ESTABLISHMENT OF TALKING QR CODES PODCAST LIBRARY

The initiative bears the name talking QR codes podcast library because it utilizes QR codes in delivery of online audio formats which are derived from conversion of documents to audio formats using RoboBraille Software. This initiative is the first of its kind and is exclusively being tried and tested at Dedan Kimathi University of Technology Institutional Repository.

It has come into use by combining several open source software's into one harmonious system which is called TALKING QR CODES PODCAST LIBRARY. The system has been deployed and being tested for viable use at the Institutional repository of Dedan Kimathi University of Technology Institutional Repository whose URL is http://repository.dkut.ac.ke:8080/xmlui/.

Attached is a screenshot of the TALKING QR CODES PODCAST SYSTEM which is available online at, <u>http://repository.dkut.ac.ke:8080/xmlui/handle/123456789/12/recent-submissions?offset=20</u>

Currently, the system is focused on Peer reviewed Academic Research papers of Academic staff of the University. The system will be fully deployed into other areas of interest to cater for different needs of library clients.



The TALKING QR CODES PODCAST SYSTEM initiative revolves around documents being converted into audio formats and made accessible online and offline via QR codes which are then uploaded into Digital Institutional Repository alongside the main document article. The initiative led to the accidental creation of a podcast library on Google drive which can be streamed online, offline and even downloadable audio formats of any document. Talking QR codes uses a combination of different software and open source systems to achieve its objectives.

Open Source Software's used to Develop Talking QR Code Podcast Library

- 1. RoboBraille
- The software is used to convert documents to audio format more specifically MP3/MP4 format.
- 2. Cloud Computing Software
- Google Drive is used to house the converted audio formats online.
- It also provides a URL link to the uploaded audio mp3/mp4 format which will be used to generate a QR code.
- Google drive also offers the option of controlling the accessibility of the uploaded mp3/mp4.
- The uploaded MP3/MP4 can be accessed on request or open to anyone who has access to the link which is provided by the QR-Code

3. URL Shortener

- The URL shortener is meant to make URL's shorter in order to make the QR Code more scan-able on smart devices or webcams.
- The use of URL shortener is optional.

4. QR Codes and QR Code generating Software

 QR codes are used to make the audio formats accessible over a number of devices such as smart phones, computers, tablets, and laptops.



Title: Recent technological advances in the management of chronic wounds: A literature review Author: Ongarora, Benson G.

Date: 2022-04



- Title: Knowledge, Attitude and Practice of Main Stakeholders towards Human Papilloma Virus Infection and Vaccination in Mombasa and Tana-River Counties in Kenya: A Qualitative Study Author: Njuguna, Diana Wangeshi; Mahrouseh, Nour; Isowamwen, Osarugue Victory;
- Author: Njuguna, Diana Wangeshi; Manrousen, Nour, Isowamwen, Osarugue Victory; Varga, Orsolya

Date: 2021-09

Above are examples of talking QR Codes. They have been uploaded alongside the main document articles providing a user of the repository an option of listening and downloading the audio of the Article as well as reading. A person can stream the audio of the work and alongside read the main document.

STEPS TAKEN TO ESTABLISH THE TALKING QR CODES PODCAST SYSTEM

1. The first step involves downloading the main article from the Institutional Repository and uploading on on Robobraille at https://www.robobraille.org/



2. After attaching the desired document on Robobraille, uploading it is the next step.

Step 1 - Upload your document

Select your file and upload it to the server (max 64 MB), Multiple files of the same type may be selected. Supported file types are .DOC, .DOCX, .PDF, .PP1X, .1X1, .XML, .HTML .HTML .RTF, .EPUB, .MOBL .TIFF, .TIF, .GIF, JPG, .JPEG, .BMP, .PNG, .PCX, .DCX, .J2K, .JP2, .JPX, .DJV, .TEX and .ASC

File	name:	Choose Files	No file chosen	Upload
100				

The file Capture.PNG was successfully uploaded to the server (76 kB).

Step 2 - Select target format

Specify the target format of your document. For more information about formats, please visit target formats. For the uploaded document type, the following formats are available:



-Options-

Step 3 - Specify audio options

Specify the natural language of your document and how fast you want the speech. For more information about MP3 audio, please visit <u>MP3 audio features</u>

Language:	British English	~
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Speed: De	fault 🗸	

Step 4 - Enter email address and submit request

Email address: k Submit

Once the document is uploaded, one needs to choose the target format which in or case is mp3. One can choose from a total of 40 international languages to which the MP3 audio file can be translated into. Audio speed can changed to 7 different speeds varying from very slow to very fast. After choosing the preferred language and audio speed, one is required to input the email address where the audio format link will be sent.

