

## **Tutorial TWO : User-Centered Development Methodology**

**Q1.** The user-centered development methodology may be divided into stages of: **Need analysis, User and task analysis, Functional analysis, Requirements analysis, Setting usability specifications, Design, Prototyping, and Evaluation.** Identify the stage involved in each of the following description:

- Characterizes the people who will use the interactive system and the types of tasks they will perform with the system; \_\_\_\_\_
- Tests the system; \_\_\_\_\_
- Organization and planning of the interactive aspects of the system; \_\_\_\_\_
- Determines the standards of quality for the system. \_\_\_\_\_

**Q2.** State two benefits of prototyping?

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**Q3.** Distinguish between an evolutionary prototype and a throwaway (revolutionary) prototype.

Evolutionary prototype: \_\_\_\_\_

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Throwaway prototype: \_\_\_\_\_

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**Q4.** (a) What is a horizontal prototype?

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(b) What is the main use of a horizontal prototype?

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**Q5.** (a) What is the difference between a high fidelity and a low fidelity prototype?

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(b) Which prototype should be used in the following situation?

(i) Time is limited and easy to build. \_\_\_\_\_

(ii) Give a realistic prototype to management. \_\_\_\_\_

(iii) Budget of the prototype is limited. \_\_\_\_\_

(iv) Many changes are required. \_\_\_\_\_

(v) Management requires accurate response from the prototype. \_\_\_\_\_

**Q6.** What is the difference between formative and summative evaluation?

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**Q7.** (a) What is the difference between user-based and expert-based evaluation?

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(b) Why is user-based evaluation considered to be better than expert-based evaluation?

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**Q8.** At a college, students taking Final Year Project are required to conduct interim project presentations with their prototypes.

(a) (i) In most cases, students' prototypes will only have interface navigations with just about 20% of the functions completed. Are these prototypes **horizontal** or **vertical**?

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(ii) In most cases, students will continue working on their prototypes until they become their final products. Are these prototypes **evolutionary** or **throwaway**?

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(iii) During the development of their Final Year Projects, students will do testing continuously. Is this kind of evaluation **formative** or **summative**?

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(iv) Students often invite their classmates studying the same area to help evaluate their products. Is this kind of evaluation **user-based** or **expert-based**?

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- Q9.** (a) Differentiate “performance measure” and “preference measure” of setting usability specifications.

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- (b) For each of the following scenarios, identify which measure, “performance measure” or “preference measure”, are used for setting usability specification:

- (i) Customers’ support team should be able to respond every user within 2 minutes.

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- (ii) Over 85% of our current users prefer the redesigned site to the current site.

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- (iii) Users should be able to locate the programme schedule of tonight’s TV series of a website with not more than 4 clicks from the home page.

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- (iv) A 7-point Likert scale is used to collect the user feedback of  
“I am satisfied with the services provided.”

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