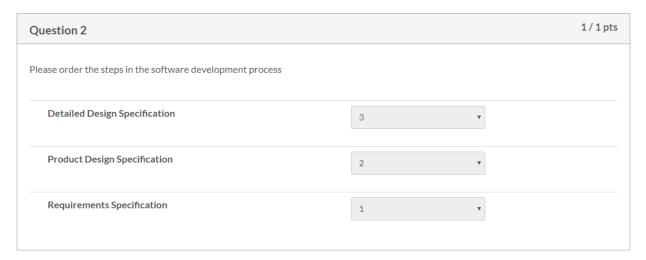
Question 1	1/1 pts
According to Boehm, which of the following is the best definition of verification and of validation?	
Validation: building the right product. Verification: building the product right.	
Verification: the state of the software meeting the requirements. Validation: whether the product fulfills the requirements.	
Validation: whether the product is built to the correct level of quality. Verification: whether the product will meet the needs of the stake holder.	
Verification: how responsive the software development process is to auditing. Validation: the state of the software meeting the requirements.	
Validation: how the software engineer feels about himself. Verification: the process of the software engineering giving himself a good look in the mirror.	

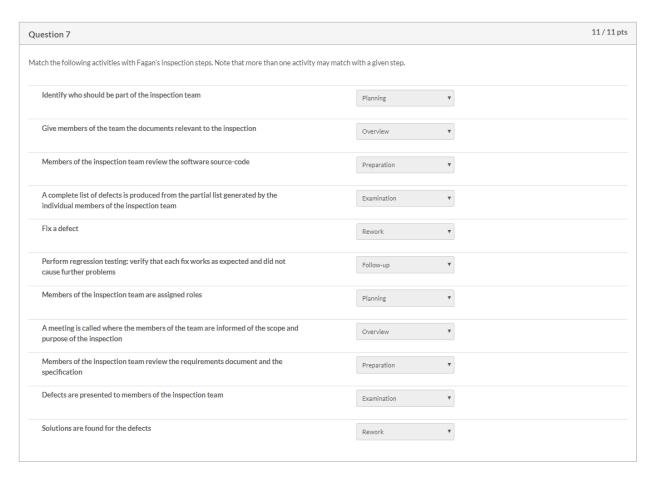


Question 3	10 / 10 pts
Boehm enumerates four V&V criteria with several associated properties. Classify each property description to the criteria it is a part of.	
The measure of the amount of unknown or poorly understood aspects of the system	
The measure of the absent functionality that should be (but is not currently) in the system Completeness: Missing Func V	
The measure of how possible it is to determine whether system meets the specification Feasibility: Testability	
The measure of how possible it is to determine where a given part of the specification came from Consistency: Traceability	
The measure of whether there are items missing from the specification that normally are part of the standard format Completeness: Missing spec Completeness: Missing spec The measure of whether there are items missing from the specification that normally are part of the standard format	
The measure of whether items within the specification do not conflict with each other Consistency: Internal consis	
The measure of whether the resulting system will be maintainable when it is completed Feasibility: Program enginee V	
The measure of how usable the resulting system will be	
The measure of how well the resulting system will not conflict with other entities Consistency: External consist	
The measure of whether there remains parts of the specification that have yet to be determined Completeness: TBD V	
The measure of whether the external resources are capable of supporting the software system Feasibility: Resource engine V	
The measure of whether all parts of the specification that need to be there are actually present in the specification, such as a reference to an appendix when the appendix is not there	

Question 4		12 / 12 pts
Match the item on the Reliability and Availability Checklist at the end of the Boehm paper with the type of error it could catch.		
Are there requirements for clear, helpful error messages?	When I specify a URL that do: 🔻	
Are records kept of the inputs for later failure analysis or recovery needs?	I am not going to keep a log of 🔻	
Are there adequate provisions for backup and recovery capabilities?	The user's picture in an Adob 🔻	
Are input codes engineered for reliable data entry? In other words, we wish to avoid the user making a careless and harmful mistake.	To remove all the emacs back 🔻	
Are there requirements for diagnostic and debugging aids?	Why should I use asserts? The ▼	
Are there provisions for protection against singularities?	Every time I perform division 🔻	
Are there design standards for synchronization of concurrent processes? Are they being followed?	My bank software is designec 🔻	
Is the data structured to avoid harmful side effects?	Hove global variables! What I	
Do inputs include some appropriate redundancy as a basis for error checking?	My grading software makes s	
Have these provisions been validated by means of a failure modes and effects analysis? In other words, how does the system recover from catastrophic errors?	I asked my tester to periodica 🔻	
Are all off-normal input values properly handled? in other words, how do we handle data this outside the expected range?	My grade program checks tha 🔻	
Are man-machine dialogues easy to understand and use for the expected class of users? Are they hard to misunderstand and misuse?	My mobile game designed for • •	

Question 5		3/3 pts
According to IEEE Standard 1028-1997, match the following terms with the	e definitions:	
The process of presenting the design of a software product to a group of interested people for the purpose of getting sign-off or suggestions	Review	
The process of carefully looking at the code for the purpose of finding problems	Inspection	
The process of the programmer explaining each aspect of the design to a group of interested people for the purpose answering questions	Walkthrough	

Question 6		5 / 5 pts
According to Fagen, match the role with the description of the role		
An engineer describing aspects of the design during a meeting	Reader •	
An engineer looking for test-cases	Tester ▼	
A manager who coordinates the efforts of the rest of the team	Moderator ▼	
An engineer who wrote the code to be inspected	Author	



Question 8	5 / 5 pts	
Several changes have been proposed to Fagan's original model. Please match the motivation for the change with the proposed change.		
Any one team often misses many defects	N-fold inspection ▼	
The preparation stage can be overwhelming, thereby reducing its effectiveness in the process	Active design review ▼	
Large inspection teams, especially with inexperienced engineers, can be inefficient	Two-person inspection ▼	
The least effective use of resources is the inspection phase	Inspection without a meeting •	
There are too many things to consider on a single pass of the code. It is better to take multiple passes, each one looking at a different aspect of the product	Phased inspection •	