

Integrated Technology

Project Name — Bar Coding

Design Brief: To make a bar code of your initials, full name, and date of birth.

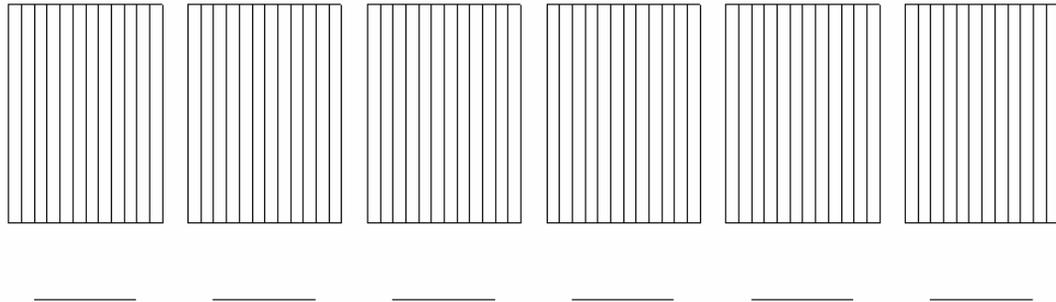
Context: Bar coding is a common form of automatic identification. It is a system of wide and narrow lines and spaces which are used to represent alphabetical and numerical characters. A laser is used to “read” the patterns of light and dark. It converts this data into digital information that is usable by a computer. One type of coding is Code 39. This system includes “quiet areas” at the beginning and ending of a code as well as start and stop characters. These help ensure that the reader functions properly and that the complete codes are read accurately.



Possible Solutions: Use a bar code generator, use computer software, cut and paste, and shading/colouring.

Design Constraints: The following are some constraints or limitations for this project:

1. You will work individually.
2. One space on the grid is a thin line or space. Two spaces on the grid make up a thick line or space (*see above example*).
3. Ensure that you print the actual characters below the bar coding.
4. Before commencing with the project, you will be able to look up the alpha numeric characters on the provided table.
5. Your completed work will be handed in during the next class.
6. Use a 12 column grid per character to assist you like the one below (*note: the actual “grid” should not be visible*).



Detail Design: The following are the steps to follow for developing your design:

1. Ensure that the work area is clear of hazardous materials (i.e., oil, gas, rags, wood, plastic, etc.)
2. Make a near-invisible grid to lay out your bar-code characters. Beginning with the start/stop character, bar code your initials. Follow each initial with a period. End with the start/stop character.
3. Beginning with the start/stop character, bar code your full name and date of birth. do not forget to include the “space” character where necessary. End with the start/stop character.

Materials: sheet of paper, pencil, and eraser.

Commissioning: Were you successful in this project when you tried it out?

Evaluation: Did this project work as you expected it to?

Reflection: Did you enjoy this project? What were you most proud of? What would you do differently next time?