**Senior Project Weekly Status Report**

**Student Name:** Vinnicius Castro **Email:** cas21003@byui.edu

**Phone or Zoom Contact:** (208) 607-5606

**Project Title:** X-Mutest

**Project Description:**

Design and implement a tool that introduces controlled mutations into Python source code and reports a mutation to evaluate the effectiveness of the test suite.

**Technologies Used:**

Git, GitHub, pytest, AST (Abstract Syntax Trees).

Programming Language**:** Python.

**GitHub URL:** <https://github.com/vinniciuscastro/Senior-Project>

**Week 1: 9/20/25**

Overall Status (on-schedule, behind, ahead): On Schedule

Number of hours worked this week: 6 hours

Total number of hours worked on the project thus far: 6 hours

Number of total hours anticipated at completion: 130 hours

Accomplishments: Create project proposal idea. start the research and test existing similar tools (MutPy, PIT and Stryker). Set up the repo on GitHub.

Challenges: The biggest challenge this week is to find other ideas if this project is not approved.

Plans / Goals for next week: Define scope supported mutations, test frameworks, and create the project description.

SPED Talk Insight (Briefly describe an insight or something interesting you learned from the SPED talks this week): N/A

Other comments for the instructor: