Web Browser and Narrator

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Abstract

A web browser (commonly referred to as a browser) is a software application for retrieving, presenting and traversing information resources on the World Wide Web. An *information resource* is identified by a Uniform Resource Identifier (URI) and may be a web page, image, video or other piece of content. Hyperlinks present in resources enable users easily to navigate their browsers to related resources. A web browser can also be defined as an application software or program designed to enable users to access, retrieve and view documents and other resources on the Internet.

Web Browser is a very essential part of World Wide Web. The whole internet world is connected to us through a web browser. We can do every type of internet access and can get huge web application coverage by using Web Browser. It is now one of the part of the modern technology and it use is increasing day by day. There are much type of Web Browser and similar application now days and they have different type of use and properties. It is difficult to find a compatible one for using my special purpose. It is quite difficult to find a Browser with your best facilities and use it for your personal use.

Function:

The primary purpose of a web browser is to bring information resources to the user ("retrieval" or "fetching"), allowing them to view the information ("display", "rendering"), and then access other information ("navigation", "following links").

This process begins when the user inputs a Uniform Resource Locator (URL), for example *http://en.wikipedia.org/*, into the browser. The prefix of the URL, the Uniform Resource Identifier or URI, determines how the URL will be interpreted. The most commonly used kind of URI starts with *http:* and identifies a resource to be retrieved over the Hypertext Transfer Protocol (HTTP). Many browsers also support a variety of other prefixes, such as *https:* for HTTPS, *ftp:* for the File Transfer Protocol, and *file:* for local files. Prefixes that the web browser cannot directly handle are often handed off to another application entirely. For example, *mailto:* URIs are usually passed to the user's default e-mail application, and *news:* URIs are passed to the user's default newsgroup reader.

A narrator is, within any story (literary work, movie, play, verbal account, etc.), the non-fictional or fictional, personal or impersonal entity who tells the story to the audience. When the narrator is also a character within the story, he or she is sometimes known as the first person or first-person narrator. The narrator is constructed by the author and may be presented as distinct from, or the same as, the author, depending upon the author's construction. The narrator is one of three entities responsible for story-telling of any kind. The others are the author and the audience (the latter called the "reader" when referring specifically to literature).

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1. Introduction:

Web browsing is not a new approach. With the recent rapid technological advances and development of Internet, effective distance learning has become an increasingly plausible alternative to more traditional methods of study. Visual information (like video or slides) is proven to be the best way to transmit knowledge. Unfortunately, transmitting video over the Internet is still facing many difficulties, which make visual information transmission inefficient for practical applications. For distance learning it is even more important to always provide the learner with the requested information under all conditions. The main goal of this project is to optimize the transmission of visual information by implementing a new protocol that will consider the current status of the network and dynamically provide the requested information.

One of the most important aims of this project is to provide communication with the ends users. This needs to be achieved regardless of the levels of congestion experienced on the Internet, which has adverse effects on the ability to transmit video.

The Internet or LAN is a network that works only base on best efforts. It does not offer any guarantees for the arrival of the packets that are sent host computer to end client. This makes it difficult when sending multimedia data because during the transmission of video we cannot afford to lose too many packets or the result will be transmission failure.

2. Objective:

The main object of this project is to develop a web browser and make the best use of internet browsing.

3. Platform:

Java (Application).

4. The reason for choosing Android:

a. **Platform independency:** Java is a platform independent language. So in every operating system java programs run efficiently. We can take this as a benefit and make the application on any platform.

b. **Object Oriented:** Java language is fully object oriented. It supports some advance features like Inheritance, Polymorphism and Encapsulation.

c. Dynamic: Java has capability to create new user defined classes & methods dynamically.

d. Multithreading: Java supports multithreading, which enable to run more than one program concurrently.

e. User's comfortless: the smart phone users are now very much dependent on android system running phone. So it is very useful to do any work on application and we will get a very useful backup and feedback on a smart amount of time.

5. The necessity of choosing android:

6. Hardware Requirement:

a. Platform independency: Java is a platform independent language. So in every operating system java programs run efficiently. We can take this as a benefit and make the application on any platform.

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7. System analysis and design:

It can perform the operation of browsing a page when we write a web address on the page the browser then send information to the server and the server send the required web page to the web browser and display the page on the center of the WebView. The browser contains some more option. The operation's are bookmark, history, and narrate the content of a page. The Bookmark is used for keep the tracking of the page that the user may like to mark manually while the history page keep track of all the page that the user has browsed earlier. The user can hear the content of the web page by using the narrator.

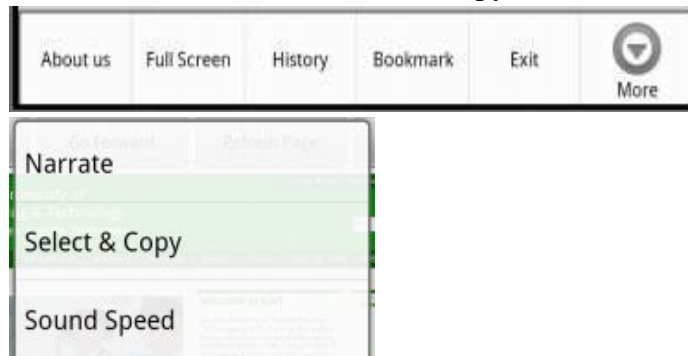# 8. Description of system:

8.1.   Transmission over internet:

The displaying of a web page in a browser can be performed in two ways .That is in the same (or local) computer or in the remote computer .Our browser can perform both of these. If we want to see a web page in the local computer or remote computer we have to just write the IP address of the computer .But we know that in remote browsing web address containing protocol, domain, host is more easier than the IP address .By writing the IP address the EditText and pressing the go button from the computer the browser will browse the existing web page .And finally display the web page all contains in a WebView.

