Pearson Level 3 National Extended Certificate in Information Technology BTEC

Primary & Secondary Data

IT systems are all about using data. The role of an IT system is to input data, store it, process it and output it. However, computers do not have the same ability humans do for discerning the quality of data. This means we need to ensure the data we enter into our computer systems is good for it to produce the right outputs. Choosing the right sources of data is the first step in ensuring that our IT systems are able to perform their processing accurately.

		Explanation	Advar
	Primary data	Data that has been gathered through original research done by the organisation or individual.	It is more up-to-date, it is more relevant and it is m
	Secondary data	Data that has been gathered by someone other than the user of the data.	It is cheaper, quicker to obtain and not affected by

Data Collection Methods

Questionnaires	Focus groups	
Involve a set of questions, normally in a closed question format, used to		Are a one-to-one meeting
gain information for statistical analysis, or personal information from		respondent in order to ga
respondents.		

Ensuring Data Accuracy

		Intuitiveness	
Validation	is a check to ensure data is sensible and reasonable. E.g. a length check or type check.	An intuitive interface is easy to use even with little training. This can be achieved by making it	
Verification	is a check to ensure data matches the original source. E.g. a proofreading check or double entry check.	easy to use and keeping the interface similar to paper forms or previous systems.	Data Collection
Extracting and Sorting Data			
Extracting Data	Extracting can be performed by choosing specific fields and using filters to select data that	Functionality	lecti
	meet specific criteria.	Functionality in a user interface is about allowing	on (
Sorting Data	Sorting can organise data by any retrieved field in ascending or descending order.	users to be able to perform the required tasks they need from the system.	
Numerical & Data Modelling			
Extracting Data	Extracting can be performed by choosing specific fields and using filters to select data that meet specific criteria.	Performance	Interfaces
Sorting Data	Sorting can organise data by any retrieved field in ascending or descending order.	improved by ensuring that tasks can be	S
Presenting Data and Results		completed in few steps, it's easy to navigate and reducing the likelihood of errors arising.	₩
Tabular	Tabular presentation is a text presentation of data within a table. This is used where precise data and detail is required.		patibilit
Graphical	Graphical presentation is where data is presented using a chart or some other form of diagram. This is used where ease of interpretation and spotting trends is required.	Compatibility affects the user interface. A highly compa different IT systems.	atible int

Unit 1: Information Technology Systems

E Impact of IT systems

E3 Using and manipulating data

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more reliable.

by the organisation's bias.

Interviews

ng where an interviewer asks questions to a single gather information.

Ease of Use

An easy to use interface must have clear navigation, good labelling and simplified input methods.

Accessibility

An accessible interface should consider the individual needs of users with disabilities. Such as using a clear and simple interface, high contrast colour schemes and support changing of sizes.

Error Reduction

Error reduction in a user interface can be achieved through validation/verification checks, input masks and warning messages.

oility

interface will allow data to be inputted to and from

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Data Collection Methods

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Ensuring Data Accuracy

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Validation			~ >
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Extracting and S	Sorting Data		Col
Extracting Data		Functionality	lectio
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Extracting Data		Performance	Data Collection User Interfaces
Sorting Data			
Presenting Data	a and Results		Ŷ
Tabular		Co	ompatibi
Graphical			

Unit 1: Information Technology Systems B Transmitting data

E3 Using and manipulating data





