# Engineering Specifications

1. The UI is simple and effective.
   1. The user interface must be simple enough for all of the users to be able to use it or no one will use it. It must also be effective at doing what it does and not just be a bunch of pretty buttons.
2. Implement certain rules that were given to us by Samsung.
   1. Wifi and Location must end up in the final implementation or as soon as possible since Samsung wanted to see these especially.
3. Check that the rules engine is working properly.
   1. The rules engine must be working properly or the application will crash and there will be no processes running and you just have an app that is taking up space until the user removes it.
4. Evaluate battery life while the app is running.
   1. The battery life in phones is of a major concern to most users as no one remembers to fully charge it daily and they definitely do not want to have to plug it in every few hours.
5. How often the app checks to evaluate rules.
   1. This extends back to battery life; you must balance between battery life and how often you need to check the rules.
6. Test the sharing functions.
   1. People want to be able to share their rules with other people who have phones without manually typing it into another phone.
7. Check extensibility to 3rd party programs.
   1. The application must work with other programs such as Facebook and Twitter for a lot of users to consider it a useful application of this type.
8. Check extensibility to tablets.
   1. The application must be usable also by tablets so that Samsung can put it on all of their smart devices.
9. Set up Bitbucket.
   1. We must have somewhere to store all of the code that we are working on while keeping it agile. It is also important to make this code private so that no competing companies can get their hands on it.
10. Set up Mercurial.
    1. Mercurial works with Bitbucket to allow us to update more easily with a better user interface.
11. Make sure the Boolean algebra works correctly.
    1. We need to make sure that the Boolean algebra is encoded correctly and parsed correctly afterwards. This must also be true for much larger rule sets.

1. Check the drag and drop UI.
   1. We must check that this user interface in particular is both user friendly and works correctly.

1. Check that the accounts connect correctly.
   1. When we connect the accounts to the phone, we must make sure that these are functioning accounts and not just a set of data taking up space. It also affects our rules as some of them need this info to work.
2. Make it so that a single receiver receives all of the rules instead of multiple receivers.
   1. There is no need to waste space and processing power to have multiple receivers. Afterwards, it is also important to check that the intent is then handled correctly.
3. Check that the event handler correctly receives callbacks from the underlying system.
   1. We must make sure that the event handler is getting all of the data correctly so that we can use all of the necessary information for the application.
4. Understand what an action is in respect to the rules database.
   1. What does the database do with an action that is waiting?