## CS411 A4-Group2

userstory normal-output

As a user I want to be able to be told what stars/constellations/planets/moons would be good to view at a given time and location. After log in (see log in user story) the software will ask for time and location data to look for possible objects for the user to stargaze at. If this permission has been granted, then the app automatically generates suggestions based on the user's current time and location. If not, then the user has the option to enter any location/time of their choice.

Suggestions can also be generated based on a future time inputted by the user (for either the user's current location or a manually inputted location) to allow the user to know what will be visible during a given night. Depending on the location and time given to the software, the app will return a table of objects that are visible to the user based on how likely the user will be able to see the object and how popular the object is to look at.

The output table will include a list of objects, the best time to view them, the RA and Dec of the object (the coordinates of where it is in the sky), the hardware needed to view the object, and the magnitude of the object. There will also be an ability to search for specific objects in the sky, where based on the user's location and time, the software will output if it is visible, when it will become visible if it isn't already, as well as the other information in the table. The user will also be able to save what objects they have viewed or save objects they are interested in viewing. They will have access to their saved objects so that they can quickly search for them later if they want. The suggestion should also output good spots to view the sky in the area. A radius can also be inputted by the user in settings, to say how far the user is able to move. These take into account light pollution and scenery (parks, etc.)

## Revised version of this user story:

A user will be told objects that can be viewed and hourly weather conditions at a given location. The app won't output the best time to view objects and will let the user decide when to view them based on hourly weather conditions.

Login is optional. The user could either log in or just use the app as guest.

Since a zip code and one of the limit of magnitude are the only things the app takes from the user, the user will no longer be able to search by object names, and the app will not store the user's search history or a list of objects they are interested in viewing.

The app doesn't check for the light pollution and scenery because we haven't been able to find relevant apis. The app just considers weather conditions at a given location.