

NEAR FIELD COMMUNICATION : TAP AND KNOW

Indrani Selokar¹, Madhumati Metkar², Shweta Nimgade³

Shivani Aglawey⁴, Assistant Prof.Mitali Ingle⁵

¹²³⁴UG Students, B.E., Computer Science and Engineering, DBACER, Nagpur, Maharashtra, India

⁵ Assistant Professor, B.E., Computer Science and Engineering, DBACER, Nagpur, Maharashtra, India

Abstract - To locate and Find out the accurate information of a Tourist Spot is key component to establish a successful Tourist information, NFC tap and know Enables user to get general information on phone by just hit. If user is tourist the hit and know gives Detail information of all tourist spot.If user Doesn't get address just hit and get information of address. Get Tourist information in TTS . NFC allows for the transfer of data such as text or numbers between two NFC enabled devices. NFC tags, for example stickers or wristbands, contain small microchips with little aerials which can store a small amount of information for transfer to another NFC device, such as a NFC TAG phone . In tap hit know we use NFC communications NFC tag is small Tag which capable of holding information just like floppy .We Store and retrieve information by using this technique.

Key Words: NFC (Near Field Communication),TTS(text to speech)

1.INTRODUCTION

NFC is a standard-based , short-range wireless connectivity technology that enables simple and intuitive two-way interaction between electronic devices . NFC is used in the context of transport ticketing in gateless systems to enable a simple start-up program. Other trials have added retail contactless Payments cards to the ticketing options. The phone can tap a reader to redeem that ticket and gain access . NFC-enabled phones have great benefits over paper tickets. NFC-enabled phones can hold multiple Payment applications , allowing the traveller to select which method to use-credit , debit. NFC card emulation—enables NFC-enabled devices such as smartphones to act like smart cards, allowing users to perform transactions such as payment or ticketing.NFC reader/writer—enables NFC-enabled devices to read information stored on inexpensive NFC tags embedded in labels or smart posters. NFC peer-to-peer—enables two NFC-enabled devices to communicate with each other to exchange information in an adhoc fashion.

1.1NFC Contactless Payment

The main use for NFC that is capturing all the headlines is as a wireless payment method. Contactless credit and debit cards have been around for a while but now you can use your phone for this instead, which as mentioned works even when you're out of battery. At least you would be able to if it was widely available - at the moment the technology is still patchy in terms of support.

1.2NFC for information transfer

Where NFC really starts to come into its own on mobile phones is as a means of communication. Due to the easy tap-and-go synchronisation on offer, you're able to tap two phones together to exchange information with little to no hassle.

So, for instance, if you meet someone who you'd like to share your contact details with you can simply go to your profile in the contacts app, select the share option and tap your phones together to pass on the info. Likewise if you want to share pictures, videos or whatever files you like.

2. MODULES

The current work used Nearest Field Communications to get mobile nodes and creates Energy efficient architecture for tourist app. At initial stage when nfc nodes enter into sensor range, the nfc send signal and wait for response. As response arrived from receiver nfc tag, then algorithm measure NFC data and convert them into readable Format. From available data,. The proposed system can proceed through following steps :

- A. Read write NFC Tag
- B. Book Ticket
- C. Book Bus

A. Read write NFC Tag :

We will focus our attention on NDEF data that is a special type of NFC tag. There are some basic steps we have to

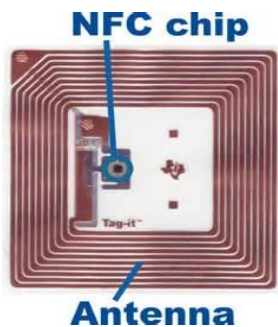
follow to read and write NFC TAGS. Android NFC Tag, the first thing we want is our app is notified when we get near a NFC tag. To this purpose we use a intent filter.

B. Book Ticket

After reading and writing of NFC tag we can book ticket automatically by using location of the NFC tag.

C. Book Bus

After reading and writing of NFC tag we can book bus automatically by using location of the NFC tag.



