A Development Approach of Software Requirements for Renewable Energy Applications Using Fundamental Principles of Software Engineering

Kenza Meridji and Ghassan Issa
Faculty of Information Technology
University of Petra
Amman 11196, Jordan

Abstract

Energy engineering is a new multi-disciplinary engineering field to develop innovative renewable energy (RE) systems. On other hand software engineering has recently emerged as a new engineering field in a continuing evolution. Software engineering is a discipline whose aim is the production of high quality software, but lacks maturity compared to other traditional engineering fields. Much of the research done up to date concentrated on developing tools and methods and less work has been done on the development of the foundations for instance, such as defining the principles and the application of these principles to software development. This paper propose a development approach for RE software’s using candidates’ engineering fundamental principles for software engineering including operational guidelines for the selected engineering principles and foundations of RE software from an engineering perspective.