3. A notification is generated and an email is sent with the URL which can be which contains the download link of the audio file.

Convert a File

Alternate media made easy

Receipt

Your document has been successfully submitted to the service for conversion. Once completed, the result will be delivered to your email inbox.

If you are satisfied with the service and wish to help keeping RoboBraille free, you can make a donation via Paypal or credit card by clicking the button below (external website):

Donate to RoboBraille

Details

Parameter	Value
File name:	Capture PNG
Extension:	png
Email addres	:: keith.wanjau@gmail.com
Process:	MP3 audic (britspeech@robobraille.org)
Language:	British English
Speed:	Default

The request was submitted on 15 July 2022 11:51:38. SiteID=main-web3

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4. The audio downloads are then uploaded into Google drive where URL links can be generated for the audio files

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Library Services (you) libraryservices@dkut.ac.ke

General access

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Anyone with the link -Anyone on the internet with the link can view

Viewer *

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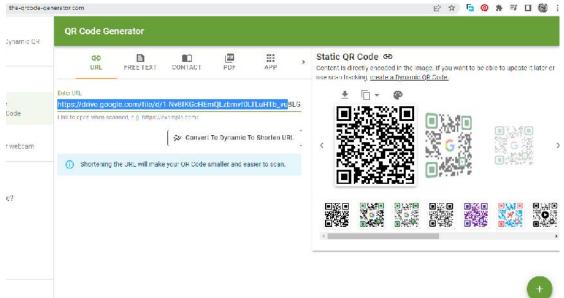
Owner

Done

(i) Viewers of this file can see comments and suggestions

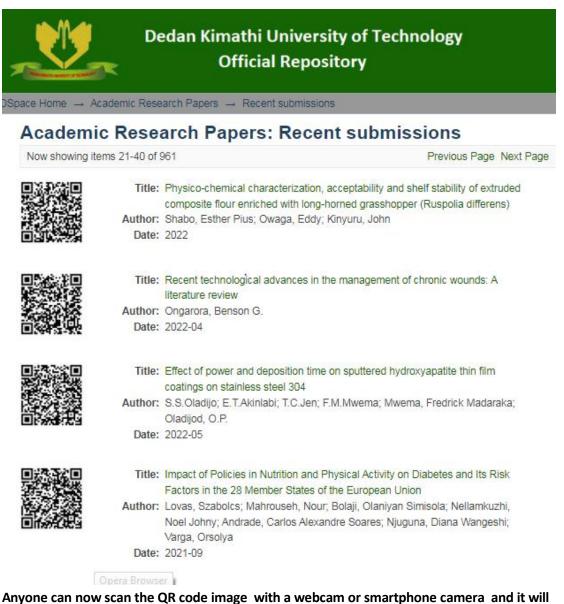
G⊃ Copy link

5. The copied link can then be encoded into a QR code image via a QR code generator. The QR code is then downloaded and ready to be attached to its equivalent work on the Dedan Kimathi University Institutional Repository as a thumb nail attachment.



After the QR images are uploaded into the Institutional repository, they appear alongside the e-documents they are derived from.





be streamed directly onto the device. An example of a working QR code podcat system can be viewed at <u>https://youtube.com/shorts/goX1RjMzCz0?feature=share</u>

The audio can be streamed or downloaded depending on ones preference. A person can also log in to their google account and save the podcast on their drive for offline access.

POSITIVE RESULTS OF THE TALKING QR CODES PODCAST SYSTEM

1. The TALKING QR CODES PODCAST SYSTEM utilizes open source software's and systems in order to work. Each system works differently but when they are put together, they create a new system which works independently.

2. The TALKING QR CODES PODCAST SYSTEM has been deployed for use at Dedan Kimathi University of Technology Official Institutional Repository to enhance innovativeness and creativity in delivery of alternative study methods. A user has a choice of reading or listening to an article. An example of its use is available at

http://repository.dkut.ac.ke:8080/xmlui/handle/123456789/12/recentsubmissions?offset=20. The TALKING QR CODES PODCAST SYSTEM has been adopted for use in the Institutional Repository for use not only for use by the University Academic fraternity but for show casing all over the world for adoption and use.



3. The TALKING QR CODES SYSTEM has created a podcast library which can be utilized as a complementary work alongside any published document. The system can be used to preview a written document in audio format.

4. The TALKING QR CODE PODCAST SYSTEM is also being adopted as a disability main streaming initiative to provide Library users who are differently abled with an alternative format of their choice.

5. The TALKING QR CODE PODCAST SYSTEM has also caught the interest of other ablebodied students who began scanning created QR Codes to listen to documents.

6. The TALKING QR CODE PODCAST SYSTEM can be used by anybody with a camera device