MiKroysoft

Module	SEPR
Year	2019/20
Assessment	2
Team	MiKroysoft
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Deliverable	4 Software Testing Report
Website	https://mikroysoft.github.io/

4a) **Summary of Testing Methods and Approaches**

Our two main methods of testing was Manual testing and Unit testing written in JUnit 4.11 Although manual testing is slower, we found it beneficial to use as is replicates the user experience in terms of visual feedback, allowing room for improvement in the UI, as well as supporting our JUnit tests(an example of this TEST_REFILL). Another reason we chose to manually test is you can recognise more clearly which features have been implemented and allows you to see how multiple units can work together unlike unit testing. Our Manual tests are comparable with our requirements from Assessment 1, allowing easy recognition of the tasks achieved such as TEST_STORY. In the future development of our project it will be beneficial to continue with human tests to collect data on updated requirements ensuring a high quality user experience. JUnit is an appropriate method as it allows us to formally and reliably automate tests without human interaction. JUnit allows for a quick and efficient testing process, increasing productivity of the team [1]. Its accurate results allows the identification of a higher abundance of bugs, however not all as it won't show units working together [1]. JUnit cannot gage visual aspects, which is why we feel the combination of unit testing and manual testing is crucial for a more complete testing process.

4b) **Test Report**

We carried out 14 manual tests, and 28 unit tests. No tests failed, indicating strong quality of code, and strong alignment to requirements. Testing completeness can always be improved, but our testing is fairly comprehensive in its current state. We tested a variety of classes' functionality and stability. Testing could further be solidified by more granular testing, for example: testing a specific fire engine deals damage to a specific Killable's health, or testing a specific Killable can no longer fire projectiles once dead. Testing game loss or completion would also be appropriate in the next assessment. Testing is fully correct, as our tests made use of the functions that are called in our implementation to achieve the desired behaviour.

4c) **URLs**

Click this link to read our testing results:
https://mikroysoft.github.io/assessment2-testing-results.xlsx

Bibliography (Test Report)

[1] Krify.co. (2018). *Advantages of Manual Testing*. [online] Available at: https://krify.co/tag/advantages-of-manual-testing/