

CHAPTER 05

IMPLEMENTATION AND EXPLOITATION

1. Introduction:

In this chapter we will detail the implementation of our application.

After implementing the application, we will try all along this chapter to evaluate the performance of the download by using Adobe AIR platform and RTMFP protocol.

2. The deployment diagram

This diagram describes the physical tools of the system is carried out before we talk about the realization itself.

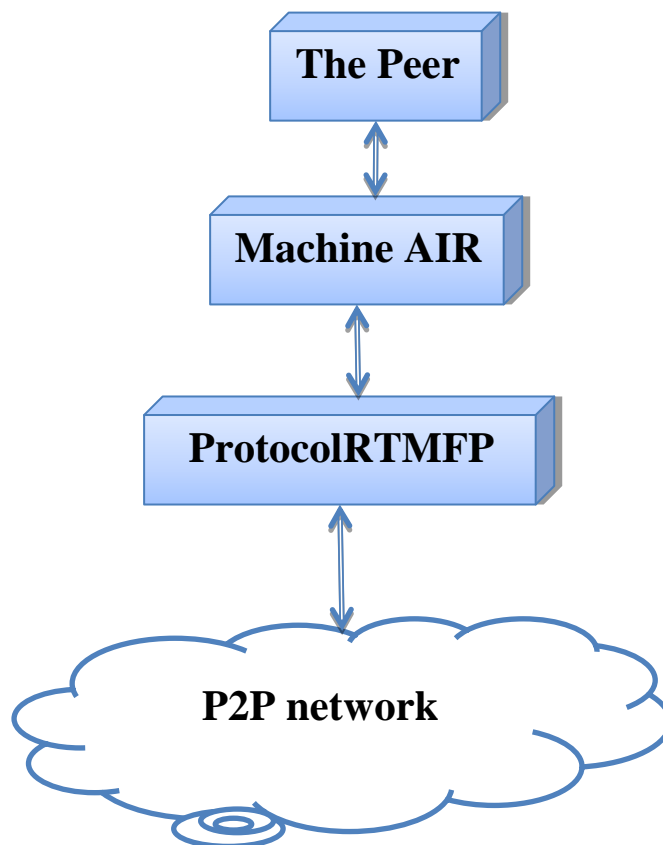


Figure 17-The deployment diagram

3. Presentation of the system:

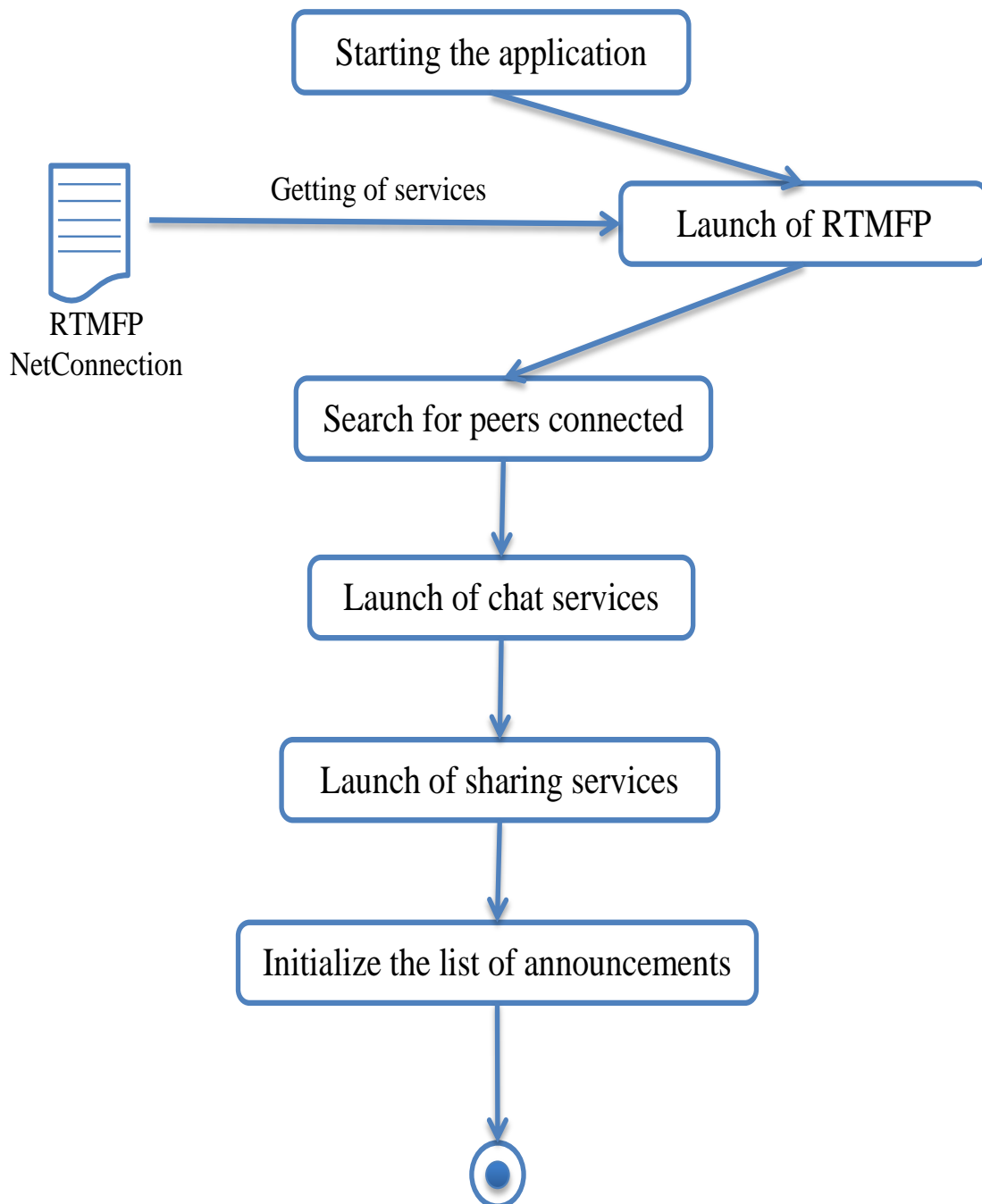


Figure 18-Presentation of the system

4. Algorithmic solution of tasks of peer:

4.1. Procedure to update the shared space:

This operation is used to modify the list of announcements when the peer made a change in their shared space whether added files or deletions.

