Abstract

In this paper, we propose a software framework for an m-learning environment. Here, we attempt the software requirement analysis for a software tool to be developed for m-learning. As the definition goes ‘m-learning is learning while move’. Our aim is to use android supportive smart devices on which this m-learning software will execute.

Developing software for m-learning application is a complex process which requires judicious handling of prioritization, specification, delivering and finally application development. In this paper we try to establish four major and vital requirements such as human-smart device interaction, infrastructure of mobile-computing, packaging and presenting of the learning content, instructional and learning design. Much m-learning software may fail to meet the objective because of non appropriate handling of above mentioned requirements. These requirements are mutually supporting and affecting each other. For example, limited screen size and Internet connectivity limit the size of learning content and user interface. Hence these kinds of requirements are very important to consider during software development of m-learning. Our
framework would constitute of smart mobile devices, interacting with cloud using mobile software agents. We are proposing the use of mobile agents for communication between smart devices and cloud.

References


Index Terms

Computer Science

Software Engineering

Keywords
Analysis of Software Requirements for an M-Learning Framework

M-learning, mobile agents, jade, android, smart devices, Cloud, e-learning