**Android App Development Design Document**

CSCE 315 Project 3

1 Introduction

For this project, we will design an android application by using freebase to search the chemical formula to get the chemical compounds’ information include the names, structures, and images. This application will use freebase to get the data online, use XML to store files on the SD card to keep track of app data, and use Graphical user interface.

2 High Level Designs

This application will have four different windows, which are New Search, History, Setting, and ReadMe. The New Search window can start a new search by user to get information from freebase. The History window lists the saved searching files, and allows reading. The Settings window can delete the post history and change the location of the file to store. The ReadeMe window will display the information about this application.

3 Low Level Designs

3.1 App GUI

3.2 App XML schema

//TODO

http://www.w3schools.com/schema/schema\_intro.asp

3.3 App Java Engine

3.4 Freebasee API

//TODO

<https://developers.google.com/freebase/v1/getting-started>

4 Conclusions

4.1Benefits

* Learning chemistry knowledge from freebase.
* Friendly GUI and easy to use.

4.2 Assumptions

* Android device’s version should between from 2.2 to 4.3
* Android device can connect to internet
* There is enough memory for the data

4.3Risks

* Freebase API seems not easy to use
* Get the most correct one form freebase when the searching result is many.