

CPS2004 — Object Oriented Programming

Assignment

Juan Scerri

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1 Plagiarism Declaration

Plagiarism is defined as “*the unacknowledged use, as one’s own, of work of another person, whether or not such work has been published, and as may be further elaborated in Faculty or University guidelines*” (University Assessment Regulations, 2009, Regulation 39 (b)(i), University of Malta).

I, the undersigned, declare that the report submitted is my work, except where acknowledged and referenced. I understand that the penalties for committing a breach of the regulations include loss of marks; cancellation of examination results; enforced suspension of studies; or expulsion from the degree programme.

Work submitted without this signed declaration will not be corrected, and will be given zero marks.

Juan Scerri

CPS2004

December 23, 2022

Student’s full name

Study-unit code

Date of submission

Title of submitted work: Object Oriented Programming Assignment

Student’s signature

A handwritten signature in black ink, appearing to read 'J. Scerri', is written over a horizontal line.

2 Village War Game

2.1 Language Choice

2.2 User Guide

2.3 Design

2.4 Technical Aspects

2.5 Testing

2.6 Limitations & Improvements

3 Minesweeper

3.1 Language Choice

C++ was chosen for Minesweeper because it has a fixed board size of 16×16 . This means that it is possible to stack allocate every object removing the need for dynamic memory allocation. This is facilitated by `std::array` from the Standard Template Library (STL) which allows for the creation of fixed size arrays on the stack.

3.2 User Guide

3.3 Design

3.4 Technical Aspects

3.5 Testing

3.6 Limitations & Improvements