Deliverable 2: Sugar Test Plan
Prepared by: Shaina Mainar, David Spry, AJ Williams

Requirements:

We are testing methods within different activities in the Sugar ecosystem. Therefore, the requirements will be varied.

- Requirements for agepicker.py method: calculate_birth_timestamp
    - Method needs to take in an integer and return an integer value

Tested items:
src/jarabe/intro/agepicker.py

Testing schedule:

Deliverable 1: September 12, 2019

- Checkout and clone HFOSS project. Compile project and run.

Deliverable 2: October 1, 2019

- Detailed test plan specifying 5 of 25 test cases.

Deliverable 3: October 29, 2019

- Re-working of test plan and building automated testing framework.

Deliverable 4: November 12, 2019

- Complete the design and implementation of the testing framework. Create 25 test cases for the framework

Deliverable 5: November 19, 2019

- Design and inject 5 faults into source code, test, and analyze the results.

Final Report: November 21, 2019

- All deliverables, code, and files are collected and delivered.

Test recording procedures:

The results of the tests will be recording here.

Hardware and software requirements:

The project should be run on Linux-based. For our project, we all used Ubuntu 18 LTS and Python 3.

Constraints:

Limited knowledge of scripting and testing framework. We will be researching methods to use these throughout the project. For this project, we are only utilizing unit testing in which we test the individual methods from the software ecosystem.

Unit tests:

Test Number: 1
Requirement: The calculate_birth_timestamp method accepts a positive integer and calculates the correct timestamp based on the inputted age
Component: agepicker.py
Method: calculate_birth_timestamp(age)
Test Input: 20
Expected Outcomes: current time + 630800000

Test Number: 2
Requirement: The calculate_birth_timestamp method accepts a zero and calculates the correct timestamp based on the inputted age
Component: agepicker.py
Method: calculate_birth_timestamp(age)
Test Input: 0
Expected Outcomes: current time + 0

Test Number: 3
Requirement: The calculate_birth_timestamp method does ont accept a negative integer
Component: agepicker.py
Method: calculate_birth_timestamp(age)
Test Input: -6
Expected Outcomes: fail

Test Number: 4
Requirement: The calculate_birth_timestamp method does not accept a float
Component: agepicker.py
Method: calculate_birth_timestamp(age)
Test Input: 5.5
Expected Outcomes: fail

Test Number: 5

Requirement: The calculate_birth_timestamp method does not accept a non-integer
Component: agepicker.py
Method: calculate_birth_timestamp(age)
Test Input: one
Expected Outcomes: fail