

Charakterisierung vom Designprozess bei der Paarprogrammierung

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- Ziele der Arbeit
- Einführung
- Plan der Durchführung
- Absehbare Probleme
- Fragen / Anmerkungen

- Bei der Paarprogrammierung treten Prozesselemente auf, die auf den Software Design ausgerichtet sind
- Die qualitativen Untersuchungen der Paarprogrammierung an der AG SE resultierten u.a. in Erstellung sog. *foundation layers*
- Die Ziele der Arbeit:
 - den Designprozess bei der PP auf der Basis vom *foundation layer* zu Untersuchen
 - eine gegenstandsverankerte Theorie (GT) anhand der Untersuchung zu bilden

- Grounded Theory (Strauss/Corbin)
„qualitative research method that uses a systematic set of procedures to develop an inductively derived GT about a phenomenon“
- Elemente von Grounded Theory
 - Research problem
 - Theoretical Sensivity
 - Coding
 - Open Coding
 - Axial Coding
 - Selective Coding
 - Theoretical Sampling

- Foundation Layer/Base Concept Set
„extensible framework [...] for classifying the basic activities that occur during PP“
 - Human-Human Interaction
 - z.B. *propose_step, explain_knowledge*
 - Human-Computer Interaction
 - z.B. *write_sth, search_sth*
 - Human-Environment Interaction
 - z.B. *show_sth, examine_sth*
 - Auxiliary codes
 - z.B. *wait, interrupt*

● HHI Basiskonzeptmenge

product-oriented concepts		process-oriented concepts		generic concepts	
ask_design Ask for a concrete proposal regarding the structure and content of the program	agree_design Signal agreement with a given proposal regarding the structure and content of the program	ask_step Ask for a concrete proposal regarding the next tactical work step.	explain_completion Make a statement regarding the degree of completion of the current tactical work step	explain_gap in knowledge Verbalize that certain knowledge is not possessed by either member of the pair	ask_standard of knowledge Ask the partner for his/her level of knowledge with respect to a certain topic
challenge_design Reject a given proposal regarding the structure and content of the program and make an alternative proposal instead	propose_design Make one or several alternative proposals regarding the structure and content of the program	challenge_step Reject a given proposal regarding the next tactical work step and make an alternative proposal instead	agree_completion Signal agreement with a statement regarding the degree of completion of the current tactical work step	think aloud activity Verbalize aspects of one's own current HCI or HEI activity	agree_hypothesis Signal agreement with a given hypothesis or conjecture
decide_design Select one from among several alternative proposals regarding the structure and content of the program	amend_design Extend a given proposal regarding the structure and content of the program without rejecting the proposal	decide_step Select one from among several alternative proposals regarding the next tactical work step	challenge_completion Reject a statement regarding the degree of completion of the current tactical work step and make an alternative statement	challenge_activity Reject all or part of the current HCI or HEI activity and suggest an alternative activity	propose_hypothesis Formulate a hypothesis or conjecture, typically regarding a property of the program, its requirements, or the environment.
disagree_design Reject a given proposal regarding the structure and content of the program without making an alternative proposal	remember_requirement Remind the pair of a given (pre-specified) functional or non-functional requirement of the program	disagree_step Reject a given proposal regarding the next tactical work step without making an alternative proposal	amend_step Extend a given proposal regarding the next tactical work step without rejecting the proposal	disagree_activity Reject all or part of the current HCI or HEI activity	challenge_hypothesis Reject a given hypothesis or conjecture and formulate an alternative one
challenge_requirement Reject a given or proposed requirement and propose an alternative one instead	agree_requirement Signal agreement with a given or proposed requirement	ask_strategy Ask for a concrete proposal regarding the strategy or work plan to be chosen.	explain_state Make a statement regarding the degree to which the current strategy or work plan has been worked through	amend_activity Propose an extension to the current HCI or HEI activity	disagree_hypothesis Reject a given hypothesis or conjecture
challenge_strategy Reject a given proposal regarding the strategy and make an alternative proposal instead	agree_strategy Signal agreement with a given proposal regarding the strategy or work plan	challenge_strategy Reject a given proposal regarding the strategy or work plan	agree_state Signal agreement with a statement regarding the degree to which the current strategy or work plan has been worked through	stop_activity Suggest to stop or abort the current HCI or HEI activity	amend_hypothesis Extend a given hypothesis or conjecture without rejecting it
decide_strategy Select one from among several alternative proposed strategies or work plans	propose_strategy Propose one or several alternative strategies or work plans	decide_strategy Select one from among several alternative proposed strategies or work plans	propose_todo Suggest that a certain work item will need to be taken care of later in the process.	agree_activity Signal agreement with all or part of the current HCI or HEI activity	remember_source of information Point out a possible source of relevant information
mumble_sth Make an incomprehensible utterance (highly fragmentary or acoustically unclear)	say_off topic Make an utterance that has nothing to do with solving the programming task.	amend_strategy Extend a proposed strategy or work plan without rejecting it	agree_todo Signal agreement with a statement saying that a certain work item will need to be taken care of later in the process.	explain_finding Verbalize a new insight; this includes interpreting an observed event	challenge_finding Reject the content of a verbalized insight or interpretation and suggest an alternative one
other concepts				Facade concepts	explain_standard of knowledge Explain or recapitulate one's own level of knowledge with respect to a certain topic
					ask_knowledge Ask the partner for information of type 'declarative knowledge'
					agree_knowledge Signal agreement (i.e. judge as correct) knowledge stated by the partner
					explain_knowledge Transfer information to the partner that is assumed to be correct declarative knowledge
					challenge_knowledge Declare transferred knowledge as fully, partially, or potentially wrong by opposing it with one's own knowledge
					disagree_knowledge Declare transferred knowledge as fully, partially, or potentially wrong without explaining why
					amend_finding Extend a verbalized insight or interpretation without rejecting it
					agree_finding Signal agreement with a verbalized insight or interpretation

- Bereits getan ...
 - Theoretischer und praktischer Einstieg in GT und Verwendung der Basiskonzeptmenge
- Geplante Arbeitsschritte (keine scharfe Trennung, da iterative Vorgehensweise)
 - Offenes Kodieren vom verfügbaren Videomaterial
 - Axiales Kodieren von relevanten Phänomenen
 - Theoriebildung
 - Schreiben der Arbeit

- Ziel
 - Filmmaterial kodieren
 - Konzepte aus dem Gebiet Software Design finden
 - Relevante Konzepte mit Eigenschaften und Dimensionen versehen
 - Kategorien erarbeiten
- Geplante Zeit: 11/2008 - 01/2009
- Absehbare Probleme
 - Abbildung der GT in der verwendeten Software
 - „relevante“ Konzepte
 - Anwendung der Basiskonzeptmenge
 - „So wenig wie möglich – so viel wie nötig“

- Ziel
 - Relevante Phänomene nach dem paradigmatischen Modell abbilden
- Geplante Zeit: 01/2009 - 02/2009
- Absehbare Probleme
 - Abbildung der GT in der verwendeten Software
 - Visualisation Nötig?
 - „relevante“ Phänomene

- Ziel
 - Kernkategorie(n) ermitteln
 - Eine Theorie erarbeiten
 - Theorie gegen Daten verifizieren
- Geplante Zeit: 02/2009-03/2009
- Absehbare Probleme
 - ???

- Ziel
 - Eine (sehr) gute Arbeit :)
- Geplante Zeit: 03/2009-05/2009
- Absehbare Probleme
 - Still
 - ???

- Fragen / Anmerkungen



Vielen Dank!