3. PROPOSED WORK

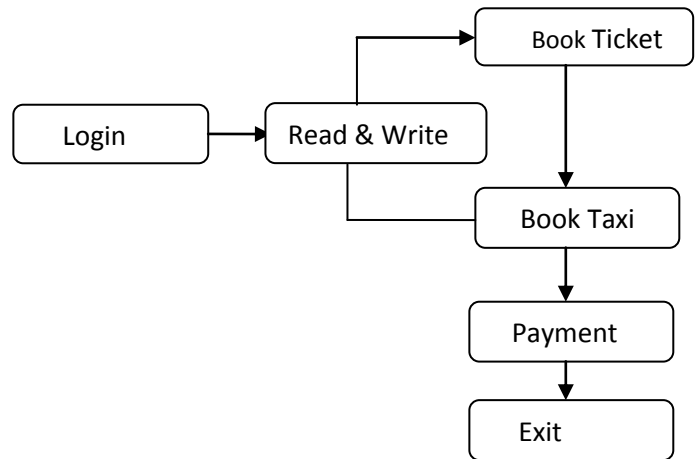
1. Advertising Interactive

You're walking past a bus stop and see an advert for a movie or see a house for sale. All you need to do is wave your phone in front of the advert and you will be able to instantly watch a trailer or get more information. QR codes currently do this, but it can be a bit hit-and-miss, and it's also a one-way-only data transfer. NFC chips and stickers are tiny, and also relatively cheap. Their increasing prevalence in both mobile handsets and in retailers means people are rapidly becoming used to the idea, so it's a space to watch for consumers, and fertile ground for innovators.

2. It brings back the mix tape!

NFC is bringing back the mix tape. Sharetapes allow you to make playlists and share it with friends using the technology. Who doesn't love a mix tape? It's a creative way to use the technology and you can keep the cards in your car, wave your phone at them and play your music without pressing any buttons

4.FLOW DIAGRAM



REFERENCES

[1] S. Chatterjee, S. Roy, and S. Bandyopadhyay, "Hop-efficient and poweroptimized routing strategy in a decentralized mesh network using directional antenna," in Parallel and Distributed Computing, 2006. ISPC '06. The Fifth International Symposium on, July 2006, pp. 155 -160.

[2] T. Lohmann, M. Schneider, and C. Ruland, "Analysis of power constraints for cryptographic algorithms in mid-cost rfid tags," in Smart Card Research and Advanced Applications, ser. Lecture Notes in Computer Science, J. Domingo-Ferrer, J. Posegga, and D. Schreckling, Eds. Springer Berlin / Heidelberg, 2006, vol. 3928, pp. 278-288, 10.1007/1173344720.

[3] C. Bachmann, A. Genser, C. Steger, R. Weiss, and J. Haid, "Automated power characterization for run-time power emulation of soc designs," in Digital System Design: Architectures, Methods and Tools (DSD), 2010 13th Euromicro Conference on, Sept. 2010, pp. 587 -594.

[4] E. Strommer, M. Jurvansuu, T. Tuikka, A. Ylisaukko-oja, H. Rapakko, and J. Vesterinen, "Nfc-enabled wireless charging," in Near Field Communication (NFC), 2012 4th International Workshop on, March 2012, pp. 36 -41.

[5] C. Moser, L. Thiele, D. Brunelli, and L. Benini, "Adaptive power management for environmentally powered systems," Computers, IEEE Transactions on, vol. 59, no. 4, pp. 478 -491, April 2010.

BIOGRAPHIES



Ms. Indrani Selokar:
Researcher, Department Of
Computer Science And
Engineering of
Dr.Babasaheb Ambedkar
College of Engineering and
Research.

Area of interest: Networking.



Ms. Madhumati Metkar:
Researcher, Department Of
Computer Science And
Engineering of Dr.Babasaheb
Ambedkar College of
Engineering and Research.

Area of interest: Networking
and Communication.



Ms. Shweta Nimgade:
Researcher, Department Of
Computer Science And
Engineering of Dr.Babasaheb
Ambedkar College of
Engineering and Research.

Area of interest: Wireless
Communication.



Ms. Shivani Aglawey:
Researcher, Department Of
Computer Science And
Engineering of Dr.Babasaheb
Ambedkar College of
Engineering and Research.

Area of interest: Networking.