

# Interaction Design Supervision

## Questions

### QUESTION 1

A company has been asked to design and create a graphical multi-platform desktop application called *GraphicBot* (Figure 1). *GraphicBot* should allow the users to create animations, behaviours and dialogs on a simulated robot (Figure 2), to test these, and to monitor and control the simulated robot.

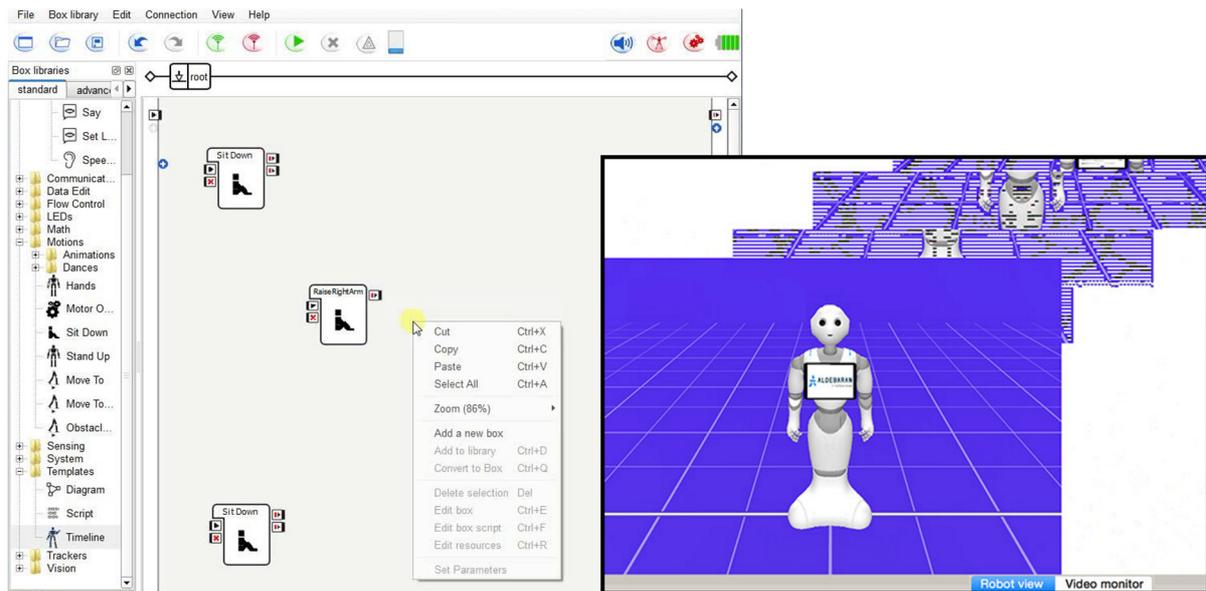


Figure 1. Illustration of the multi-platform desktop application called GraphicBot

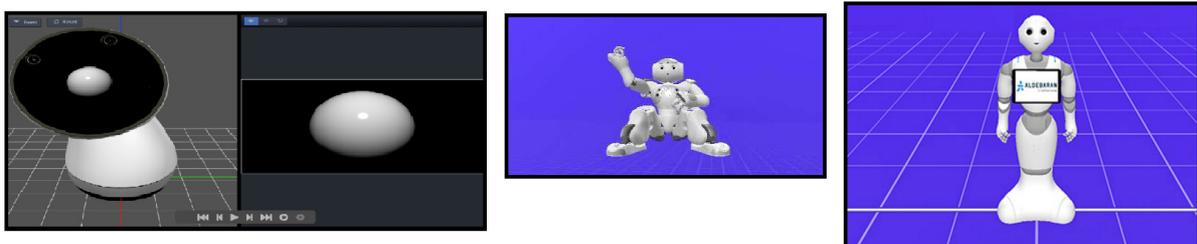


Figure 2. Different types of robot simulations

- a) Describe what 'anthropomorphism' is in the context of user interface design and discuss how this will be achieved (or not achieved) when designing and creating *GraphicBot* and the different types of robot simulations it can provide (see Figure 2).

[3 marks]

- b) (i) Describe what the two emotion-related (affective) aspects that have an impact on user interface design are, and explain how each aspect impacts user interface design. (ii) Use *GraphicBot* as an example to outline how each emotion-related aspects will impact the perception and use of the simulated robot. Provide examples for positive and negative impact considering a target user group.

[10 marks]

- c) What is user-centred design? Provide a schematic description of a user-centred design /development model.

[7 marks]

## QUESTION 2:

- (a) List the six principles of Gestalt psychology that have implications on interaction design explaining what each principle is about. Describe with multiple examples how each of these principles were employed and/or were violated in the design of the web page given in Figure 3 below.

