

Wireless Advertising Using Pull-Based Approach

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Abstract— This paper refers to the implementation of the Bluetooth to provide m-advertisement (Mobile Advertisement). Advertisement is the best way to compete with market. The end users request the server on their willingness. Wireless advertisement system(WAS) focuses on the pulled based approach as it avoids two issues, spamming and time limit. In push based, messages are send to the users without their willingness resulting in spamming issues. The advertisers can edit and do modifications as per their needs and publish it. This user driven concept gives flexibility to end users. The system is set up at the entrance and inside the mall so as to transmit the data to all the mobile devices. We have explained bellow the flow of the system. We have also explained the architecture.

Index Terms— pull based approach, Wifi advertising, user driven advertising

INTRODUCTION

Mobile advertisement (m-advertising) is a form of advertise where advertises are visible on mobile phones. Mobile advertising involves displaying of text, graphics, images and animated advertisement on data enabled mobile devices [2]. Advertisement is necessary to keep pace with competition and get the people noticed. It is necessary to get customer and make people aware of their needs. It is necessary to inform people about availability of products and services.

The implementation of WAS is on pull based approach. The user can see the advertisement on his willingness. This overcomes the two issues time limits and spamming of pushed based approach. As long as the Bluetooth/wi-fi is switched on the phone is visible, the server will do the rest and send the files to the phones and keep record of the phone and hence will never send the same piece of content to the same person again [4].

Previous papers are based on pushed based concept with two issues. This papers aims at pull based approach. The vendors can edit and do modifications as per their needs and broadcast the advertises. If user is willing can accept it or reject it. The advertise get download on his mobile and he can view it any time. It is suitable for organization like bank, large shopping mall, plazas, theatres, multiplex, insurance company, corporate bank, finance company, hospitals [2].

I. LITERATURE SURVEY

On a mobile advertising a few studies have been conducted to show the effectiveness of the mobile advertising. It describes mobile advertising is one of the m-0063ommerce applications and very important topic for information system

[3]. Using the Bluetooth/Wi-Fi technology we can be easily interconnected [4]. It is a communication technology intended to replace the cables connecting portable devices. Using this we can connect and communicate with each other. Stated that the mobile advertising can be divided into three categories which are push pull and dialogue[3]. The dialogue advertisement is different from pull and push categories. In terms of duration of interaction between advertiser and customer. Mobile advertising shows development in mobile technology and increase in the mobile uses [5]. We have analyzed the push based approach. There are two possible ways to deliver the advertisements to end user's mobile devices; push -based ,i.e. the advertisements are sent to the recipient's mobile device without their prior request, and pull based , i.e. the recipient requests the advertisements from the server[3].

II. FLOWCHART

This flowchart refers to the overall process of Wi-Fi connection. First the server launches the system and the server creates his own advertisement. Slide creation and linking will be done. And then the compilation will be done. Then the users turn on their Wi-Fi and can request to the server for the application. The server will accept the request and then process it. And this will continue for all the clients. Once the connection is established the user will be redirected into the GUI (graphical user interface) at client side application. The GUI will provide guidance for the users. The users can select categories from the advertisement such as food, clothing, etc. client who is advertiser can make modification and make updates in the advertisement and can publish it. This process continues for all the clients.