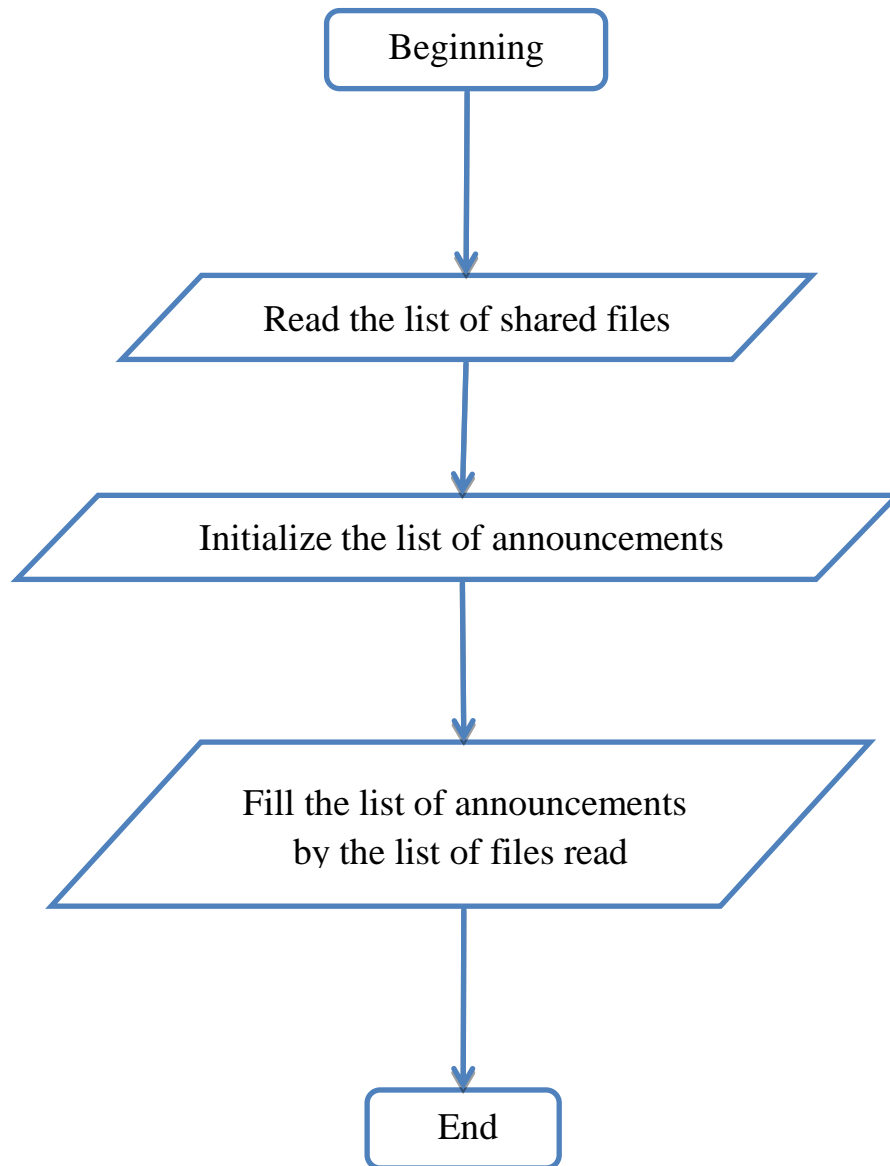


Figure 19-Procedure to update the shared space

4.2. Search procedure, browse and download documents:

This operation is used for peer to a search by file name in the search result and make the result in a list, if the list is not empty the peer can choose a file and browse and download.

