



series

commands

12 Pages

1. Please give the information requested in the boxes below.
2. Enter your name in the space provided to the right, fold the book in half lengthwise and seal down (using the label provided) to hide your name.
3. The answers must be legibly written. The Examiners cannot read answers that are typed and the typewriter will be charged to the candidate.
4. Write your answers in ink.
5. Begin each answer on a fresh page. Do all rough work in the answer book and cross it through.
6. No part of this book is to be torn out; it must be handed in complete.
7. If more books than one are used, fasten them together using the tags available from the invigilator(s).
8. **Every book must be handed in. In no circumstances may answer books, used or unused, be taken out of the examination venue.**

List the numbers of the questions you have attempted	Office Use
2	15
3	9
4	8
Total	32

(Gweler yr ochr arall am y fersiwn Cymraeg)

2a	Line	Description	
	1	Includes input/output stream libraries	1
	3	Standard C++ syntax, operands and commands	1
	7	Comment	1
	8	Class declaration "GameElement"	1
	10	Private variables (or functions)	1
	11	Character variable instantiation	1
	12-15	Integer instantiation	1
	16	Public elements of class	1
	17	Constructor	1
	21	Overloaded variables in constructor function	1
	23-27	Received arguments "translated" into new variables	1
	30	Destructor	1
	32	Function	1
	34	If pathCount is more than spriteIndex	1
	36	Prints to screen ~~that needs~~ (memory stream)	1
	37	Increments spriteIndex by 1	1
	39	If arguments not met:	1
	41	Set spriteIndex to 0	1
	46	function (overloaded)	1
	48-49	Received variable manipulation	1
	52	Comment	1
	56	Comment	1
	57	Class instantiation (inherits from GameElement)	1
	59	Private variables	1
	60	Integer instantiation	1
	61	Float — " —	1
	62	Public elements (visible outside of class)	1
	63	Constructor	1
	65	Function (overloaded)	1
	67, 68	Received variable manipulation	1
	71	Destructor	1
	73	Function. Can return a float.	1
	75	Returns variable	1
	78	Function. Can return integer.	1
	80	Returns variable.	1

2a Cont.	Line	Description	
	83	Comment	
	86	Function prototype	1
	88	Main (start of program. Receives variables.)	1
	90, 91	Character instantiation. Unknown length.	
	92	New object	1
	93	— " —	use instantiation ↑
	95	For - logic (for - loop) 4 iterations	
	97, 102	Calls function, with variable.	1
	104	Returns 0 to prevent memory issues.	
	107	Function	
	109	Sends variable to function.	14

2b This code allows a player to collect collectables and the code keeps track of what's collected.

It can also generate collectables. Variables are passed through objects and ~~proy~~ functions.



3 i) AGILE manifesto:

- Customer collaboration over strict contracts
- Working software over comprehensive documentation

1 ✓

3 ii) The AGILE approaches favours an more relaxed and dynamic take on software development. It is adaptive.

2 ✓

3 iii) UP (unified process) is a ~~more~~ stricter, predictive approach. It allows for less flexibility, but arguably more control.

1 ✓

AGILE is an ~~an~~ adaptive approach, taking on problems as they come, with more focus on deliverables.

1 ✓

UP ~~it~~ follows 4 paths, and 5 workflows:

Paths:

Inception
Elaboration
Construction
Transition

2 ✓

Workflows:

