

Online ordering system essay sample

[Technology](#), [Computer](#)



Hardware

Rouse(2006) stated that In information technology, hardware is the physical aspect of computers, telecommunications, and other devices. The term arose as a way to distinguish the box and the electronic circuitry and components of a computer from the program you put in it to make it do things. Smith(2003)stated that hardware actually denotes to the parts and objects that we can touch and feel their existence in physical manner. It includes disk keyboard, display screen, printer and chips and boards.

Godwin(2007)

Software

Rouse(2006) Software is a general term for the various kinds of programs used to operate computers and related devices. Becht(2010)There are different categories, or types: system, middleware and application programs. Application programs are what most people think of when they think of software. Examples are office suites and video games. Godwin(2007)stated that Software is all of the parts of the computer that you can't really see or touch. Software would include things like Microsoft Word, your email program, Windows or the Mac OS, plus all of your personal files like letters, photos, music, and more.

People Ware

Stimmer(2011)In addition to hardware and software, the term peopleware was created to address the third core aspect of Information Technology covering anything that has to do with the activities and interaction of people

in the design, development, operation or use of computer systems. Husser (2004) stated that Peopleware can refer to anything that has to do with the role of people in the development or use of computer software and hardware system, including such issues as developer productivity, teamwork, group dynamics the psychology of programming project management, organizational factors, human interface design, and human-machine-interaction. Klinker (2006) stated that Peopleware is less tangible than hardware or software include individual people, groups of people, projects teams, business developers, and end users. While Peopleware can mean many different things, it always refers to the people who develop or use computer system.

Network

FitzGerald (2002) stated that networking means virtually any computer will be able to communicate with any other computer in the world. This will increase telecommuting in which employees perform some or all their work at home instead of going to the office each day. Stanley (2004) stated that network is composed of (LAN) local area network is a group of microcomputers or terminals located in the same general area. A (BN) backbone network is a large, central network that connects almost everything on a single company site. A (MAN) encompasses a city or country area. A (WAN) wide area network spans cities, states, or national boundaries. Wiley (2002) stated that networking will also increase the use of (EDI) electronic data interchange, the paper less transmission between companies of orders, invoices, and other business document.

The PIECES Framework

Ellicec(2008)stated that the PIECES model and first presented by Wetherbe, focuses on the actual work of doing requirements determination. This model is used to classify identified requirements into one of six subject areas— Performance, Information, Economy, Control, Efficiency, and Services. The goal of the model is to assure the systems analyst and the user that questions will be included during analysis about each of these six essential subjects as it relates to the problem domain. The responses to the questions for each of these subject areas significantly contribute to the definition of the system's requirements. What follows is a brief summary of each of the six subject areas.

Performance questions address how the system needs to perform for the user. Issues of and response time are considered. For example, the systems analyst may ask questions about the needed response time or throughput required on the network, the quality of print needed, or the need to have a graphical user interface or a menu or text type of interface. In other words, the question the systems analyst asks is, " How does the system need to perform in this environment?" Its answer can be multifaceted depending on the needs of the user.

The information category provides the basis for the information or data model that the system needs to maintain. Issues dealing with input data, output data, and stored data are considered. The systems analyst may ask the following questions: " What information is required by the users of the system?" or " What outputs are required?" and " What do these outputs

need to look like?” These questions need to be addressed and answered while the systems analyst is interacting with the user to define output or report definitions.

Similarly, questions related to input data required in order to produce the outputs are also included in this category, for example, “ What input screens are needed?” or “ What is the source for the input (where does it come from)?” and “ Can the input enter the system with source data acquisition equipment such as bar code scanners, laser guns, mouse, and so on?”

Ultimately, the data need to be defined with a high degree of detail, which is discussed further in a later chapter of this book.

The third category in this framework is economy. This subject area addresses project development and operational cost information along with any objectives that may relate to economy or savings associated with the system. For example, the systems analyst may ask, “ What is the budget for this project?” or “ What is a workable solution to the problem worth to the user of this system?” Other questions can include: “ What are some anticipated cost savings associated with this system?” and “ Are there current manual activities that an automated solution to the problem may affect?” If so, “ How will the automated system transform the role of these workers?”

The control category is closely associated with system security issues as well as the editing required on the incoming data. For example, questions may be asked related to needed accounting controls for some processes, or at what levels (workstation, user, screen, file, data element, and so on) security is

needed. Any issue related to controlling the use of the system, its outputs and inputs, or required controls over the data can be included in this category.

Somewhat related to economy, the other “ E” in the PIECES framework refers to efficiency. Efficiency is a measure of method correctness. In other words, “ Are things being done right?” Efficiency’s impact is usually measured at least at one of three levels—corporate-wide, department, or individual. Questions related to efficiency are primarily directed toward the impact that any solution must have on the environment. For example, “ How can the operations in the office be improved by this system?” and “ What values can be added to the environment by using an automated solution to the problem?” are two questions that the analyst can ask in this subject area. The final category in Wetherbe’s PIECES framework is essentially the functional requirements of the system that he associates with services.

“ What does the system need to do in order to solve the problem?” and “ What processes need to be performed?” or “ How are the objects expected to perform?” and “ What do the objects need to be able to do?” are typical questions the analyst asks for this subject area. In addition to functional requirements, services may also include implementation concerns, such as ease of use and needed support for ongoing use of the system, maintenance of the system, and training and documentation requirements.

Level of usability

Waterfall model has six phases namely: Analysis Phase, Design Phase, Coding Phase, Testing Phase and Acceptance Phase. Under the Analysis Phase, the software and hardware of the proper completion of the project is analyzed in this phase. In the Design Phase, the algorithm or flowchart of the program of the software code to be written in the next stage is created now. Under coding of the software is carried out. With the coding complete, Testing Phase now comes into scene, It checks out if there are any flaws in the designed.