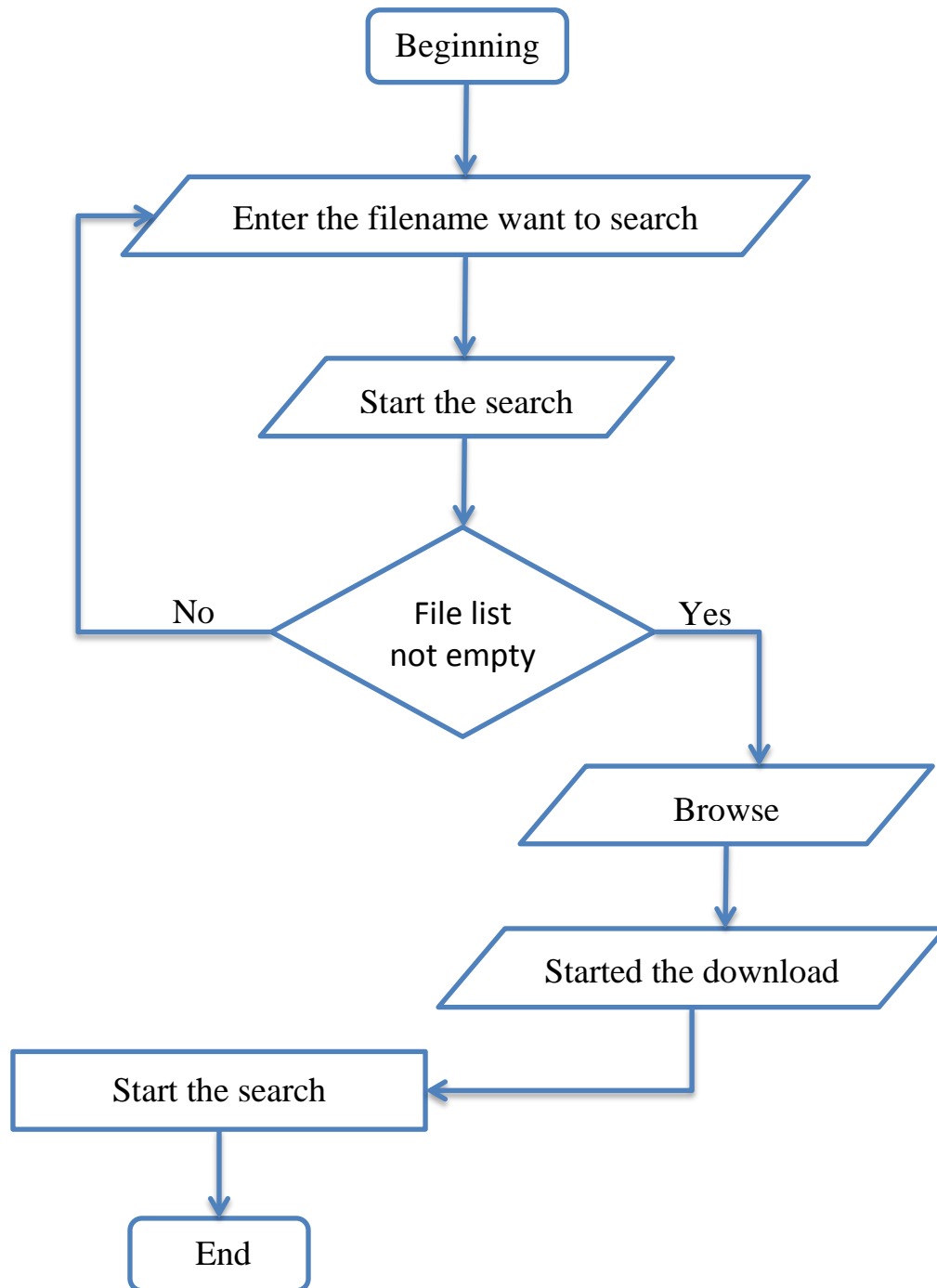


Figure 20-Search procedure, browse and download documents.

5. Programming the algorithms of the tasks:

5.1. The work tools:

5.1.1 ActionScript:

ActionScript is an object-oriented language originally developed by Macromedia Inc. (now owned by Adobe Systems). It is a dialect of ECMAScript (meaning it is a superset of the syntax and semantics of the language more widely known as JavaScript), and is used primarily for the development of websites and software targeting the Adobe Flash Player platform, used on Web pages in the form of embedded SWF files. The language itself is open-source in that its specification is offered free of charge and both an open source compiler (as part of Adobe Flex) and open source virtual machine (Mozilla Tamarin) are available.

ActionScript was initially designed for controlling simple 2D vector animations made in Adobe Flash (formerly Macromedia Flash). Initially focused on animation, early versions of Flash content offered few interactivity features and thus had very limited scripting capability. Later versions added functionality allowing for the creation of Web-based games and rich Internet applications with streaming media (such as video and audio). Today, ActionScript is suitable for use in some database applications, and in basic robotics, as with the Make Controller Kit.

Flash MX 2004 introduced ActionScript 2.0, a scripting programming language more suited to the development of Flash applications. It is often possible to save time by scripting something rather than animating it, which usually also enables a higher level of flexibility when editing.

