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**EECE 457** 

**Mobile Applications** 

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The project helped me to improve the skills in Java language programming and construct a mobile application which might be use for real use-cases. The application of different techniques and algorithms helped me to understand the principles of the building of the proper mobile application for Android system phones.

Moreover, I learned how to use online tools which allow the developer to build mobile applications with high-quality features. First, the using of the Firebase online database tool provided me with flexibility of adding users and data to online database. Therefore, the user is able to register and identify personalized events for their own Bucket List application. Each user has an individual list of the events they should go to, and the usable feature is that they are able to connect to their own database from different android applications. Secondly, using of Google Services provides the developer with different options by using Google APIs for applications. In this specific project, using of Google Maps allows the user to choose the location for the thing they have to do.

Application of corresponding and adaptive User Interface also allowed me to understand the principles of work of mobile applications. Checking of the corresponding checkbox and changing of the firebase data should be reflected in the user interface. Integrating of the User Interface and its components with Firebase properly also was very challenging. Specifically, the changing of data in Firebase which should be reflected through all activities in the system is the challenging problem and identification of proper "key" was the hardest part of the project. However, completion of the tasks described above increased my ability to build more advanced mobile applications which might be used for real-life applications.