## Chapter I.

Team JAB's chosen project is Sugar, a desktop environment created by Sugar Labs in order to provide an activity-driven learning application for children. We chose to work on this project because it has exceptional documentation provided for developers, has a fairly active community, and has numerous activities providing us many avenues for testing.

Despite the documentation detailing how to set up a development environment, some difficulties were still encountered. We initially chose the chroot style for setting up the Sugar environment, but found problems during the building and testing phases. This was found to be a problem with how sugar-build interacts with Ubuntu. We decided to switch to the packaged style Sugar environment which provided a smoother building experience. We still encountered some problems with running the existing tests, but these problems came more from our lack of experience with python testing. After we spent more time with the code, we were able to get a few tests running. The preexisting tests included with the code consisted of:

1.test\_activitieslist

2.test\_backup

3.test\_bundleregistry

4.test\_desktop\_config

5.test downloader

6.test\_journaltoolbox

7.test\_microformat

8.test modemconfiguration

9.test\_user\_profile

10.test webaccount

11.test\_webservice 'As stated earlier, the tests produced varying results, which may be due in part to the several different build processed for sugar-labs run on the testing machines. In any case, the results are as follows:

Test #1: Terminates early due to an ImportError for "uitreep". Even after verifying that the file to import did in fact exist, this issue could not be resolved at the time of this publication

UPDATE: 9/14/2017. It appears that "uitreep" is actually a typo in the code, and when the test was edited to simply call"uitree" the test ran through to the end. However, the test still failed citing the error "AssertionError: unexpectedly None"

UPDATE: 9/15/2017. Running the test while in the Sugar Desktop Environment results in the test passing

Test #2:Test Passes Properly

Test #3:Tests run through, but fail citing KeyError as 'SUGAR\_ACTIVITIES\_DEFAULTS'

Test #4:Test Passes Properly

Test #5:Test Passes Properly

Test #6:Test Passes, however many warning messages stating things such as "WARNING:root:No icon with the name edit-duplicate was found in the theme."

Test #7: Test file contains two tests, one passes and the other fails citing ERROR: test\_html\_parser (test\_microformat.TestMicroformat), ValueError: too many values to unpack. This seems to be some sort of running error in the source files themselves

Test #8: Terminates early, also stating an ImportError: No module named mock.

Test #9:Terminates due to ImportError: No module named cpsection.aboutme

Test #10: Test Passes Properly

Test #11: Test Passes Properly

As previously stated, as of 9/13/2017, we have been unable to discover why precisely these tests are failing. However many of them seem to have issues pulling code from libraries. Since the requested code, is in the specified place, the cause of this remains a mystery. However, we believe that, since we attempted several different builds of the software, this may have caused some issues with the files that are throwing errors. Aside from that, all team members lack experience in running python testing scripts, especially within an Ubuntu environment, which may be keeping us from solving the issue at hand. Naturally, this is an obstacle that must be overcome so that the goals of this project can be met. Through this, we shall gain a greater understanding of the software we are working with.