VennDiagram: Testing Document

For our Venn Diagram application, we tested many methods in our classes. These include methods in our Item, Group and library classes. Our tests include making sure methods such as inserting multiple items and removing multiple items at once work without any fault. A sample list of test method includes:

- getText()
- getID()
- equals() *for our overridden equals method
- hashcode() *for our overridden hashcode method
- insertItems() *for inserting an arraylist of items
- removeAll()

… and more.

These test cases were derived by ensure that our Venn diagram program would work correctly, even when given multiple items, or having no items whatsoever. This methodology of testing extreme individual scenarios ensures that our application can work for the needs of many customers, without them having to worry about bugs due to their input. These tests were also derived to ensure that we got ample test code coverage for our application. By covering as much of our code as possible, we can ensure that the application can run near-bug free for most users. In order to minimize bugs in a short period of time, we decided to focus on primarily testing methods in our item and group classes.

These test cases are sufficient because they cover most cases for possible scenarios, as well as when the Venn Diagram application has no items. This means that our program can handle the needs of our customers without fail. These test cases therefore help ensure that our program can operate correctly, regardless of the information the user inputs. By testing methods in our item and group classes we can ensure the foundational structure of our Venn Diagram application runs perfectly.

Our Test coverage for our model package is about 50% meaning that we tested about 50% of all possible cases for our methods in said package. This includes over 50% of our Group class being covered as well as almost 90% of our Item class being covered. This ensures that our application is robust enough to handle any possible inputs by our customers. The Group and Item classes are the most covered because they are to most important classes for our Venn Diagram application to run smoothly.