamp (local machine) manual: website files and database separately. Complete website backup using WordPress plugin (WP Migrate) 			
22.	Restore Website Backup	 Restoration of complete WordPress website backup on cloud server/web hosting using cpanel backup restoration module 	Week 18		
23.	Troubleshoot the Connectivity of mysql database on LIVE web hosting	 Connectivity of database with WordPress website file using wp-config file. Correction of Permalinks/URLs (from localhost to live domain name) 			
24.	Configuration of htaccess and php.ini file at web hosting	 Configure htaccess file to manage the parameters of website errors, warnings, notices, path and SSL Configure the php.ini file to manage the parameters of max file upload size, max php variables, max processing time, max file attachment size and php version. 			
25.	On-Page SEO	 As per the SEO standards Optimize the main home page of WordPress website with respect to: Page Meta Title Page Meta Description Page Meta Tags and Keywords 			
26.	Create Google Search Console Account and Submit Website as a property in it.	 Adding website URL as property in google search console Generate Website XML based sitemap and submit to Google Search Console Generate Robot.txt file and Submit Crawl and index web pages in google search console Generate a report of errors and warning, if find any on the website, using google search console. 	Week 20		

27.	Create Google Analytics and Submit Website as a property in it.	 Create Google Analytics Account and add property in google Analytics Configuring Property with verification code and managing views in google analytics 	
28.	E Commerce Website designing and development in WordPress using WooCommerce	 Demonstrate E Commerce website and its difference from Conventional Commerce Find, Download, Install and Activate WooCommerce Plugin in WordPress Website Manage Settings of WooCommerce Pluginwith respect to: General Payment Shipping Emails Accounts and Privacy 	Week 21-22
29.	Build your CV	Download professional CV template from any good site (https://www.coolfreecv.com or relevant) • Add Personal Information • Add Educational details • Add Experience/Portfolio • Add contact details/profile links	Week 21-26
30.	Create an account profile on Fiverr (at least two gigs) and Up-work	Create an account by following these steps: Step 1: Personal Info Step 2: Professional Info Step 3: Linked Accounts Step 4: Account Security	Week 21-26
31.	How to search and apply for jobs in at least two labor marketplace countries (KSA, UAE, etc.)	 Browse the following website and create an account on each website Bayt.com – The Middle East Leading Job Site Monster Gulf – The International Job Portal Gulf Talent – Jobs in Dubai and the Middle East Find the handy 'search' option at the top of your homepage to search for the jobs that best suit your skills. Select the job type from the first 'Job Type' drop-down menu, next, select the location from the second drop-down menu. Enter any keywords you want to use to find suitable job vacancies. On the results page you can search for part-time jobs only, full-time jobs only, employers only, or agencies only. Tick the boxes as appropriate to your search. 	Week 21-26

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Annexure-II:

Motivational Lectures

Web Designing Full Course In Urdu / Hindi Language Class 1 Intro and Basic || Wasi

https://www.youtube.com/watch?v=nq3IEtyrcpM

How to Start working on Fiverr or Upwork? - Urdu/Hindi

https://www.youtube.com/watch?v=a0c5n0Uec9Q

WordPress Customization with Porto Theme For E Commerce - Urdu/Hindi

https://www.youtube.com/watch?v=ju2QKM7Jdc4

Hisham Sarwar Motivational Story | Pakistani Freelancer

https://www.youtube.com/watch?v=CHm BH7xAXk

21 Yr Old Pakistani Fiverr Millionaire | 25-35 Lakhs a Month Income | Interview

https://www.youtube.com/watch?v=9WrmYYhr7S0

22 | Web Designing and Web Engineering

Success Story of a 23 Year - Old SEO Expert | How This Business Works | Urdu Hindi Punjabi

https://www.youtube.com/watch?v=tlQ0CWgszl0

Failure to Millionaire - How to Make Money Online | Fiverr Superhero Aaliyaan Success Story

https://www.youtube.com/watch?v=d1hocXWSpus

How To Propel Your Career- Women in Welding

https://www.youtube.com/watch?v=S LuVnW-UdQ

Underwater Welder | I AM WOMAN | Lifetime

https://www.youtube.com/watch?v=LZiIXOkE-rc

SUGGESTIVE FORMAT AND SEQUENCE ORDER OF MOTIVATIONAL LECTURE.