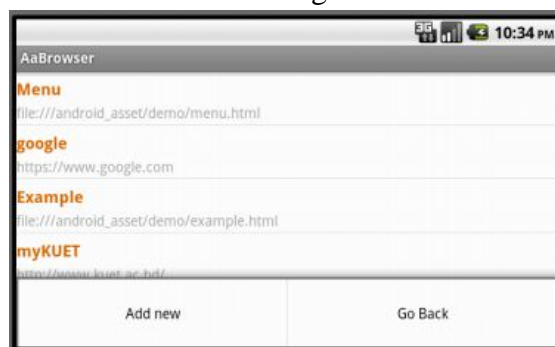## 8.2.   The task of the Browser:

8.3.1. Sample Tasks:

a) This project performs the task of developing an application program which can browse a web page

b) It can display all it contains. It   works in HTML, JAVA Script and PHP.

c) Like any browsing software it can perform every type of web operation like browsing, chatting etc.

d) It also presents the web page as the CSS order.

e) S   Two core browsing technologies are supported through the Java Browser API:

   1. Web page recognition.

   2. Web page searching

f) The Android Browser API enables developer soft browsing enabled applications to incorporate more sophisticated and natural user interfaces into android applications.

8.3.2. Menu bar Task: The menu bar contains the action to be performed by the application. The menu bar items are history, bookmark, exit, full screen, about, select and copy, narrate and narrating speed.

8.3.3. Bookmark task: The bookmark is a user choice is a user controlled page the user can keep his favorite pages link in the bookmark page. He can modify his bookmark, delete any item and add any item. The user can modify his bookmark from his main page. The menu page also has a menu which contains go back and add new.

8.3.4. History Task: The history page contains all the history of browsing. The browser keeps the browsing history of the user. It is static not dynamic. The user can delete any history at any time and if he wants he can remove all the history at a time. It also contains a menu with add new

and go back.

8.3.5. Buttons, Progress Bar and Text input: There is
an input text and a button at the top of the browser and there are four
buttons below the text input the buttons are go back a page, go forward,
refresh page, clear history. The when we focus the input text the side button
turn to go. when we start loading a page the progress bar is shown on the
top when the page stop loading the button turn into go again and the
progress bar is gone. When the user blur the text area the button turn into
bookmark. If the page is bookmarked then the star is yellow or else the star
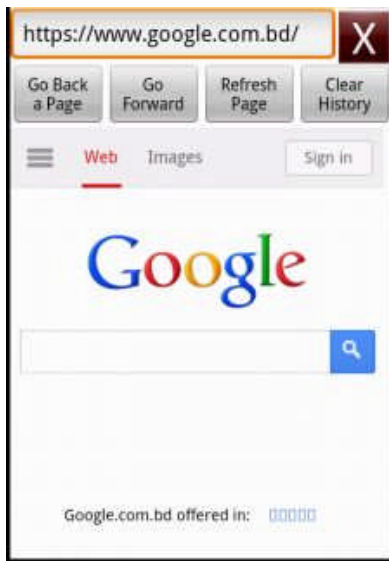is silver color.

8.3.6. Narrator task:

8.3.5.1. Select & copy: The select and copy option select a
text and copy it to the clipboard.

8.3.5.2. Narrate: The narrator narrates the text for the user.

8.3.5.3. Speech Speed: The speed selector controls the speed
for the narrator. It has three options 0.6, 1.0, 2.0. 0.6 For slow. 1.0
For normal and 2.0 for faster.

9. **User Guide:** When the user will open the application they will see a layout like this.

He can choose the item he wants from the menu and perform any type of action he wants. The user can use the buttons as described above so he can get the full taste of using an app. The app is totally user friendly the user can perform all type of given operation very frequently and the exceptions are handled very frequently.

10.   Limitation & challenges:

The user can feel free to use this app but there are some limitations. I have tried very hard to overcome from all of this but I can't fix some of them. The limitations are given below:

- There may be some Problem with bangle font.

- The home page is not dynamic but static.

- There is no preference setting.

- There is no auto competition. So the users have to type the address very sincerely so it is totally correct.

- The narrator can only read the ASCI code texts.

- The history is not shown in date sorted order.

- The app doesn't support multithreading so there is no download option and there is only one window for browsing.

The challenges are to take user feedback and make the best use of the app I must try to overcome this entire fault and increase the user flexibility.

11.   Conclusion: This was my Software development Project. I have tried my best to make use of my knowledge and build a nice app. Android is very new platform and we are working hard to learn more about this platform. We have learned many new things through this process and we are trying hard to increase our knowledge every time. Though we faces many problem our teachers and classmates helps us very much to overcome all the problems. Our senior students have taken care of us very well so we can make the best use of our knowledge.

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