[12 marks]

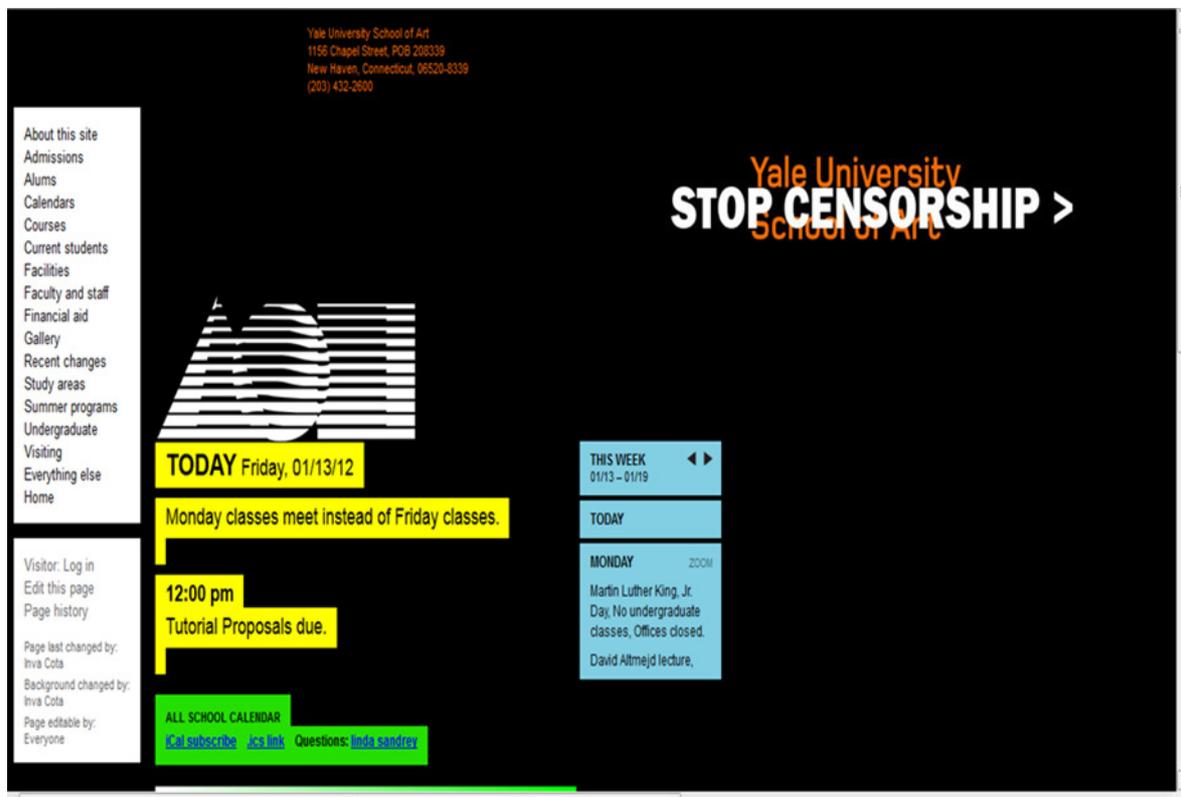


Figure 3

(b) Describe what the Cognitive Walkthrough is. What are the typical five stages we need to follow through to perform Cognitive Walkthrough? Briefly explain what each step is about.

[8 marks]

### QUESTION 3:

(a) Explain what Heuristic Evaluation (HE) is and how it is conducted. List the ten Usability Heuristics used in evaluating user interfaces. Explain the concept of severity rating in the context of HE.

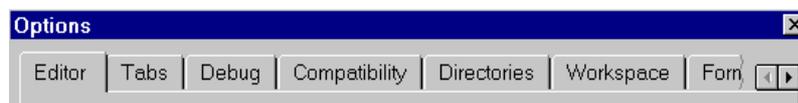
[12 marks]

(b) For each of the user interface (UI) visualisations provided below explain the following:

- Is it good or bad?
  - If good - which heuristics (H.1 – H.10) apply?
  - If bad - which heuristics (H.1 – H.10) are violated?
- Why?
- Severity rating?

[8 marks]

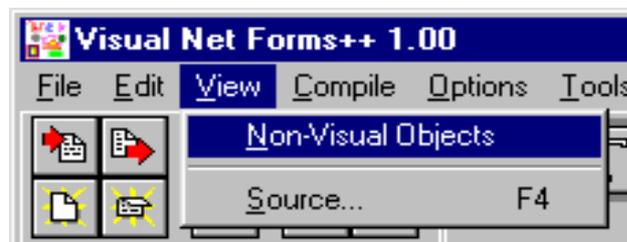
(1)



Clicking once on the right arrow gives the following:



(2)



View menu from Visual Forms has two options:

- Non-Visual Objects (e.g., formatting labels)
- Source...