Mentor

Mentors are provided an observation checklist form to evaluate and share their observational feedback on how students within each team engage and collaborate in a learning environment. The checklist is provided at two different points: Once towards the end of the course. The checklists are an opportunity for mentors to share their unique perspective on group dynamics based on various team activities, gameplay sessions, pitch preparation, and other sessions, giving insights on the nature of communication and teamwork taking place and how both learning outcomes and the student experience can be improved in the future.

Session-1 (Communication):

Please find below an overview of the activities taking place Session plan that will support your delivery and an overview of this session's activity.

Session- 1 OVERVIEW

Aims and Objectives:

- To introduce the communication skills and how it will work
- Get to know mentor and team build rapport and develop a strong sense of a team
- Provide an introduction to communication skills
- Team to collaborate on an activity sheet developing their communication, teamwork, and problem-solving
- Gain an understanding of participants' own communication skills rating at the start of the program

Activity:	Participant Time	Teacher Time	Mentor Time
Intro Attend and contribute to the scheduled.			
Understand good communication skills and how it works.			
Understand what good communication skills mean			
Understand what skills are important for good communication skills			
Key learning outcomes:	Resources:		Enterprise skills developed:
 Understand the communication skills and how it works. Understand what 	PodiumProjectorComputerFlip Chart		CommunicationSelf ConfidenceTeamwork

communication skills	Marker	
mean		
 Understand what 		
skills are important		
for communication		
skills		
SIIIIS		

Schedule	Mentor Should do
Welcome: 5 min	Short welcome and ask the Mentor to introduce him/herself. Provide a brief welcome to the qualification for the class. Note for Instructor: Throughout this session, please monitor the session to ensure nothing inappropriate is being happened.
Icebreaker: 10 min	Start your session by delivering an icebreaker, this will enable you and your team to start to build rapport and create a team presentation for the tasks ahead. The icebreaker below should work well at introductions and encouraging communication, but feel free to use others if you think they are more appropriate. It is important to encourage young people to get to know each other and build strong team links during the first hour; this will help to increase their motivation and communication throughout the sessions.
Introduction & Onboarding: 20mins	Provide a brief introduction of the qualification to the class and play the "Onboarding Video or Presentation". In your introduction cover the following: 1. Explanation of the program and structure. (Kamyab jawan Program) 2. How you will use your communication skills in your professional life. 3. Key contacts and key information – e.g. role of teacher, mentor, and SEED. Policies and procedures (user agreements and "contact us" section). Everyone to go to the Group Rules tab at the top of their screen, read out the rules, and ask everyone to verbally agree. Ensure that the consequences are clear for using the platform outside of hours. (9am-8pm) 4. What is up next for the next 2 weeks ahead so young people know what to expect (see pages 5-7 for an overview of the challenge). Allow young people to ask any questions about the session topic.
Team Activity Planning: 30 minutes	MENTOR: Explain to the whole team that you will now be planning how to collaborate for the first and second collaborative Team Activities that will take place outside of the session. There will not be another session until the next session so this step is required because communicating and making decisions outside of a session requires a different strategy that must be agreed upon so that everyone knows what they are doing for this activity and how. • "IDENTIFY ENTREPRENEURS" TEAM ACTIVITY • "BRAINSTORMING SOCIAL PROBLEMS" TEAM ACTIVITY"

	As a team, collaborate on a creative brainstorm on social problems in your community. Vote on the areas you feel most passionate about as a team, then write down what change you would like to see happen. Make sure the teams have the opportunity to talk about how they want to work as a team through the activities e.g. when they want to complete the activities, how to communicate, the role of the project manager, etc. Make sure you allocate each young person a specific week that they are the project manager for the weekly activities and make a note of this. Type up notes for their strategy if this is helpful - it can be included underneath the Team Contract.
Session Close: 5 minutes	MENTOR: Close the session with the opportunity for anyone to ask any remaining questions. Instructor: Facilitate the wrap-up of the session. A quick reminder of what is coming up next and when the next session will be.

