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Ontology development guide using Protégé: BCS3263SQA at FSKKP

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Ontology is a collection of formal terms that allows the communication between a machine and humans. It contains formal naming, definitions of types, properties and interrelations within a specific domain. Ontology allows knowledge visualisation of selected domain. However, developing an ontology requires a huge effort including designing its structure and the actual ontology development process. Software Quality Assurance (SQA) is a process that assure the reliability of a software and reduce its maintenance effort. Therefore, it is important for a computer science students to have a basic understanding on every aspect of SQA process. However, to master the SQA is a challenging task due to its wide coverage in the subject. To improve the learning process of the students in Universiti Malaysia Pahang, an ontology has been developed to provide an overview about the structure of the courses and help the students to visualise the entire course structure. In this paper, we discussed about the steps require for developing an ontology using Protégé. We focus on the ontology development methodology and how to use Protégé as an ontology development tools. As the result of the SQA ontology development, there are 5 classes and 40 terms. These terms help SQA class's students in understanding the entire course structure.

Keywords: Ontology, Protégé, Software Quality Assurance

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Towards a Nuanced Explanation of Technology Adoption Determinants

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This study suggests the understanding of business technology adoption should be viewed from a new lens. This in line with the fundamental knowledge of practice suggests that a decision to adopt a business technology generally should be treated as a process where the level of significant of each determinant will act differently depending on the state where the determinant is measured. Thus, the aim of this research is to investigate technology adoption determinants into a structured approach where each determinant is evaluated at different state. Further, we also aim to discuss the synergistic relationship of technology adoption determinants to generate the highest level of intention. This aim could be demonstrated using non-linear techniques. Two theoretical lenses were used where Theory of Planned Behaviour was used to identify the behavioural intention determinants, while the progression and combination of superior or inferior determinants to generate the highest level of intention will be observed through Ettlie's multi-stage adoption model. In this regard, we use the example of the adoption of corporate-wide systems by SMEs focusing on the interactions between subjective norms, perceived behavioural control and attitude against intention in the adoption stage.

Keywords: Technology adoption; Linear and Non-Linear; Determinants