Team Dezenove

System Correctness

Initially, the system was tested purely by comparing the contents of the .ics file that our program output compared to the contents of a .ics file that calendar programs such as Google Calendars output, and also to the information provided by RFC 5545. For the first deliverable, the requirements that we were expected to meet contained the correct output when compared to Google Calendars. If any part of our system's output did not fit the format provided by 'official' .ics file generators and RFC 5545, we knew that there was an error in our code. Also, the fact that everything from our system's output displayed correctly after being imported into Google Calendars was enough to verify the integrity of our young system.

We incorporated unit tests as we started working on the second deliverable. The function of the tests was to ensure that what was imported into a calendar object was *exactly* the same as what was exported. We knew that if the import and export files were different, then the import didn't go through as intended, or put simply that there was a bug in the code. This was done by hashing the inputs and outputs, then making sure that the content was the same between the two by using an 'equals' statement. To be safe, we also included a J-Unit 'assertEquals' test to ensure exact replication.

Another way the system was tested was by manually inputting information that shouldn't work, trying to generate an .ics file, and making sure that the catches in the code would notify us that what we were doing wasn't possible. This worked for a broad range of extremes, and ensured that the system wouldn't output a file that wasn't readable by a calendar program.