SUCCESS STORY

S. No	Key Information	Detail/Description
1.	Self & Family background	Abdul Mateen, a passionate and creative freelance website designer, graphic designer, and front-end developer who has earned four years of experience and skills in this field.
		He is from a small village in the Cholistan area where the residents make a living by raising livestock and farming. I belong to the area where the majority of the population live a nomadic lifestyle and have limited resources of income. Understanding the changing world's paradigm, businesses, and entrepreneurship opportunities, I decided to choose my own destiny and move to city area. Like every other rebellion face, I was also criticized for choosing a different path but history knows "when there is a will, there is always a way."
		Later, he decided to move to Hasilpur Tehsil for my matriculation degree. I passed matriculation exam with distinctive marks and I got the laptop from Government of Punjab because of my good grades. This was the time when I started interacting with computer and tech gadgets and from here my love for computers and tech gadgets started. Because of this love for computers, I was even willing to work in a computer shop, but my friends and family were not allowing me to do this. So, he decided to shift to Islamabad primarily for a brighter future.
		Today due to his consistent efforts; He has made a respectable name in the freelancing industry and having an impressive portfolio in his hand.
		If at first, you don't succeed, try try again
2.	How he came on board NAVTTC Training/ or got trained through any other source	In Islamabad, he got a 3 Year diploma in Computer Information Technology from Iqra College of Technology and got the first position in Computer Information Technology from Khyber Pakhtunkhwa Technical Board along with learning of freelancing expertise.

3.	Post-training activities	Along with diploma, he started learning graphic designing as a student in the freelancing field. he also had support from my uncle who is a senior software engineer as helped me learn and upgrade the most indemand skills in this field. He resumed my struggle by enhancing my expertise from different tutorials available on the YouTube channels and after almost one and a half years of struggle, I created an account on Fiverr and received the first order of my career of \$5 only. This created a spark inside me as I wasn't able slept that night due to sheer happiness.
4.	Message to others (under training)	Take the training opportunity seriously Impose self-discipline and ensure regularity Make Hard work pays in the end so be always ready for the same.

Note: Success story is a source of motivation for the trainees and can be presented in several ways/forms in a NAVTTC skill development course as under: -

- **1.** To call a passed out successful trainee of the institute. He will narrate his success story to the trainees in his own words and meet trainees as well.
- **2.** To see and listen to a recorded video/clip (5 to 7 minutes) showing a successful trainee Audio-video recording that has to cover the above-mentioned points.*
- **3.** The teacher displays the picture of a successful trainee (name, trade, institute, organization, job, earning, etc) and narrates his/her story in the teacher's own motivational words.

^{*} The online success stories of renowned professional can also be obtained from Annex-II

Workplace/Institute Ethics Guide

Work ethic is a standard of conduct and values for job performance. The modern definition of what constitutes good work ethics often varies. Different businesses have different expectations. Work ethic is a belief that hard work and diligence have a moral benefit and an inherent ability, virtue, or value to strengthen character and individual abilities. It is a set of values-centered on the importance of work and manifested by determination or desire to work hard.

The following ten work ethics are defined as essential for student success:

1. Attendance:

Be at work every day possible, plan your absences don't abuse leave time. Be punctual every day.

2. Character:

Honesty is the single most important factor having a direct bearing on the final success of an individual, corporation, or product. Complete assigned tasks correctly and promptly. Look to improve your skills.

3. Team Work:

The ability to get along with others including those you don't necessarily like. The ability to carry your weight and help others who are struggling. Recognize when to speak up with an idea and when to compromise by blend ideas together.

4. Appearance:

Dress for success set your best foot forward, personal hygiene, good manner, remember that the first impression of who you are can last a lifetime

5. Attitude:

Listen to suggestions and be positive, accept responsibility. If you make a mistake, admit it. Values workplace safety rules and precautions for personal and co-worker safety. Avoids unnecessary risks. Willing to learn new processes, systems, and procedures in light of changing responsibilities.

6. Productivity:

Do the work correctly, quality and timelines are prized. Get along with fellows, cooperation is the key to productivity. Help out whenever asked, do extra without being asked. Take pride in your work, do things the best you know-how. Eagerly focuses energy on accomplishing tasks, also referred to as demonstrating ownership. Takes pride in work.

7. Organizational Skills:

Make an effort to improve, learn ways to better yourself. Time management; utilize time and resources to get the most out of both. Take an appropriate approach to social interactions at work. Maintains focus on work responsibilities.

8. Communication:

Written communication, being able to correctly write reports and memos. Verbal communications, being able to communicate one on one or to a group.

9. Cooperation:

Follow institute rules and regulations, learn and follow expectations. Get along with fellows, cooperation is the key to productivity. Able to welcome and adapt to changing work situations and the application of new or different skills.

10. Respect:

Work hard, work to the best of your ability. Carry out orders, do what's asked the first time. Show respect, accept, and acknowledge an individual's talents and knowledge. Respects diversity in the workplace, including showing due respect for different perspectives, opinions, and suggestions.