Since the arrival of the Flash Player 9 alpha (in 2006) a newer version of ActionScript has been released, ActionScript 3.0. ActionScript 3.0 is an object-oriented programming language allowing far more control and code reusability when building complex Flash applications. This version of the language is intended to be compiled and run on a version of the ActionScript Virtual Machine that has been itself completely re-written from the ground up (dubbed AVM2).^[2] Because of this, code written in ActionScript 3.0 is generally targeted for Flash Player 9 and higher and will not work in previous versions. At the same time, ActionScript 3.0 executes up to 10 times faster than legacy ActionScript code.^[15]

5.1.2 Adobe Flash Builder

Adobe Flash Builder (previously known as Adobe Flex Builder)^[15] is an integrated development environment (IDE) built on the Eclipse platform that speeds development of rich Internet applications (RIAs) and cross-platform desktop applications, particularly for the Adobe Flash platform. Adobe Flash Builder 4 is available in three editions: Standard, Premium and Educational. The package is available free of charge for non-commercial use by students and unemployed developers.^[16]

Adobe Flash Builder offers built-in code editors for MXML and ActionScript and a WYSIWYG editor for modifying MXML applications. Adobe Flash Builder includes an interactive debugger, allowing developers to step through code execution while inspecting variables and watching expressions. Flex Builder 3 added support for performance analysis. The profiling view displays statistical information about memory use in addition to function call execution time.

