Title: Whonix: Automated Testing Suite

Class: CSCI 462 Software Engineering Practicum

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Abstract: Whonix: Automated Testing Suite is a behavior-driven testing framework developed to access the functionality of Whonix features, behaviors, and graphical interfaces. As stated by the founder, "current Whonix development is slowed down by the time spent on manual testing as well as finding the causes for bugs" [1]. The contribution of an automated test suite allows for developers to run tests without manually executing them therefore increasing the efficiency, uniformity, and accuracy of development cycles. With the testing suite utilizing Python 3, Dogtails, and Behave, the software suite alleviates the tedious task of running individual tests and lets the software undertake the role of testing execution. Consisting of feature files and step implementations, a major benefit of the software is the flexibility in allowing for future and customizable feature tests. In conclusion, our contribution is intended to assist Whonix developers by contributing a testing suite that automates feature testing and the discovery of bugs.