國立成功大學

111學年度碩士班招生考試試題

編　號：218

系　所：創意產業設計研究所

科　目：數位媒體與互動設計

日　期：0220

節　次：第 3 節

備　註：不可使用計算機

※ 考生請注意：本試題不可使用計算機。

　請用 "英文" 於答案卷(卡)作答，於本試題紙上作答者或用中文作答，不予計分。

I. Reimagining the display (20%)

1. Please draw a picture and then create a pixilated version of the picture with *custom pixels*. Think carefully about how you design your pixels (10%) and the relationship between your "pixel concept" and the image you draw (10%). You can use text to explain your design concepts and the transformation.

II. Digital Design: representing time (68%)

Design a "visual clock" that displays a novel or unconventional representation of the time throughout the day. Challenge yourself to convey the time without using numerals.

1. Please describe three types of historical methods/devices/systems for timekeeping. (10%)

2. Devise graphic concepts and technologies for representing time that go beyond conventional methods of visualization and mediation by drawing at least **five** prototypes and explain them using text. The wider the variety of the prototypes, the better. (30%)

3. Select a final design: describe your final design in terms of (a) its name, (b) its purpose, (c) how to use/operate it in detail, (d) explain the reason(s) for selecting the final design from the five prototypes. (16%)

4. Explain the **originality** of your design by comparing it with the selected three examples you have listed in II.1 above. (12%)

III. Terms about programming (12%)

Please select a word/phrase from the pool below to fill in the missing word(s) in the four sentences.

application	pseudocode	comment	string
token	variable	internal memory	method
memory location	algorithm	function	semantics
internal	syntax rule	properties	argument
computer program	statement	coding	float

1. Which term expresses the step-by-step instructions of an algorithm by using keywords, while depicting logical groupings or structures using indentation? _____.
2. The actual writing of the program based on the design specifications is _____.
3. _____ is a sequence of instructions written to perform a specified task for a compiler.
4. _____ means the memory location whose content may change during program execution.