Prior to version 4, this product was known as Flex Builder. The name change is meant to signify its connection to other products in the Adobe Flash Platform^[17] and to create a clear distinction between the Flex SDK and the IDE.^[18]

5.2. Launch of the application:

To run the application in a Smartphone, Flash Builder allows you to export the application according to the operating system of Smartphone.

After execution, the home page will be displayed and also the connection setup.

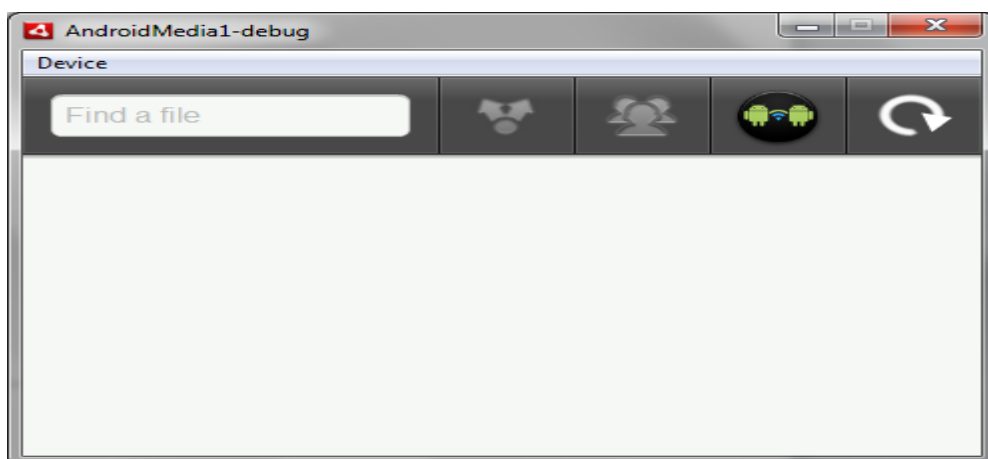


Figure 21- The home page.

If the first time you launch the application the page of file share appears for give a hand to the user to select files.

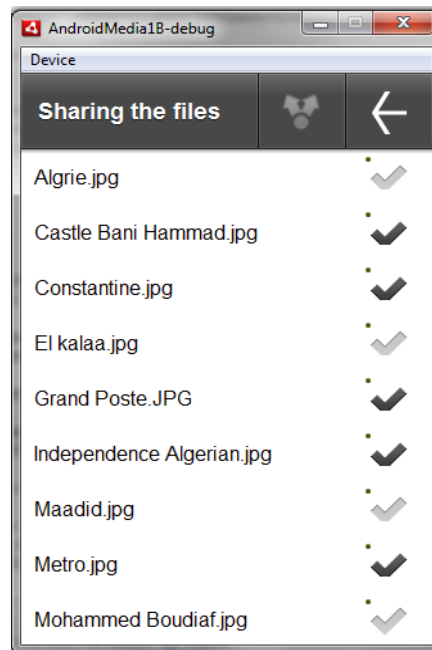




Figure 22- The page of sharing the file.

To obtain the file sharing by other peers, click the button  of the home page, then click the button  of the page Select Peer