Requirements
Analysis
Design
Implementation
Test

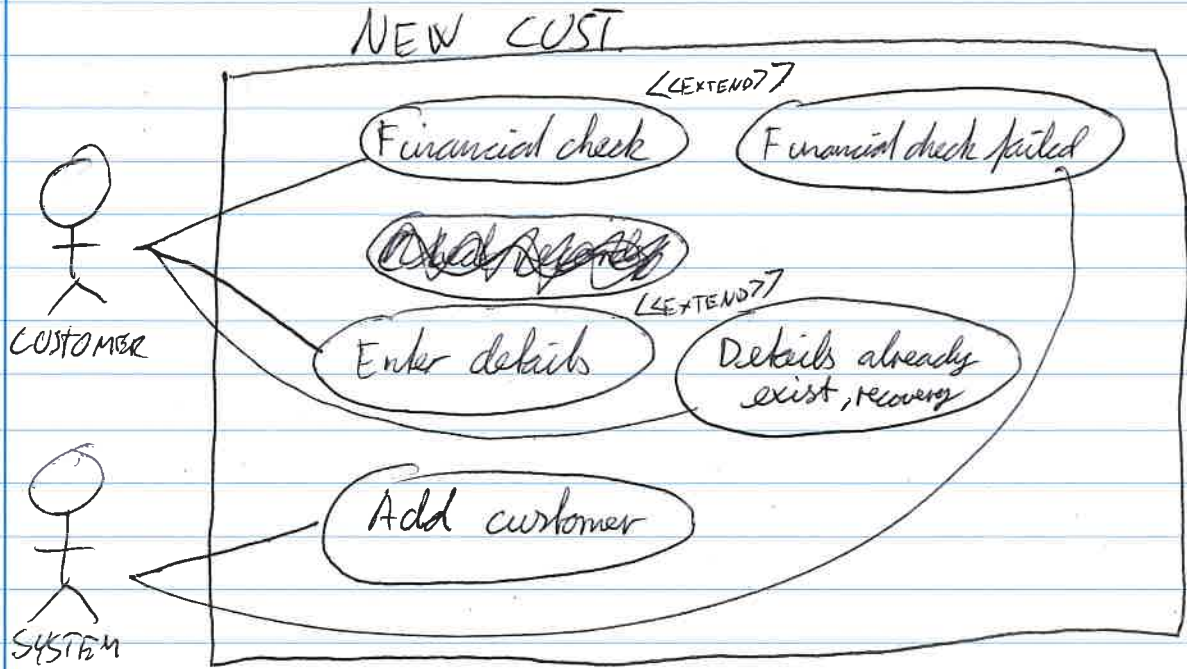
2 ✓

9
Q3-9

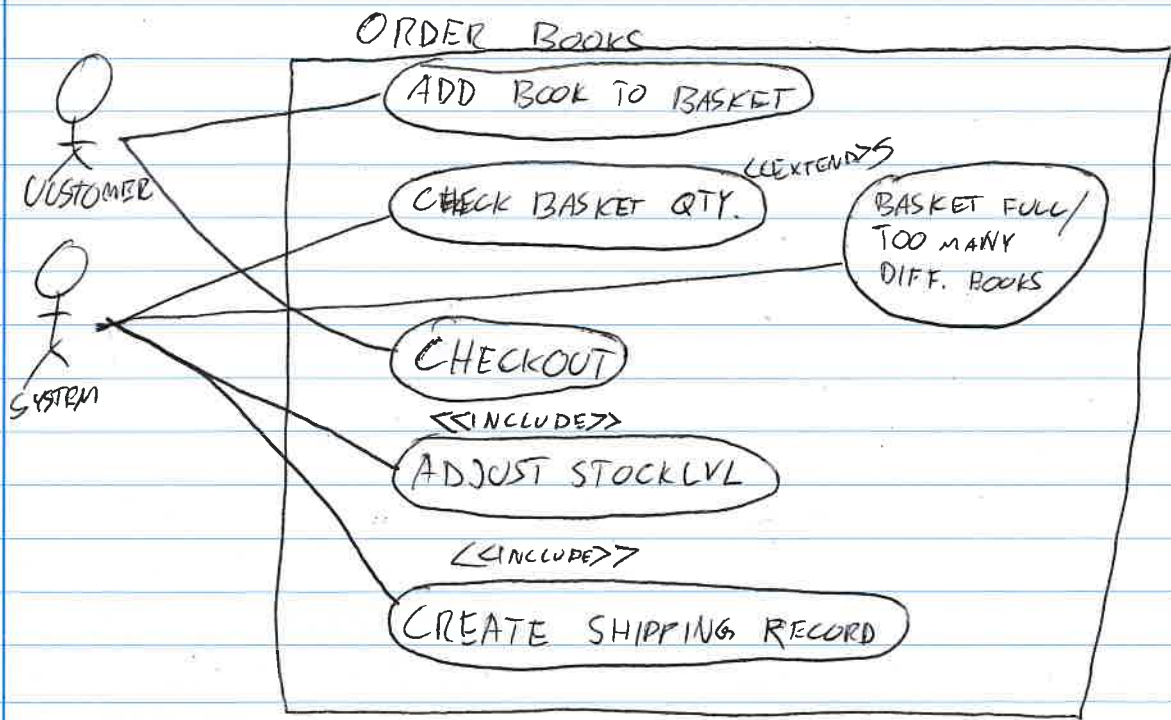
4a)