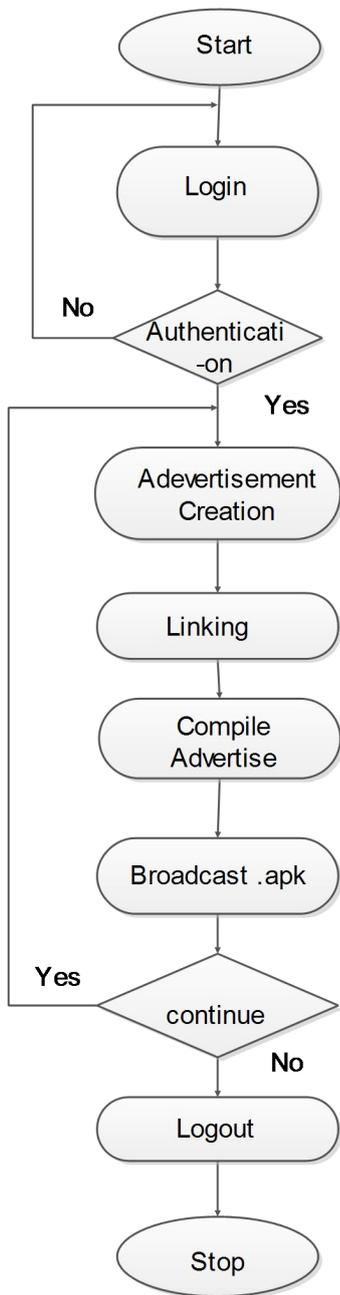


Figure 1. Flowchart

III. IMPLEMENTATION ARCHITECTURE

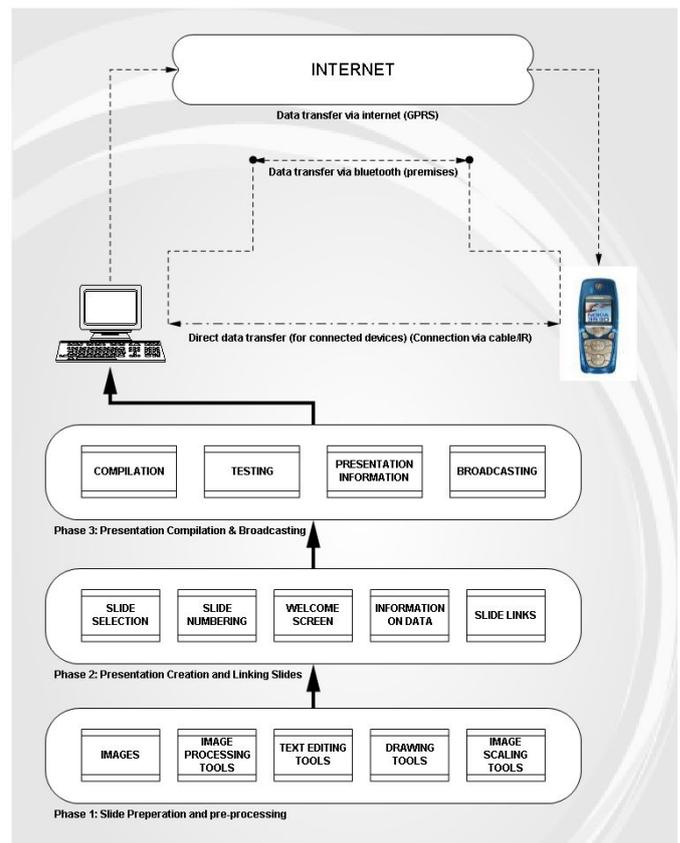


Figure 2. Architecture

The software will be equipped with all necessary image processing (slide processing) tools like resizing, text editing, drawing tools, etc. The project comprises of following major modules.

1. Preparing Slides: Pre-processing of slides/images to be used in final presentation is done in this module.
2. Slide Processing: Numbering and linking of slides, setting up presentation information is done in this module.
3. Presentation Compilation: Automatic creation of J2ME code and compilation of presentation (creation of executable/installable JAR file) is done in this module
4. Presentation Broadcasting: Transferring the presentation to destination mobile device using internet, Bluetooth or direct connection is done in this module.
5. Presentation Downloading & Installation: Downloading a presentation from available resources, installing and executing it on a mobile device comes under this module. This is the final module where in mobile device user can start accessing and using the presentation.