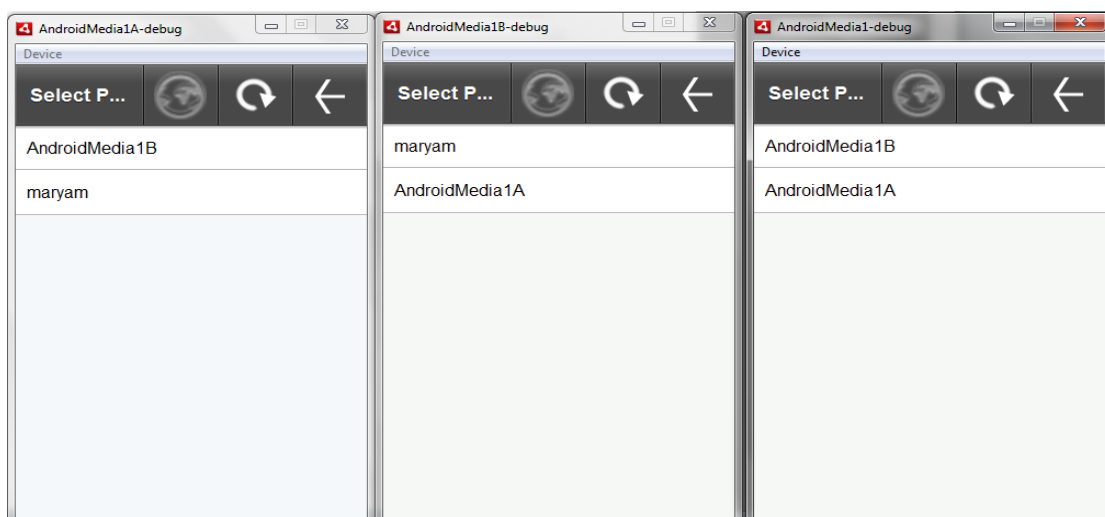


Figure 23- the page of Select Peer.

Then start the search in the list of announcement, select the file for browse and download.

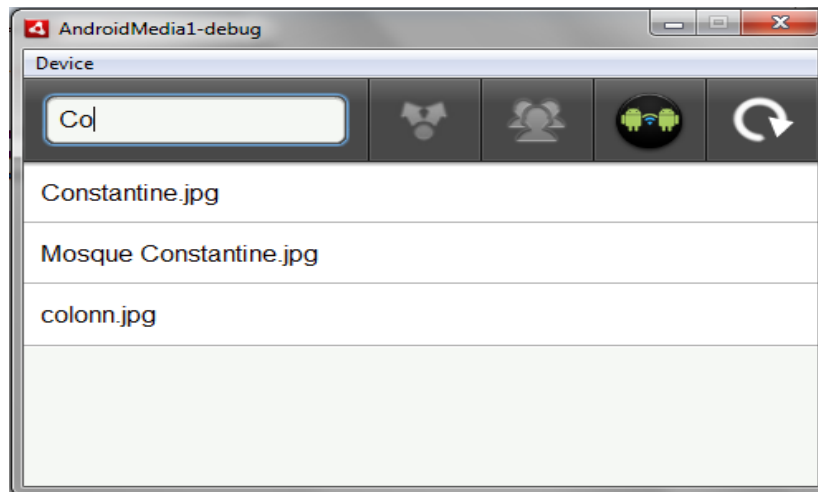


Figure 24- The search page.

