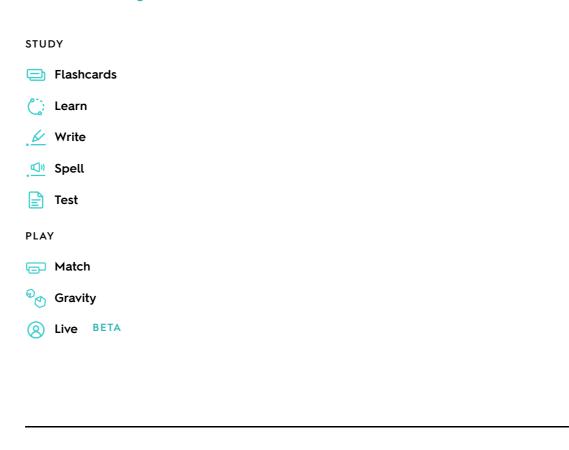
Quizlet

Week 9: Systems Acquisition and Development

Leave the first rating





Key concepts:

Development Process Testing Feasibility Analysis

Terms in this set (28)

Buy: Pros	- less risky	4
	- quick deployment	

Buy: Cons	 may not be a good match if unmodified maintenance and supports costs may be excessive
Build: Pros	customised software may be a better matchincreased competitive advantages
Build: Cons	- cost to build is high compared to buying - long build time
Waterfall System Development Process	A sequential, multistage system development process where work on the next stage cannot begin without the completion and approval of the current stage
Waterfall System Development Process: Phases	 Investigation Analysis Design Construction Integration Testing and Implementation
Waterfall System Development Process: Advantages	- formal review at the end of each phase - system requirements can be traced back to business needs as they are documented early on - produces many intermediate products that are reviewed to measure progress
Waterfall System Development Process: Disadvantages	- system meets the needs of developers and may not be what users desires - users go unstated (miscommunication)

	= users can't review the intermediate products
Waterfall System Development Process: Investigation	Purpose: to gain clear understanding of the specifics of the problem to solve Feasibility Analysis: - technical /feasibility/ - economic - legal - operational - schedule
Waterfall System Development Process: System Analysis	 gathers data on the existing system determines requirements considers alternatives with identified constraints investigate the feasibility of alternative solutions
Waterfall System Development Process: Design	Creates a complete set of technical specifications that can be used to construct the system
Waterfall System Development Process: Construction	Converts the system design into an operational system Steps: 1) Code components 2) Create and load data 3) Unit testing
Unit Testing	Testing where an individual program executes all its functions and user features where abnormal inputs are tested to observer erroneous data
Waterfall System Development Process:	Types of testing: - integration

Testing	- system - volume - user acceptance
Integration Testing	- links all the individual components together and tests them as a group to uncover defects between components
System Testing	- testing the complete and integrated system to validate if the IS meets all the specified requirements
Volume Testing	Evaluating of the system under realistic work volumes and operating conditions where the purpose is to determine the work load at which the system performance begins to degrade and eliminate the issues causing it
User Acceptance Testing	Verify the information system can complete required tasks in a real-world operating system
Waterfall System Development Process: Implementation	Steps: 1) User preparation (preparing users to accept and use system) 2) Site preparation 3) Installation 4) Cutover
Cutover	The process of switching from the old system to the new system Types: direct, phase, pilot and parallel
Agile Development	- develops the system in sprint increments lasting two weeks to two months

- system requirements cannot be fully defined at the start
- concentrates on maximising teams ability to deliver quickly and respond to emerging requirements
- types: scrum, DevOps and extreme programming

Agile Development: Scrum

A method to keep agile system development focused and moving quickly where the scrum master coordinates all the activities

Agile Development: Extreme Programming

Promotes incremental development of a system using short development cycles to improve productivity and accomodate new user settings

Agile Development: DevOps

Practice of blending the tasks performed by the development staff and IT staff operational groups to enable faster and more reliable software release

Agile Development: Advantages

- puts an application into production sooner
- documentation produced as a byproduct of completing project tasks
- forces teamwork and interaction between users and stakeholders

Agile Development: Disadvantages

- intense process (can burnout)
- requires system analysts and users to be skilled in agile
- requires larger percentage of stakeholders and users time

1) Identify potential solutions Software Package Selection 2) Select top contenders 3) Research top contenders 4) Perform final evaluation of leading solutions 5) Make selection 6) Finalise contracts Software Package - cost Selection: Factors - needs - process improvements - quality - speed - staffing and support - competitive advantage

THIS SET IS OFTEN IN FOLDERS WITH...

