Software Architecture Assignment Semester One

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Introduction

When designing and creating software, it is common to think about the end user experience. However, it is also important to consider what software development consultant Kevlin Henney describes as the *"Programmer Experience"*. [2]. This refers to the readability, maintainability, and reusability of the source code. He argues that if programmers cannot understand the source code, then they cannot use it effectively. However, as Gamma *et al* (commonly known as The Gang of Four or GoF) state *'Designing object-oriented software is hard, and designing reusable object-oriented software is even harder.'* [1]. This report explains and evaluations the design decisions taken during the creation of my educational game, Bug Busters, and how they impacted on the; usability, efficiency, reliability, maintainability, and reusability of the source code.

Design

TOOD

Use Case Diagrams

TODO

Sequence Diagrams

TODO

Class Diagrams

TODO

Design Patterns

TOOD

Singleton

TODO

Model View Controller (MVC)

TODO

Marker

TODO

Factory

TODO

Command

TODO

Conclusion/Summary

TODO

References

[1] Gamma E, Helm R, Johnson R, Vlissides J. 2005. Design Patterns: elements of reusable object-oriented software. Addison Wesley.

[2] Henney K. 2017. FizzBuzz Trek HD. `https://www.youtube.com/watch?v=LueeMTTDePg`. Accessed December 2nd 2017.

[3] Drumm, I. 2017. Software Architecture Lecture Notes. University of Salford

[4] Fowler M, Kendall S. 1999. UML Distilled: a brief guide to the standard object modelling language. 2nd Ed. Addison Wesley.