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Case Study Assignment #1

Question 1:

a. The main stakeholders would include:
- The client company that ordered the customized order processing system.
- Software house that has been asked to organize the training course.
- Investors financing the project.

b. The project will be a success if:
- End-users of the system become knowledgeable in how to use the customized order processing system.
- Dates, times, and locations for training are held with end-users and equipment availability.
- A system is set up for end-users to register for the course and notify them of relevant course information.

c. The measure of effectiveness can be checked by having:
- Training material that describes all end-user functionality of the system.
- Dates and times for training are held when room and computer facilities are available.
- Each end-user who registered through the system can be identified and is present at the course.

d. To reach the objectives, the following must be in place:
- Training materials are designed and created for end-users to keep and refer to.
  - Responsibility: Employee organizing the training course.
- System is developed to automatically highlight date, time, and locations where end-users and operating time for computer room facilities are both available.
  - Responsibility: Developers at software house.
- System is developed for end-users to register on and then send out notifications via text or email. System can be as simple as a Google form.
  - Responsibility: Developers at software house or, if simpler, then employee organizing training course.

Question 2:

a. The main uncertainty in this situation is that the student does not have experience developing an application with the chosen mix of technologies. Therefore, gaining experience with the mix of technologies is the main learning outcome for this situation. This learning outcome can be evaluated by reviewing the knowledge that was gained by developing the prototype and reflecting on how comfortable the student has become with application development using the new mix of technologies. Also, the feedback received from the stakeholders' review of the prototype will provide an external

evaluation of the prototype, and therefore the overall design and development of the prototype.

b. The main uncertainty in this situation is the functionality and capability of a computer-based document retrieval system. Therefore, understanding the functionality and capability of the system is the main learning outcome. This learning outcome can be evaluated by checking if various stakeholders have a similar understanding of the functionality and capability of the system. If there is a consensus on these aspects of the system, the consensus can be verified with developers to see if the consensus is accurate.

c. The main uncertainty in this situation is the customer interest in the school's job and training website. Therefore, determining the interest in the website is the main learning outcome. This learning outcome can be evaluated by releasing the prototype to former students and tracking the traffic on the prototype. By analyzing the information collected from the tracking, the overall interest in the website and possibly specific features of the website can be determined. The prototype can also be demoed to a small group of former students where they can receive direct feedback from the former students on the potential interest in the website.

Question 3:

a. i. The most appropriate SLC model for requirements that are easily defined and well-known would be the V-shaped model. Phases can be completed and verified more easily and quickly since all the requirements are already defined and there's little ambiguity in them. The downside would be if we had to make any changes, going back to do them would be costly but since our requirements are easily defined and well known, the risk of that is low.

ii. The most appropriate SLC model for having a proof of concept to demonstrate capability would be the Spiral model. Since a proof of concept needs to be shown, this model will prove useful to minimize risks and avoid costly mistakes especially since the requirements are vague in this scenario. Through its systematic approach, the project can be delivered in iterations that allow the developers to show clients the end product as well as the capabilities of the system as it is being developed, and make any adjustments as required.

b. i. Since the availability of the user of the project is limited during the lifecycle, any of the SLC models that require the user to be involved throughout the lifecycle would not be suitable. This means that the spiral, evolutionary rapid prototyping, RAD, and incremental models cannot be considered for this project. Both of the two remaining models, waterfall and v-shaped, only require involvement from the user at the beginning of the lifecycle, so either of these models is suitable for this type of project.

ii. Since the user wants to be involved in all phases of the lifecycle, any of the SLC models that only involve the user at the beginning would not be suitable. This means that the waterfall and v-shaped models cannot be used. With the remaining four models, they each have an incremental or cyclical nature where the user can get involved in each increment or cycle, ensuring that they are involved in all phases of the lifecycle. Therefore, any of these four models, specifically the spiral, evolutionary rapid prototyping, RAD, and incremental model, are suitable for this type of project.