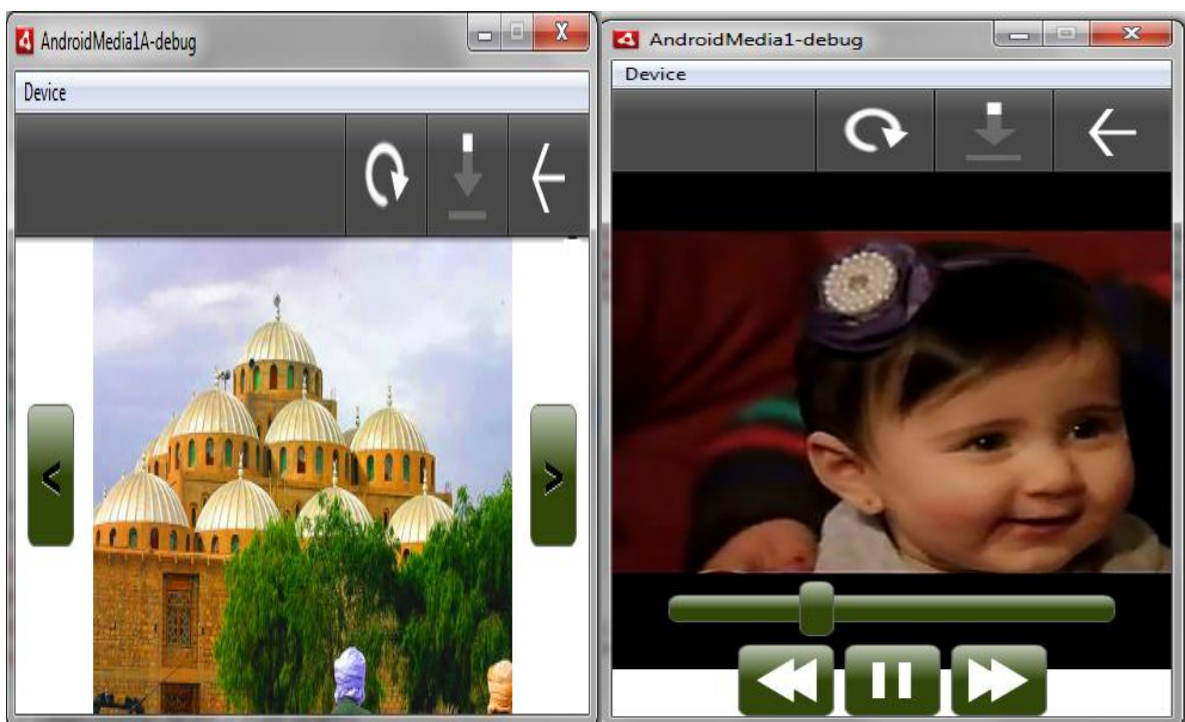



Figure 25- The browse page.

Finally the chat page, for access to the chat page click on the button  of the home page.

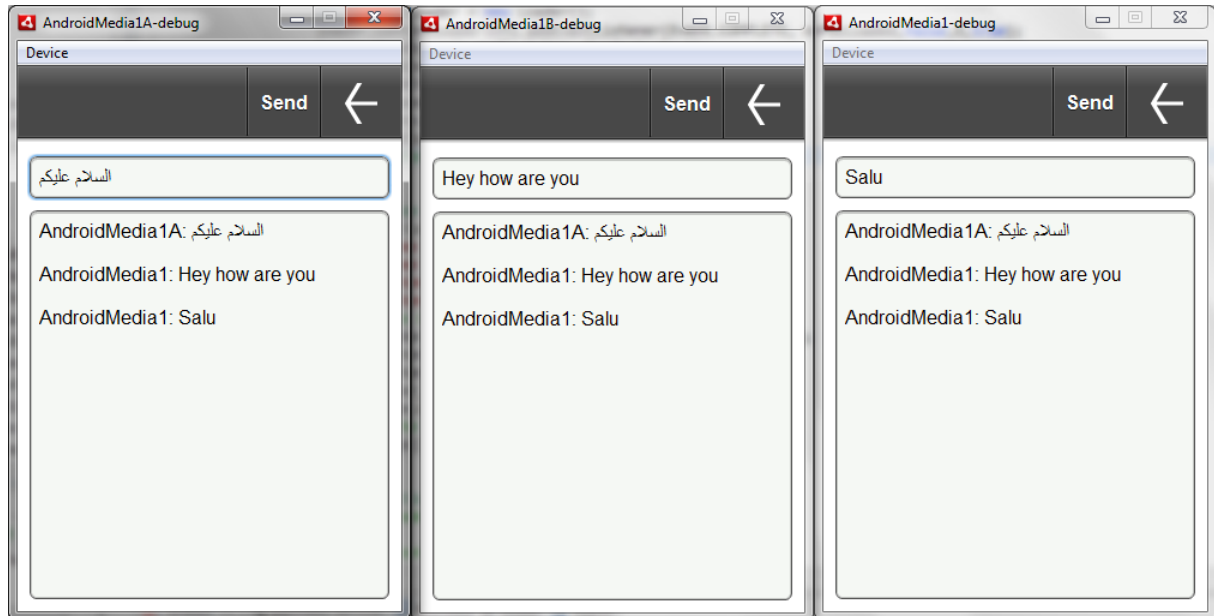


Figure 26- The chat page.

Conclusion:

At the end of the phase of the implementation we can say that our goal was realized and for implementing of a series tested in different operating system will be necessary.