A Testing Tool for Introductory Programming Courses

Thesis B Seminar

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Contents

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5. Perform proving and performance tests on the new software package
6. Deprecate and replace the existing autotest used for introductory programming courses at UNSW CSE

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This presentation will discuss work done for Thesis B.

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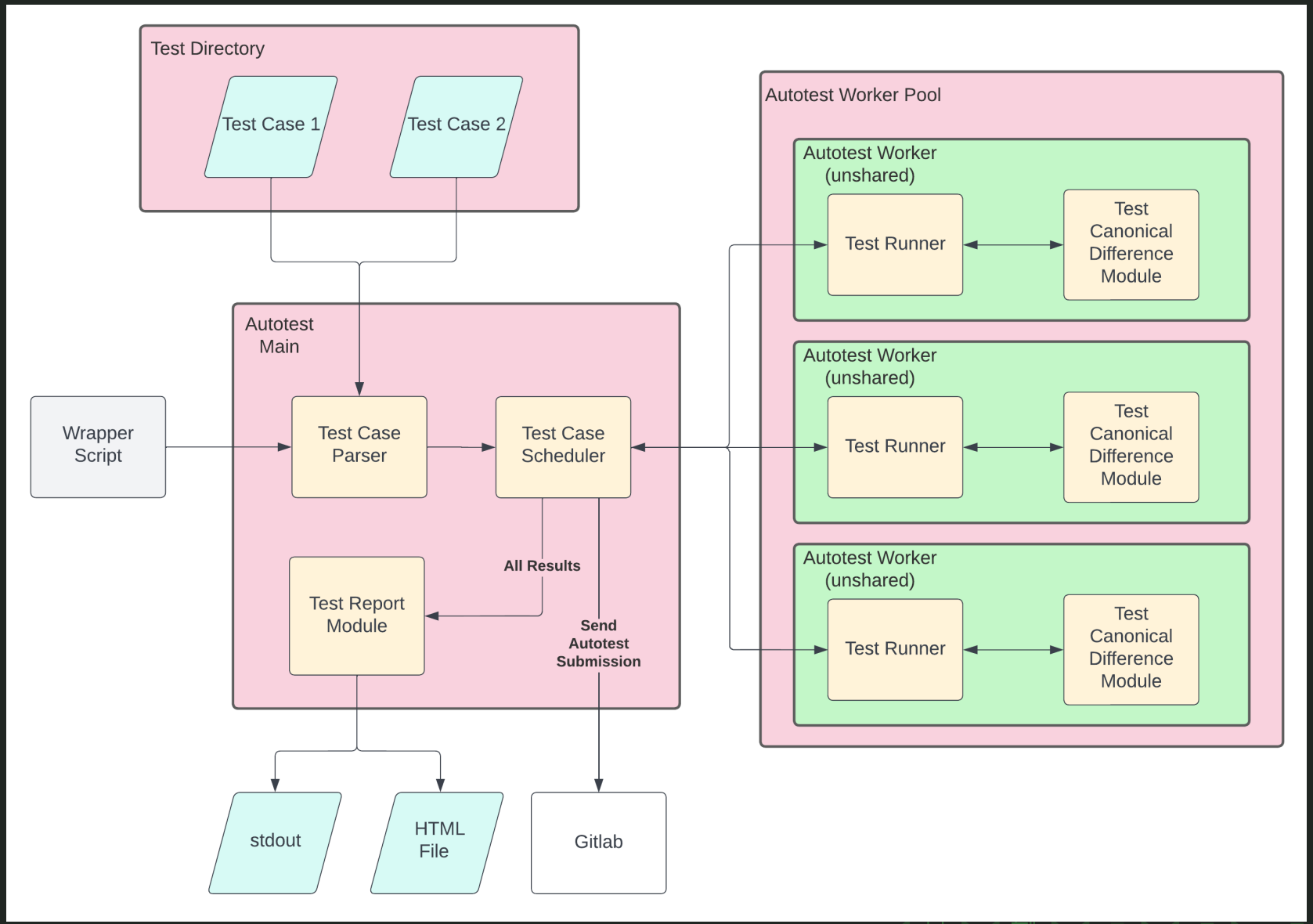
- Abstract Class design allows for easier novel design and implementation of pre-existing modules

Architecture Diagram



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- Direct code only for optional “administrative” tasks

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In the case of autotest, *unshare* allows processes to *disassociate* a *user namespace* and replace it with a subordinate that cannot "see" the original

The same can also be done for network access, file system mounts etc.

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- Most engines wrap around *unshare* to deliver capabilities

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Purpose: Optional HTML report generation

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Status: Planned as extension - could be dropped

Demo

- Main module is regulating how the parser and test case scheduler modules interact
- Legacy Parser has been cut down, revamped and ported over to the new architecture
- Observe that tests are being parsed correctly and from the correct directory

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- Main module makes basic output comparison to determine if test has passed or failed before printing result to stdout

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- My own expectations on the time I thought I had available for Thesis B were not met

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- Higher allocation of weekly time to Thesis C

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- Removal of the following clause from the thesis statement:
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- Refactoring of the legacy parser is to be considered "out of scope" for this thesis

Thesis C Plan

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Thank you for attending! *Questions?*