COURSE NAME / CODE			BTEC National Subsidiary / Diploma / Extended Diploma in IT
UNIT(s) No / Name			Unit 28- Website Production
LEVEL	3	Assignment No & Title	Assignment 1: Web architecture

LECTURER/ASSESSOR	Gargi Gupta		
ISSUE DATE	11/01/17	**DEADLINE DATE**	26/01/17
SUBMISSION DATE			
RESUBMISSION AUTHORISATION BY LEAD INTERNAL VERIFIER*		**AUTHORISATION DATE (BY IV)**	
RESUBMISSION DATE**			

*All resubmissions must be authorised by the **Lead Internal Verifier**. Only **one** resubmission is possible per assignment, providing:

- The learner has met the initial deadlines set in the assignment, or ha met an agreed deadline extension
- The tutor considers that the learner will be able to provide improved evidence without further guidance
- Evidence submitted for assessment has been authenticated and accompanied by a signed and dated declaration of authenticity by the learner

Any resubmission evidence **must be submitted within 10 working days of receipt of assessment

Student declaration

I declare that this assignment is all my own work and the sources of information and material I have used (including the internet) have been fully identified and properly acknowledged as required.

STUDENT NAME	**SIGNATURE**

ASSESSMENT DETAILS & GRADING CRITERIA

(NB: Columns 1 &2 of the table below will be completed once the assignment has been submitted) Please note that criteria & evidence should be aimed to give the learner the maximum grade available within their qualification (i.e. A, Pass, Distinction)

Learning Aims Covered	
LO1	Understand web architecture and components
LO2	Understand the factor that influence website performance

GRADING CRITERIA FOR TASK		**EVIDENCE**	**EVIDENCE SEEN**		**Page No#**	**CRITERIA MET**			
			Y	**N**		**Y**	**I**	**N**	**IV**
P1	Outline the web architecture and components which enable internet and web functionality	Task 1: Report with flow diagram							
P2	Explain the user side and server side factors that influence the performance of a website	Task 2: Report							
P3	Explain the security risks and protection mechanisms involved in website performance	Task 3 : Report							
M1	Explain the role of web architecture in website communications	Task 1: Report							
D1	Explain the role of the TCP/IP protocol and how it links to application layer protocols	Task 1: Poster/Report							

KEY: Y = Yes, I = Incomplete, N = No

BREAKDOWN OF HOW GRADES WILL BE AWARDED:

(NB: Please tick as appropriate)

TYPE OF QUALIFICATION	**TICK**	**DESCRIPTION**
BTECS / WORKSKILLS	√	Pass / Merit / Distinction / Fail

A LEVELS / A2		A-U

Internal Verification of Assignment Brief

IV Full Name		**Signed**		**Date:**	
LIV Full Name		**Signed**		**Date:**	

BTEC SAMPLE MATERIAL

LEARNER CONSENT DECLARATION

Centre No & Name	**51330 – UTC Reading**	
Subject & Level	**BTEC National Subsidiary / Diploma / Extended Diploma in IT**	**3**
Unit No & Title	**Unit 28: Website Production**	
Learner No & Name		

I agree to the learner work identified above, after having been made anonymous, being used to support any of the following activities, which may involve the display of work online through the BTEC website or through publications:

- Professional Development and Training
- Centre Assessment Example Material
- Standardisation Support
- Publication Materials

Assessor Signature	
Name (block capitals please)	Gargi Gupta
Job Title	Teacher
Date:	

Learner Signature	
Name (block capitals please)	
Parent/Guardian consent if under 16 years of age	
Date:	

Please ensure that this sheet is completed on submission of your assignment.

Please note that your assignment **MUST** have the following (unless otherwise stated):

1. Cover page
2. Table of Contents
3. Introduction
4. Conclusion
5. Bibliography & References

Scenario

Your tutor has been offered a contract with an external agent to create a website for a project. The project is being kept under wraps for now, but in order to earn a chance to design a site, your tutor is asking you to show your understanding of the underpinning theories behind website production.
Attempt the questions below, remembering that the quality of your responses may offer you an opportunity to expand your portfolio in the world of web design.

TASK 1 **Evidence you must produce for this task.**

How the internet works; outlining the web architecture, components that enable internet and web functionality,

To achieve the criteria you must show that you are able to:	Unit	Criterion Reference
In a report explain web architecture, Components and web functionality	28	P1
In the same report explain the various stages and processes that information must pass through to get from server to screen	28	P1
In another report, detail regarding the way website move information for communication. Discuss current methods of information sharing and movements such as web 2.0	28	M1
Create a poster or report with diagrams and explanatory text explaining the role of the TCP/IP protocol and how it links to application layer protocols	28	D1

TASK 2 **Evidence you must produce for this task.**

Produce a report on

To achieve the criteria you must show that you are able to:	Unit	Criterion Reference
Describe both the user side factors and server side factors that influence the performance of a website. See check list.	28	P2
Explain in a short report the security risks and protection mechanisms involved in website performance. Also ensure you reference any specific **laws** which may factor into this. Ensure you provide screenshots	28	P3

Sources of information	**Indicative reading for learners** **Textbooks** **Textbooks** 1. Anderson K – Information Technology, First Edition (Pearson Education Limited,2011) ISBN-978 1 846909 29 0

P1

- [ ] Internet Service Provider
- [ ] Web hosting services
- [ ] domain structure
- [ ] domain name registrar
- [ ] world wide web
- [ ] web
- [ ] mail
- [ ] proxy server
- [ ] browser
- [ ] email
- [ ] TCP/IP
- [ ] application layer e.g HTTP, MTP
- [ ] Flow Diagram

P2

- [ ] Userside factors
- [ ] download speed
- [ ] PC performance factors like browser, cache memory,processor speed
- [ ] Server side factors
- [ ] webserver capacity
- [ ] available bandwidth
- [ ] number of hits
- [ ] file types

P3

- [ ] Security risk :
- [ ] hacking ,virus, identity theft
- [ ] protection mechanisms:
- [ ] firewall
- [ ] security sockel layers
- [ ] strong password etc
- [ ] Data protection Act

M1

- [ ] Web 2.0
- [ ] blogs
- [ ] cloud computing
- [ ] online applications

D1

- [ ] poster/ reoprt
- [ ] Role of TCP/IP
- [ ] How it links to application layer

SUMMATIVE ASSESSMENT RECORD SHEET					
Programme	BTEC National Subsidiary / Diploma / Extended Diploma in IT	**Learner Name**		**Assessor Name**	Gargi Gupta
Unit No. & Title	Unit 30 – website Productions	**Target Learning Aims**	**LO1, LO2**	**Issue Date**	26 November 2015
Assignment No & Title	Assignment 1: Web architecture			**Final Submission Date**	08 December 2015

Target criteria	Criteria Achieved	Final Assessment Comments

Summative comments

Assessors declaration			
I certify that the evidence submitted for this assignment is the student's own and the learner will be able to provide improved evidence without guidance. I understand that any false declaration is a form of malpractice.			
Resubmission authorisation*		**Resubmission Date:**	Click here to enter a date.
* All resubmissions must be authorised. Only 1 resubmission is possible per assignment.			
Assessor Signature		**Date:**	
Learner comments			
Learner Signature		**Date:**	