This thesis focuses on Android application development techniques needed to implement a mobile application portal that consists of features used at Eastern Michigan University. Since there is not a single source available to developers that explains such techniques, this thesis represents a unique manual for such development. Based on the similarity of features, mainly in terms of data nature and access, five techniques are defined in a step-by-step procedural manner. This is accomplished by outlining the development techniques and presenting them "in action" with coding examples from a fully developed demo application. As a result, the demo application demonstrates functional solutions to research problems that are able to operate on an actual Android device. This thesis provides a unique approach to Android development due to its single focus on the data and IT environment of Eastern Michigan University.

Recommended Citation