i)



2 ✓



2 ✓

i) a)

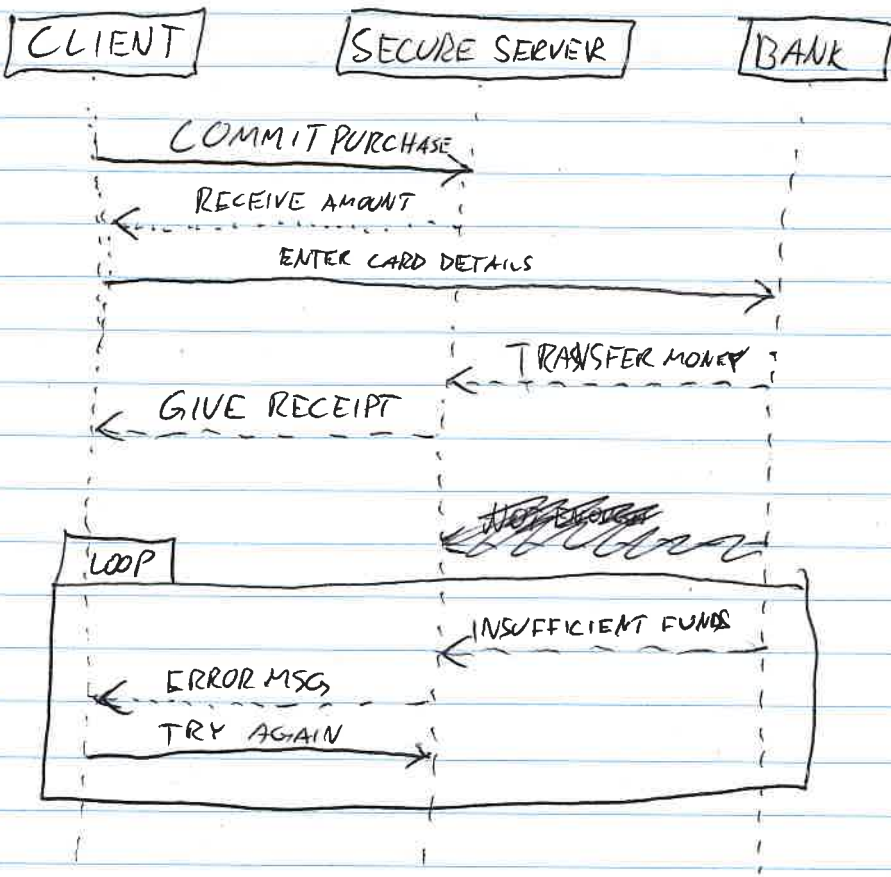
ii)

iii) Includes always happens after previous stage in program.
Extends can happen, depending on user input, etc.

✓

4b)

Checkout process:



3

Q4-8