**Essential functions of drug drug interaction statement annotation tool:**

1. Annotate a drug-drug interaction with the established DDI data structure.
   1. Successfully annotate multiple drug-drug interactions in the same text without getting lost/confused or missing interactions.
      1. Multiple drugs listed, with a distinct pair for each interaction.
      2. The same pair of drugs, with 2 separate annotations for each combination of the drugs as object and precipitant, if appropriate.
2. Save drug-drug interaction annotation.
3. View all the annotations saved for a given section of text, both within the annotation box, and in the document itself.
4. Edit and delete annotations.
   1. Individually edit and delete
   2. Group delete – list of all annotations in a document or in a section of text, and ability to check annotations to delete them en masse.
   3. Be able to undo deletions – Trash folder?

**Major problems with current DOMEO interface:**

1. Inconsistency in ability to highlight and annotate all drug interaction statements.
2. Frequent lost work due to time-outs and crashes.
3. Difficulty in annotating text that contains multiple drug drug interaction statements without getting lost and missing interactions.
4. Difficulty tracking work that has already been done:
   1. Full set of annotations for a document not easily accessible from main page
   2. Difficulty tracking annotations that have been completed for a specific section of text
5. Difficulty deleting annotations in general.
   1. Difficulty deleting annotations en masse.

**Necessary Improvements:**

1. System must be stable:
   1. Able to highlight and annotate any and all drug interaction statements without problems.
   2. No lost work due to time-outs and crashes.
2. System interface must support necessary tasks with as few steps as possible.
3. System interface must provide clear record of annotations that have already been completed, both in the document as a whole, and in a specific set of text.
4. System must better support annotating multiple interactions within one section of text.
5. System must support editing and deleting annotations, and en masse deletion.