IV. FLOW OF SYSTEM

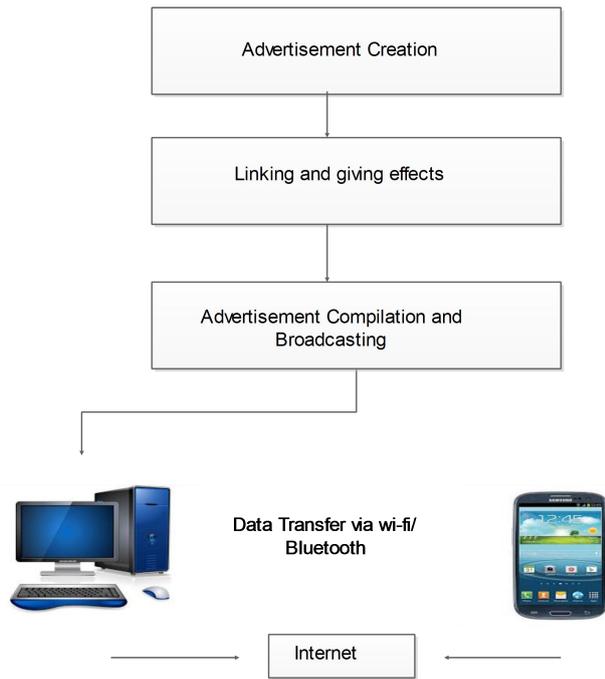


Figure 3. Flow of system



Figure 5. Snapshot

V. GUI

1. Main form:



Figure 4. Snapshot

1.1. Main form :click on Ok button to proceed

2. **Menu Form:** Used for selecting the menu

- 2.1. **Set welcome image:** Used to set the welcome image for the presentation
- 2.2 **Create Presentation:** Selecting the number of slides and uploading the linking them.
- 2.3 **Set about image:** upload the image about presentation
- 2.4 **Menu editing:** load the image and insert text on it.
- 2.5 **Broadcast:** send the image to users mobile

6.1 Create Presentation:



Figure 6. Snapshot

1. Select the number of slides for the presentation.
2. Double Click on the slide to upload image on it. Then the below window gets open.
3. Right click on the slide for linking the slides. Then save it. And export.
4. **Uploading the images:**



Figure 7. Snapshot

5. Upload the image.
6. If necessary then crop it
7. If need to give effects to the image then go in process advertisement and apply the blur, threshold, etc effects to the image.
8. **Menu editing:**



Figure 8. Snapshot

If there are any changes needed to be done on Image for adding text, changing color then it can be done here.

VI. FUTURE SCOPE

As will send text and images to the users mobile we can also send audio and videos if its implemented at large scope. In the future enhancement multimedia elements can be implemented. Hence this will attract more users. The system can also overcome privacy issues such as spamming, but also in the future scope security issues such as encryption capabilities can be overcome.

VII. BENEFITS OF ADVERTISEMENT USING WI-FI:-

a) The Right Advertisement at Right Place at Right time:

- Helps in getting advertisement at right time.
- Advertisement is sent on their mobile devices to attract their attention when they are outready for shopping.
- Discounts and offers attract customers to purchase the products.

b) Novelty:

- To gain the “wow” factor and attract public and media interest towards the product that to be sold.

c) Mobility:

- Pictures, text, graphics, bright color, backlighting will attract to your audience.

d) “Really There?”:

- Mobile Advertising is firmly in the real world now days.

e) Outdoor Advertising:

Excellent way to build two keys to successful advertising and they are

- Familiarity.
- Trust factor.

Control Factor:

- It is more effective if you can control when and in what

situation the message is received.

- It is more efficient if your advertisement is closer to the point of purchase, where the customer is ready to buy.

Affordable Advertising Rates:

- Mobile advertising is cheaper than any other medium.
- Comparing to advertisement that is done on internet is much higher than advertisement done using Wi-Fi.
- Cost of advertisement using Radio, Print, Spot TV, you will surely agree that there is no one more affordable eans.
 - Affordable Advertisement Rates.
 - For longer distance=100 meters.

RESULT

For study of Advertising using Wi-Fi analysis of case study is as follows:

Name of the Project- Wireless Advertising Using Pull-Based Approach

Sr no.	Functionality	B-MAD	Proposed System
1	Push Based Approach	YES	NO
2	Pull Based Approach	NO	YES
3	Dynamic Advertising	NO	YES
4	Interactive GUI	NO	YES
5	Permission For GUI	NO	YES
6	Time limitation for Response	YES	NO
7	Spamming Issues	YES	NO

Table 1: Comparison of existing system with proposed system

CONCLUSION

In this paper we presented m-advertising system using pull-based approach. The advantage of the system is all advertisements received by users are Based on their willingness. This can eliminated spamming issues. Although Security issues are not considered in this project, however, major issues like spamming has been resolved User can create his own Advertisement and can publish it. . Users now can retrieve any advertisement and without worrying about being flooded by unwanted messages.

The proposed system is able to provide vendors a convenient way for editing and a low cost and efficient ways to implement digital advertisement publishing mechanisms. Major issues like spamming and time limitation has been resolved.

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