Design and Development of Case Studies in Security and Privacy for Health Informatics Education

Abstract – Health informatics has been reported to be a vital sector for the last decade. Many efforts have been implemented to better utilize advancements in health informatics in real life. Educational institutions have worked hard to enhance their programs to develop or incorporate health informatics. However, in Palestine, this field is not widely deployed in health care delivery institution or in educational institutions. One key element of Health Informatics is electronic health records, for which privacy and security are very important factors. The paper proposes a case based learning method in teaching privacy and security issues for Information Technology students. The paper proposes the use of mini case studies instead of a single cases study, each of the mini cases studies concentrates on a set of learning outcomes. Hence, these mini case studies will enable us to better fulfill learning outcomes. The paper firstly describes the selected mini case studies for Privacy and Security issues in health informatics, then, it deeply details the development of a complete case study called applying data security techniques over sensitive Drug management/traceability data, which enables students to gain essential skills to protect the privacy of patients and security of drug data. These case studies will be evaluated once they are implemented and results will be reported after that.