

QR Code



The QR code is a two dimensional matrix-type barcode that has become widely popular due its readability and ability to contain a large amount of information. Created in the early 90's by the Denso Wave Company for the automotive industry, the QR code has significant advantages over conventional bar codes. Chances are, if you open almost any modern magazine, you will see companies advertising their products and providing a link to their site via a QR code. This badge will explore the origins, creation and uses of this funky symbol.

Requirements (Check when complete):

This section focuses on the origins and design of the QR code, including its advantages over conventional bar codes.

Do EACH of the following and submit to your instructor:

- Identify and describe the rationale behind the codes invention
- Identify and describe 4 distinct advantages QR codes have over conventional bar codes

Do EACH of the following and submit to your instructor:

- Identify and describe the code's standard features and their locations within the code as well as the different code types
- Identify and describe how the code validates data integrity
- Identify and describe the data types that can be encoded into the code
- Identify and describe the quantity of data that can be stored within the different code types
- Identify and describe how data is encoded within the code

This section focuses on the uses of the QR code

Do EACH of the following and submit to your instructor:

- Identify and describe 4 industrial uses of the code
- Identify and describe 4 commercial uses of the code
- Identify and describe why you think the QR code has become a popular means for sharing information with the consumer public

Do the following and submit to your instructor:

- Using Python, write an application that generates a QR code based on user input
- Use a stand-alone or web-based QR code generator designed to provide a hyperlink to your favorite website (i.e. Adafruit, Hack A Day, TechEBlog, etc.)
- Identify and describe how you could use a QR code in a project for this course. You do not need to implement this feature.