

Attempt 1 of 2

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Attempt Score 5.8 / 6 - 96.67 %

Overall Grade (Highest Attempt) 5.8 / 6 - 96.67 %

Question 1

1 / 1 point

The author of the paper (Vaclav Rajlich) describes the triangle of entities for a concept: name, intension and extension. Relations between those entities describe six comprehension processes. Mark the alternatives that correspond to correct descriptions of those relations.

Select 4 correct answer(s)

- ☒ Annotation recognizes an extension and gives it a name.
- ☒ Naming is the process to find/give a name to an intension.
- ☒ Location allows finding code extensions for a given concept intension.
- ☐ Definition is the process to find/give a name to extension in the source code.
- ☐ Recognition means understanding a source code file, i.e., finding the concept name inside the file.
- ☒ Indexing allows finding corresponding extensions to a given name/concept.

Question 2

1 / 1 point

The author of the paper (Vaclav Rajlich) gives examples of concepts, intensions and extensions. Using the the approach, mark the correct alternatives that are examples of either concepts, intensions and extensions.

Select 4 correct answer(s)

- ☒ Search is a concept in the Google search tool.
- ☐ The extension of search in the Google search tool is the process of finding one or more web pages that has a given search keyword.
- ☒ Taylor Swift's latest picture on Instagram is an example of extension of the concept "Posting a picture on Instagram".
- ☐ "Posting a picture on Instagram" is an example of concept extension.
- ☒ Searching for "rock concerts in Victoria" is an example of an extension of search in the Google search tool.
- ☒ The intension of "Posting a picture of Instagram" concept is "the process that an Instagram user does to upload a given existent picture on their feed area of the Instagram app".

Question 3

0.8 / 1 point

The author of the paper (Vaclav Rajlich) describes concept location as an interactive search process made of different actions. Mark the actions that are part of this process (notice that they do not need to be in order).

Select 5 correct answer(s)

- ☐ Refactor the code before performing the concept location to facilitate understanding the code.
- ☒ Choose the appropriate search strategy to locate the concept on the source code.
- ☐ Connect the change request with the source code by committing the files that are found in the concept location search.
- ☐ Run unit tests to understand the concept in run time.
- ☒ Find all the files that are affected by the concept.
- ☒ Formulate a query from names/synonyms of the searched concept.
- ☐ Conduct the search with the help of supporting tools (e.g., search menu item on the IDE).
- ☒ Check whether the search results in locating the concept or not, and act accordingly by either ending the search or performing a new search.
- ☒ Understand the terminology in the change request.
- ☐ Check whether the change request is a priority in the product backlog before doing the search.

Question 4

1 / 1 point

The author of the paper (Vaclav Rajlich) describes the ideas of implicit and explicit concept extensions in the concept location process. According to the author, an implicit concept extension is:

- ☐ a concept that is not yet implemented in the source code.
- ☐ an obvious concept that is available on source code as the name of a method/function or variable.
- ☐ a concept extension in the source code that is less important than other explicit concept extensions.
- ☐ a concept extension that is irrelevant in the concept location, serving only as developer communication.
- ☒ a concept that is implemented in the source code but may not be found in a specific code snippet.

Question 5

1 / 1 point

The author of the paper (Vaclav Rajlich) describes the concept location technique by GREP. Mark the alternatives that correctly describe this technique.

Select 3 correct answer(s)

- ☐ It is based on searching the concept in text description of the change request.
- ☒ If the search fails, a new pattern matching query may be tried from what was learned in the initial attempts.
- ☐ After the search returns a result, the programmer investigates the files that have static dependencies with the matched file(s).
- ☐ It is a fully automated process, i.e., the programmer does not need to decide whether the concept was found or not, because the pattern matching does that.
- ☒ It requires a search for one or more concept names in the source code.
- ☒ It is based on pattern matching.
- ☐ When the programmer does not find a match, that means the concept is not present in the source code.

Question 6

1 / 1 point

The author of the paper (Vaclav Rajlich) describes the concept location technique by dependency search. Mark the alternatives that correctly describe this technique.

Select 5 correct answer(s)

- ☒ UML class diagrams may sometimes be used to replace dependency graphs when performing concept location by dependency search.
- ☒ It uses a form of graph to describe static dependencies between code entities (e.g. classes, files).
- ☐ It always starts from the result of a GREP search.
- ☒ If the concept extension is not found in the local responsibility, the programmer may look for the supplier modules to maybe find the concept extension in the module's combined responsibility.
- ☐ Backtracking, i.e., taking a different search route after a route that resulted wrong, is never used in concept location by dependency search.
- ☒ It analyzes both the local and the combined responsibilities of a module to guide the search.
- ☒ It is an interactive process that usually starts from a top module of the program.

Done